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Implementation Lessons: The Importance of Assessing Organizational “Fit” and External Factors When Implementing Evidence-Based Teen Pregnancy Prevention Programs

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A B S T R A C T

In recent years, the demand for evidence-based teen pregnancy prevention programs has increased, but practitioners often struggle to replicate and implement them as designed in real-world community settings. The purpose of this article is to describe the barriers and facilitators encountered during pilot year attempts to implement an evidence-based teen pregnancy prevention program within three types of organizations: (1) small community-based organizations; (2) a school-based organization; and (3) a large decentralized city-sponsored summer youth program. We frame our discussion of these experiences within the context of a systemic, multilevel framework for implementation consisting of (1) core implementation components; (2) organizational components; and (3) external factors. This article explores the organizational and external implementation factors we experienced during the implementation process, describes our lessons learned throughout this process, and offers strategies for other practitioners to proactively address these factors from the start of program planning. These findings may provide useful insight for other organizations looking to implement multi-session, group-level interventions with fidelity.

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IMPLICATIONS AND CONTRIBUTION

This paper describes lessons learned during pilot implementation of an evidence-based teen pregnancy prevention program within three different types of organizations. It describes organizational and external barriers and facilitators, and provides practical recommendations. These findings may be useful for organizations that want to implement multi-session, group-level interventions with fidelity.

Teen pregnancy and childbearing can have immediate and long-lasting consequences for the young parent, their child, and society at large: teen mothers are much less likely to obtain a high school diploma [1]; children of teen mothers are at increased risk of behavioral problems, dropping out of high school, incarceration during adolescence, and becoming teen

parents themselves [1]. In 2008, the national public cost of teen childbearing was estimated at \$10.9 billion [2].

To help address this issue, in 2010, the Office of Adolescent Health (OAH) began to provide organizations with funding to implement and rigorously evaluate evidence-based teen pregnancy prevention (TPP) programs [3]. However, programs that have

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demonstrated effectiveness may fail to reproduce improved participant outcomes if they are not implemented as intended [4]. Quality implementation of evidence-based programs (EBPs) is essential not only to provide the greatest benefit to participants but also to ensure that limited public resources are maximized, and evaluation findings accurately inform policy, research, and programming decisions [5].

Replication and implementation of EBPs in the real-world context of community-based settings can be challenging [6]. As community providers have worked to implement EBPs with fidelity, a body of literature has developed around the study of the “translation” of research into practice and the role of implementation as potentially the “missing link” between the two [7]. In their meta-analysis of 500 implementation studies, Duklak and Dupre [7] find support for their hypothesis that effective implementation is associated with better outcomes. Implementation science outlines many models, theories, and frameworks of implementation; these models have progressively become multilevel systemic frameworks of factors that impact implementation [8]. In their seminal synthesis of implementation studies, Fixsen et al. [9] suggest that there are three levels of implementation (Figure 1): core implementation components, organizational components, and external factors. Core implementation components are key implementation drivers that support high-fidelity behaviors of program providers/staff such as training, coaching, and fidelity monitoring. Organizational components ensure the availability and integrity of core implementation components and include staff selection, administrative support, and program evaluation. External factors refer to the social, political, and economic context in which an organization works to implement a program, such as federal and state laws, local ordinances, funding priorities, and community resources. Fixsen et al. [9] contend that all three levels are interrelated and that “sustainable high fidelity practices best will be achieved when strong core implementation components are well-supported by strong organizational structures and cultures in an enabling mix of external influences” (p. 59).

Although core implementation components have been clearly articulated [10], Fixsen et al. [9] state in their summary of areas for future implementation research that “research related to organizational and socio-political factors that directly influence implementation efforts can help define hospitable practices and environments in which the probability of successful implementation and sustainability is increased” (p. 75). Rosenheck [11]

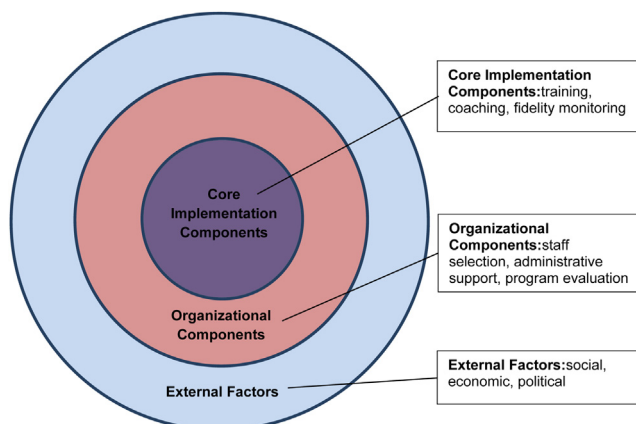


Figure 1. Multilevel influences on successful implementation [9].

views the “organizational process as a largely unaddressed barrier and as a potential bridge between research and practice” (p. 1607). Fixsen et al. [9] further contend that there is limited information available about practical approaches to working within the organizational and external implementation levels, and “[t]hus, organizational and systems intervention strategies and skills represent a critical research and practice area for national implementation of successful practices and programs” (p. 66).

Although numerous impact studies of TPP EBPs exist [12], there are fewer implementation studies [13]. Some researchers have provided tools, models, or strategies for improving TPP EBP implementation [13–17]. One such tool, *Promoting Science-Based Approaches to Teen Pregnancy Prevention Using Getting to Outcomes* (PSBA-GTO), was specifically developed for the implementation of evidence-based TPP programs and outlines a 10-step process for program planning, implementation, and evaluation: (1) needs and resource assessment; (2) goal and objective setting; (3) identification of best practices; (4) assessing fit; (5) assessing capacity and readiness; (6) program planning; (7) implementation and process evaluation; (8) outcome evaluation; (9) continuous quality improvement; and (10) sustainability [17].

Other researchers have articulated specific challenges in implementing TPP EBPs with fidelity. In keeping with the language of the Fixsen et al. model [9], researchers describe challenges with core implementation components, such as inadequate staff training [18,19]; organizational components, such as staff turnover [19,20], lack of staff buy-in [18], lack of resources [17,19], lack of general organizational capacity [21], an absence of accountability within community partnerships [22], and concern that sex education programming will impact an organizations’ ability to secure funding [19,20]; and external factors, such as low parental involvement [23] and community opinions against comprehensive sex education for adolescents [18–20].

Program background

In 2010, the Louisiana Public Health Institute (LPHI) received a 5-year grant from OAH to replicate and rigorously evaluate the effectiveness of *Becoming a Responsible Teen* (BART), an evidence-based sexual education curriculum. The Policy & Research Group (PRG), an independent research firm, was contracted by LPHI to conduct the rigorous evaluation.

BART is a group-level behavioral skills training sexual education intervention that aims to reduce HIV risk for African-American adolescents [24]. Implementation fidelity requirements for BART mandate that the intervention be delivered to youth 14–18 years of age in small gender-specific groups of between 5 and 15 persons. BART is intended to be delivered in eight 2-hour sessions over the course of 8 weeks; each session should be facilitated by a team of two health educators, one male and one female [25]. LPHI renamed the program for their implementation setting to 4Real Health.

Organizational structure. During the grant proposal-writing process, LPHI formed partnerships with three different types of organizations to implement the program: (1) two small community-based organizations (CBOs); (2) a school-based CBO; and (3) a large decentralized city-sponsored summer youth program. Based on the information that was available about the program at that time, leadership of these four organizations felt confident that they could meet implementation requirements. In the planning and pilot year, LPHI’s initial model (Figure 2) was to

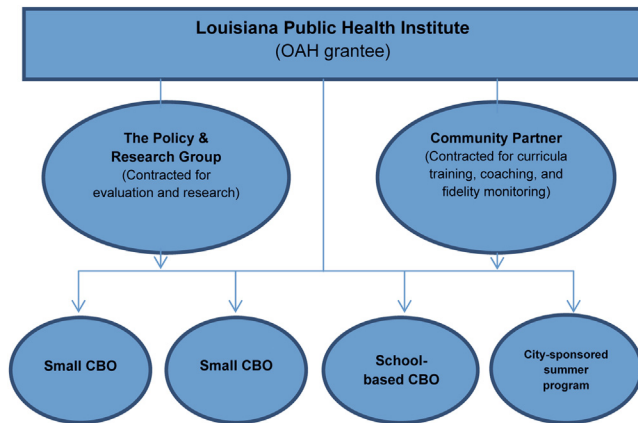


Figure 2. Initial 4Real Health organizational structure.

subcontract with each of the four partner organizations to implement 4Real Health. Each organization would be responsible for hiring and managing their own health education staff, coordinating program implementation sites, and recruiting and enrolling a target number of program participants from the population of adolescents they currently served. Each partner organization's staff would receive training in the curriculum and other relevant professional development trainings from another outside LPHI-contracted community partner, who would also be responsible for fidelity monitoring. PRG would oversee the implementation of the rigorous outcome evaluation processes and provide ongoing formative feedback to both LPHI and its implementation partner organizations. All 4Real Health partner organizations and their program implementation activities would be overseen and facilitated by LPHI.

Core implementation requirements. Implementing BART with fidelity is essential to replicating positive results on participants' knowledge, attitudes, skills, self-efficacy, intentions, and behaviors [25]. Because the purpose of the funding is to replicate evidence-based curricula with fidelity, each partner organization needed the ability and experience to work with youth 14–18 years of age in the community and implement 4Real Health within the parameters dictated by the BART program developers and OAH. After being funded by OAH, LPHI and PRG embarked on a planning process with OAH to concretely define BART's implementation requirements, such as program setting, class size, facilitator to participant ratios, and dosage. It was at this time that potential adaptations were proposed, and OAH provided guidance on if they would or would not threaten program fidelity. As a result of this process, community implementation partner organizations had to meet the following key implementation requirements:

- Time and flexibility within their current programming requirements to host eight 2-hour sessions over an 8-week period.
- Adequate facilities to host the program (i.e., access to two to four separate and private classrooms that could accommodate up to 15 youth).
- Comfortable seating, desks, and a TV/DVD player in each classroom.
- Ability to hire at least two health education staff, one male and one female, to co-facilitate intervention sessions.

- Organizational latitude to deliver all aspects of the curriculum without programmatic limitations imposed by organizational policy or statute.
- Each class must be gender separated and have at least five and no more than 15 participants.¹

The implementation requirements were met with varying levels of success by each type of partner organization. Ultimately, the large city-sponsored program was able to successfully implement 4Real Health during the pilot year, but the two small CBOs and school-based CBO were not.

Purpose and implications. Now in the second year of 4Real Health's full implementation, LPHI and PRG staff, authors of this article, reflect upon and assess the barriers and facilitators encountered during the pilot year. We share our attempts to implement within the three different settings and describe lessons learned throughout this process. The purpose of this article is to explore the organizational and external implementation factors we experienced during the planning and pilot year and offer strategies for other practitioners to proactively address these factors from the start of program planning.

Methods

The lessons learned presented in this article were identified through a standardized implementation assessment process. During the planning and pilot phase, PRG and LPHI staff utilized a structured document to identify implementation issues, potential recommendations to address each concern, and resolution strategies and due dates on an ongoing basis. Findings described in this article result from the authors' review of these and other formative project-related documents, including questionnaires administered to leaders of all three types of partner organizations; notes documenting the content of planning meetings and calls among LPHI, PRG, and partner organizations; OAH-required progress reports written by LPHI's project manager; and other planning documents.

Additionally, PRG staff conducted informal interviews with LPHI's 4Real Health project director and two project managers. These interviews included open-ended questions about the director and managers' perceptions of barriers and facilitators experienced during program planning and piloting. Topics addressed included the benefits and barriers of partnership with different types of organizations, reasons why specific partnerships were successful or discontinued, and the external factors that acted as barriers to successful implementation. Finally, the director and managers were asked about suggestions and recommendations they would offer other organizations who were attempting to administer community-based TPP programs.

Our review of this information was guided by four exploratory themes:

1. What organizational component barriers were experienced in implementing this EBP?
2. What organizational components facilitated the implementation of this EBP?
3. What external factors impacted the implementation of this EBP?

¹ To meet evaluation requirements, a minimum of 40 youth must be enrolled at each implementation site.

4. What lessons learned can be articulated from the organizational and external barriers and facilitators experienced during the implementation of this EBP?

With these four questions serving to guide the investigative focus, the authors reviewed the data sources outlined above to identify emergent themes and interpret the data relevant to the questions.

Findings

Small community-based organizations

Organizational component facilitators. LPHI's partnerships with the two small CBOs were appealing on multiple levels. These organizations had strong ties to the target population and were extremely motivated to implement TPP programs within the community. Their leaders recognized the need for this type of programming, were already familiar with BART or similar curricula, and had previously provided TPP programming. Thus, LPHI anticipated that the smaller CBOs could successfully implement because they had a population of youth they currently served, experience with sensitive topics, and existing parental buy-in.

Organizational component barriers. Despite their enthusiasm, it became evident during the planning and pilot year that the CBOs did not have the administrative capacity to meet 4Real Health's structured implementation requirements. One limitation was their lack of adequate facilities. They were accustomed to meeting with program participants informally in various community sites; however, implementing 4Real Health required a consistent space with two to four separate, private classrooms, which was not possible for them to obtain. In addition, each organization consisted of single leaders, who were not always able to attend 4Real Health planning meetings due to other obligations, such as part-time jobs, and the CBOs did not have sufficient administrative staff to coordinate with LPHI on the project. A third limitation was their inability to hire and supervise qualified health educators. In the past, the CBOs had relied upon the organizational leader and part-time assistants to provide programming; they did not have a formal administrative structure or office space that allowed them to house additional educators. Finally, they could not consistently recruit the planned numbers of participants required to conduct the program.

External factors. Although barriers were primarily organizational in nature, some external issues existed as well. For proposed after-school implementations, 4Real Health had to compete with other after-school activities, and participants were less likely to attend all eight sessions. Transportation home from the after-school sessions was also a barrier, especially in a community with limited public transportation. Without the needed organizational capacity, it was impossible for these CBOs to implement 4Real Health; therefore, LPHI discontinued these partnerships during the planning and pilot year.

School-based CBO

Organizational component facilitators. LPHI's partnership with the larger, school-based CBO appeared to be a more promising fit. This organization was able to reach and recruit the target

population due to its strong school affiliations, was motivated to implement the program, and had greater administrative and organizational capacity than the two smaller CBOs. Before partnering with LPHI, this organization had been operating programs for pregnant teens in several local high schools and was very committed to playing a greater role to prevent teen pregnancies. The CBO was an established affiliate of a national organization and therefore had existing offices with full-time support staff and the administrative ability to contract with LPHI and hire new staff to implement 4Real Health.

Organizational component barriers. As this organization tried to implement 4Real Health within the schools where they worked, they confronted several logistical barriers in meeting implementation requirements. None of the schools' class time length was long enough to provide each 2-hour intervention session. Additionally, the class size (number of students) and gender-separation requirements were logistical barriers. Although the school administrators were interested in having the CBO provide 4Real Health to their students, there did not appear to be an easy way to fit the program into their existing school-day schedule and structure.

External factors. Even with the aforementioned barriers, schools seemed to be the most likely setting for implementation of 4Real Health because they had access to the target population and were motivated to provide TPP programming. However, there was a conflict between the state education law related to instruction in sex education and requirements of the BART program. The law states that contraceptive drugs, devices, or similar products cannot be distributed at any public school and also prohibits students from being surveyed about their personal beliefs or practices in sex [26]. This was in direct conflict with several of BART's intervention activities (i.e., condom distribution for a skill-building activity and personal use) and with OAH's requirement that all grantees collect performance measures from every program participant concerning their past and intended future sexual behaviors. Further, the law requires all sex education instructors be selected by the public local or parish school board and that sex education curricula materials be approved by both the school board and a parental review committee. Ultimately, these barriers resulted in the discontinuation of LPHI's partnership with this organization as well.

Large decentralized summer youth program

Organizational component facilitators. The best organizational fit to implement 4Real Health was achieved through LPHI's partnership with a large city-sponsored summer youth employment program. Long-running and established, the city program easily recruits and "hires" several thousand youth 13–21 years of age each summer and places them with participating community and civic organizations throughout the city for employment. Implementing 4Real Health within these employment settings required LPHI to create formal partnerships not only with the larger administrative entity through which the youth apply to the employment program—the city, but also with several of the individual community partner organizations where the youth are placed by the city for the summer—the work sites. Adequate administrative capacity at both the city and work site levels was essential for implementation to succeed. LPHI first worked with the city administrators to identify organizations that had

the most potential to meet 4Real Health implementation requirements and then worked directly with the work site organizations to determine whether and how they could meet the requirements. The final and current 4Real Health organizational structure is shown in Figure 3.

Organizational component challenges. Even in this successful implementation structure, challenges still exist, and significant facilitative administrative support from both LPHI and PRG staff is required to make this multilevel partnership work. The work site organizations essentially act as a venue for 4Real Health programming; work sites are not responsible for 4Real Health staffing, training, or evaluation activities, but site administrators must still be willing to work with LPHI and PRG to meet 4Real Health’s structural and logistical implementation requirements. This requires many meetings with work site administrators to first determine whether they are willing and logistically capable of acting as an implementation site. Achieving these partnerships takes much coordination, relationship building, and planning to ensure that the sites understand what is required of them. Conversely, LPHI and PRG also recognize that 4Real Health is just one component (2 hours 1 day a week) of these sites’ varied summer program activities. Even with the best intentions, the work site administrators do not necessarily have the time to devote to ensuring they meet all requirements. 4Real Health staff must be organized, accommodating, and flexible in order to meet the needs of the sites and implement 4Real Health with fidelity.

One approach LPHI and PRG used to accomplish this was to conduct a presentation for work site staff members to provide an overview of the program, evaluation, and site-level participation requirements in an effort to encourage open communication and foster support from work site staff. Another strategy used to facilitate the implementation process at these sites was distributing a work site expectations checklist (Table 1) to site administrators. This document was developed by PRG and LPHI to clearly and succinctly outline the implementation requirements and other necessities to become a 4Real Health partner. PRG and LPHI staff also conducted several site visits to each work site prior to implementation to meet with site staff and administrators to discuss program plans, ensure that they could meet the checklist requirements, and address any potential barriers to implementation.

External factors. Summer implementation removes any potential competition with school-year activities and programs. The employment program provides youth with a daily structured work-like environment, in which they participate in social, educational, and skill-building activities. Because the summer program has a large youth development component, the city viewed the 4Real Health curriculum as very complementary to their other programming. Further, the city provides all summer employment program participants, including those that choose to enroll in 4Real Health, with a weekly \$100 stipend, which encourages participant recruitment and retention.

Discussion

LPHI approached several types of organizations to implement 4Real Health and, as a result, learned that each type had varying levels of capacity to meet the BART curriculum’s implementation requirements, as listed in Table 2. Consistent with earlier studies [19,21,27], implementation efforts with the small CBOs were unsuccessful because these organizations lacked general capacity and did not have basic administrative systems and infrastructure needed to support core implementation components required to implement BART. The school-based CBO partnership failed in part due to logistical restrictions imposed by the school-day structure (class size, class length, room availability), but more importantly, because state policies were at odds with LPHI’s mandate to replicate BART with fidelity and collect specific data from participants. This external factor significantly impacted the organization’s ability to implement 4Real Health and proved to be a major lesson learned.

The large city youth employment program continues to provide the best partnership model for sustained implementation of 4Real Health because it fits well within the city program’s existing structure and programming. This unique multilevel partnership offers the benefits of an established program with adequate city- and work site-level administrative capacities that can enroll and retain large numbers of the target population, provides built-in incentives for participant recruitment and retention, and does not have the policy restrictions associated with school settings. However, this structure requires intensive planning and ongoing communication with city and work site partners to be successful; presentations are used to garner buy-in among work site

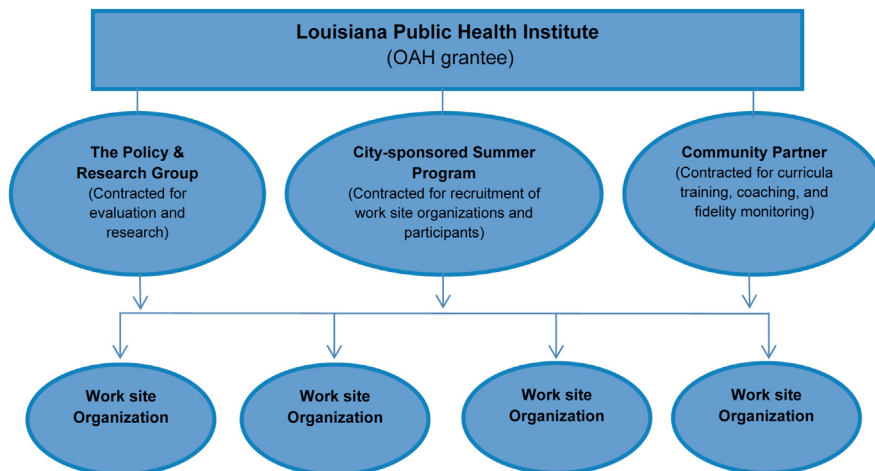


Figure 3. Final 4Real Health organizational structure.

Table 1
Work site expectations checklist of essential 4Real Health site requirements

Checklist item	Item description
Site must have the capacity to host at least 40 youth during the summer	At least 40 youth from the site must be enrolled in 4Real Health
Fully functional site	A/C working, restrooms, desks, chairs, etc.
Site able to host youth workers for at least 8 weeks during summer months	4Real Health staff must be allowed to conduct programming at the site at least 1 day a week for 8 consecutive weeks
Two separate classrooms available specifically for the program	The classrooms (or any room that can accommodate the program session) must be separate from each other so that youth in one room are not able to see/hear youth in the other room and must be able to close the door to avoid distraction
One additional room for youth not enrolled in the program (if applicable)	At least one other classroom or office area should be available for any youth not enrolled in the program or youth must be able to continue on with their regular job duties, while 4Real Health-enrolled youth participate in the program
Desks/tables and chairs	One chair and one desk or ample table space to comfortably accommodate at least 15 youth in each classroom (for taking questionnaires and doing program activities)
TV and DVD player	At least one classroom must have a working TV and DVD player available as one program session of BART requires that a DVD is shown to participants
Work site staff person (supervisor or other) to act as primary liaison with 4Real Health staff	Work site must designate one person to work with 4Real Health staff who will be familiar with the program structure, activities, and needs prior to start of program and available during implementation to help manage any issues that arise
No field trips on program days	No field trips or competing activities for the 4Real Health youth should be scheduled on program days. A schedule for any field trips, guest speakers, or other activities should be submitted to 4Real Health staff before the class scheduling process begins
Site contact information	Contact information, including work phone, cell phone, and e-mail for all site supervisors and teachers must be made available to 4Real Health staff
Fax machine	Fax should be working and available for 4Real Health program staff to send attendance sheets to main offices
Site assessment and staff orientation visits (one mandatory; two preferred)	4Real Health staff will conduct site visits with interested sites during planning process to ensure the above criteria can be met and provide an orientation session to site staff about planned program activities. Site staff (supervisors, teachers, etc.) should be available to participate in the orientation session

BART = Becoming a Responsible Teen.

administrators and staff, a checklist is used to clearly identify implementation requirements to potential work site partners, and multiple site visits are employed to ensure that sites are meeting expectations and to address any barriers that arise.

In hindsight, our primary lesson learned is that undertaking a structured assessment process prior to the implementation of the pilot that includes a detailed preliminary assessment of BART's implementation requirements, the organizational capacity of each partner, and any relevant external factors would have allowed for an earlier re-alignment of implementation strategy. This re-alignment could have involved a change in program to better fit the partners' capacity or a change in partners to better match the TPP program's requirements. These preliminary planning steps correspond to the first two phases of the four-step protocol for implementing EBPs proposed by Tomioka and Braun: (1) deconstruct the EBP into its components and requirements and prepare an implementation plan; (2) identify agencies ready to replicate the program; (3) monitor the fidelity; and (4) track participant outcomes [28].

Although a more thorough and earlier assessment would most certainly have helped to alleviate some of the implementation issues experienced with the small and school-based CBOs, it is important to note here that LPHI's partnerships with all four organizations were formed during the rapid OAH grant proposal-writing process. As other organizations may experience, during the planning and pilot year, LPHI and its partners identified additional implementation and evaluation requirements that were only set or developed after the project had been funded. Similar to many grant-funded projects, the expectations articulated for these CBOs when the partnerships were formed and the program and evaluation were designed (during the grant proposal-writing process) changed and increased as the project began to get underway. Our experiences have led us to conclude that although it is extremely important to conduct thorough

program planning and assessment at the core, organizational, and external levels, some challenges will be unforeseen; when they arise, it is essential to remain flexible and willing to change course to address them.

Recommendations

We have several recommendations as a result of our implementation experiences with these three different types of organizations that may help other programmers avoid the same issues we encountered. Before implementing an EBP, it is essential to assess potential barriers and facilitators that exist at each implementation level (core implementation components, organizational components, and external factors) and examine how these factors could enable or hinder implementation. There are several existing tools that can help lead an organization through this process [17,29,30]; the 10-step PSBA-GTO [17] was developed specifically for implementing EBP TPP programs, and a number of case studies exist to help TPP programs learn from others who have used the tool [21,31].

After assessing the needs and characteristics of the population being served and identifying an appropriate EBP, planners should fully research and understand the core intervention and implementation components that must be in place to meet fidelity requirements. Understanding these core requirements sets the stage for identifying the essential organizational components needed in program partners to achieve quality, sustainable program implementation. As noted by other researchers [21,27,28], at the organizational level, it is important to ensure that both the lead organization and all partner organizations implementing the program have, or can build, adequate administrative and logistical capacity and infrastructure to support the core implementation activities. Elliot and Mihalic [27] noted in their implementation research on the *Blueprints*

Table 2

Summary of organizational and external factors experienced at each type of 4Real Health organization

Organization type	Organizational component facilitators	Organizational component barriers	External facilitators and barriers
Small CBOs	<ul style="list-style-type: none"> • Access to target population through existing programs • Engaged and motivated to implement TPP programs • Prior TPP program implementation experience 	<ul style="list-style-type: none"> • Lack of administrative infrastructure • Lack of administrative capacity to hire and supervise program staff • Lack of consistent access to facilities/classroom space to implement program • Unable to recruit target number of participants to enroll in program 	<ul style="list-style-type: none"> • Barrier: competition with other after-school activities • Barrier: limited public transportation for youth to get home after program
School-based CBO	<ul style="list-style-type: none"> • Access to target population through partner schools • Engaged and motivated to implement TPP programs • Established national organization • Administrative infrastructure and capacity to hire and supervise program staff 	<ul style="list-style-type: none"> • Logistical restrictions imposed by school-day schedule and class structure (class time length, class size, need for gender-separate groups) 	<ul style="list-style-type: none"> • Barrier: state education law related to sex education instruction in direct conflict with several core 4Real Health program activities • Barrier: state law prohibits collection of OAH-required data from students about personal beliefs or practices related to sex • Barrier: state law requires sex education instructors and curricula to be approved by school board and parental review committee
Large decentralized summer youth program	<ul style="list-style-type: none"> • Access to large numbers of target population through existing summer youth employment program • Established city-sponsored program • Administrative infrastructure and capacity at both city and work site levels • City and work sites engaged and motivated to implement TPP programs • Ongoing communication and strong partnerships with city and work site organizations 	<ul style="list-style-type: none"> • Ongoing long-term process to identify summer work site organizations that are motivated and logistically capable of meeting 4Real Health's implementation requirements • Work sites do not always meet all logistical program requirements 	<ul style="list-style-type: none"> • Facilitator: summer implementation removes competition with school-year activities and programs • Facilitator: city views curricula as complementary to other youth development programming • Facilitator: city provides all summer employment program participants with weekly \$100 stipend

CBO = community-based organization; OAH = Office of Adolescent Health; TPP = teen pregnancy prevention.

for Violence Prevention-Replication Initiative that “The finding that most sites are initially unprepared to implement and sustain programs with fidelity presents a major obstacle to taking model programs to scale. Some commitment to developing site capacity must become a routine part of any implementation initiative and the expected time frame for successfully implementing programs must be extended to allow for developing site readiness” (p. 48). Practical tools that program planners might find useful in conducting these organizational assessments include Chapter Five of the PSBA-GTO [29]; the Center for Healthy Aging’s *Self-Assessing Readiness for Implementing Evidence-Based Health Promotion and Self-Management* tool [30]; and, the *Capacities Tool* specified in the *Getting to Outcomes 2004: Promoting Accountability Through Methods and Tools for Planning, Implementation, and Evaluation* manual developed by RAND [29].

Another critical organizational consideration is to ensure that all potential partners fully understand what is expected of them prior to implementation. Developing a clear and concise checklist is a useful way to help clarify these requirements. Lead organizations should have frequent and open communications with implementation partners about program requirements and capacity needs; multiple site visits prior to implementation will help to ensure sites are adhering to requirements and serve as a good way to identify and address barriers as they arise. Memoranda of Understanding are another effective method to clearly spell out and enforce these expectations. A lead organization should monitor adherence to the Memoranda of Understanding

and change or discontinue partnerships if it becomes clear that a partner lacks the organizational components necessary, or if external factors make it impossible, to implement with fidelity. Alternatively, if a partnership is fixed or integral to the project, a change in EBP should be considered.

The key partner organization characteristics that we found helped to facilitate 4Real Health’s implementation are (1) strong administrative motivation and support to implement TPP programming; (2) ability to reach and recruit large numbers of the target population; (3) established programming in which you can integrate your TPP program; (4) incentives to help motivate youth participation in the program; (5) logistical capacity to implement (classrooms, chairs/tables, program time, etc.); and (6) administrative capacity to implement (staffing, office space, oversight, etc.). As we learned, it is also important to assess the political environment in which the program will be implemented to identify any external factors, such as agency regulations or local/state laws that can impact implementation.

Taking the time to identify EBP implementation requirements, assess organizational “fit” both when identifying implementation partners and on an ongoing basis, and uncover potential external factors at play can be well worth the effort, as it will improve the likelihood that a program is executed with fidelity, and thus increase the likelihood that the hypothesized participant outcomes will be realized.

Limitations. This is intended to be a *lessons learned* article that describes our experiences with implementing an EBP within the

context of three different types of organizations. The purpose of the article is to reflect on and describe our experiences, contribute to the knowledge base about real-world organizational and external implementation issues, and provide guidance to practitioners on practical approaches to prevent or address these issues. Although we hope that our findings will provide useful insight to other organizations intending to implement TPP EBPs, as a singular case study of our experiences, the findings are not necessarily generalizable to implementers in other settings. In addition, the findings presented here are based on input from a narrow group of people—the core individuals involved in evaluation and programming at the funded agency. And finally, because the purpose of our formative evaluation process was to assess and address perceived problems rather than identify actual problems, those issues identified may be subjectively biased.

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References

- Centers for Disease Control and Prevention, Chronic Disease Prevention and Health Promotion Web site. Teen pregnancy: improving the lives of young people and strengthening communities by reducing teen pregnancy. Centers for Disease Control and Prevention website. Available at: <http://www.cdc.gov/chronicdisease/resources/publications/aag/teen-preg.htm>. Accessed June 16, 2013.
- The National Campaign to Prevent Teen and Unplanned Pregnancy Web site. Counting it up: the public costs of teen childbearing. The National Campaign to Prevent Teen and Unplanned Pregnancy website. Available at: <http://www.thenationalcampaign.org/costs/default.aspx>. Accessed July 16, 2013.
- Goesling B, Colman S, Trenholm C, et al. Programs to reduce teen pregnancy, sexually transmitted infections, and associated sexual risk behaviors: a systematic review. ASPE Working Paper. Office of the Assistant Secretary for Planning and Evaluation website. Available at: http://www.mathematica-mpr.com/publications/pdfs/family_support/teen_pregnancy_wp.pdf. Accessed July 12, 2013.
- Damschroder L, Aron D, Keith R, et al. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implement Sci* 2009;4:50–64.
- Durlak J. The importance of quality implementation for research, practice, and policy. The Office of the Assistant Secretary of Planning and Evaluation website. Available at: http://aspe.hhs.gov/hsp/13/KeyIssuesforChildrenYouth/ImportanceofQuality/rb_QualityImp.cfm. Accessed July 16, 2013.
- Korda H. Bringing evidence-based interventions to the field: the fidelity challenge. *J Public Health Manag Pract* 2013;19:1–3.
- Durlak JA, DuPre EP. Implementation matters: a review of research on the influence of implementation on program outcomes and the factors affecting implementation. *Am J Community Psychol* 2008;41:327–50.
- May C. Towards a general theory of implementation. *Implement Sci* 2013; 8:1–14.
- Fixsen DL, Naoom SF, Blasé KA, et al. Implementation research: a synthesis of the literature. Tampa, FL: Louis de la Parte Florida Mental Health Institute, University of South Florida; 2005.
- Fixsen DL, Blase KA, Naoom SF, Wallace F. Core implementation components. *Res Soc Work Pract* 2009;19:531–40.
- Rosenheck RA. Organizational process: a missing link between research and practice. *Psychiatr Serv* 2001;52:1607–12.
- Kirby D, Laris BA. Effective curriculum-based sex and STD/HIV education programs for adolescents. *Child Dev Perspect* 2009;3:21–9.
- Chinman M, Acosta J, Ebener P, et al. Enhancing quality interventions promoting healthy sexuality [EQUIPS]: a novel application of translational research methods. *Clin Translational Sci* 2013;6:232–7.
- Lesesne CA, Lewis KM, White CP, et al. Promoting science-based approaches to teen pregnancy prevention: proactively engaging the three systems of the interactive systems framework. *Am J Community Psychol* 2008;41:379–92.
- Lewis KM, Lesesne CA, Zahniser SC, et al. Developing a prevention synthesis and translation system to promote science-based approaches to teen pregnancy, HIV and STI prevention. *Am J Community Psychol* 2012; 50:553–71.
- Philliber S, Kim N. Implementation science: promoting science-based approaches to prevent teen pregnancy. *Prev Sci* 2008;9:166–77.
- Lesesne CA, Lewis KM, Moore C, Fisher D, Green D, Wandersman A. Little (PSBA) GTO: 10 steps to promoting science-based approaches (PSBA) to teen pregnancy prevention using getting to outcomes (GTO). The Centers for Disease Control and Prevention website. Available at: <http://www.cdc.gov/TeenPregnancy/PDF/LittlePSBA-GTO.pdf>. Accessed December 19, 2013.
- Harris MB, Allgood JG. Adolescent pregnancy prevention: choosing an effective program that fits. *Child Youth Serv Rev* 2009;31:1314–20.
- Shearer DL, Gyaben SL, Gallagher KM, Klerman LV. Selecting, implementing, and evaluating teen pregnancy prevention interventions: lessons from the CDC's Community Coalition Partnership Programs for the prevention of teen pregnancy. *J Adolesc Health* 2005;37:S42–52.
- Cassell C, Santelli J, Gilbert BC, et al. Mobilizing communities: an overview of the Community Coalition Partnership Programs for the prevention of teen pregnancy. *J Adolesc Health* 2005;37:S3–10.
- Duffy JL, Prince MS, Johnson EE, et al. Enhancing teen pregnancy prevention in local Communities: capacity building using the interactive systems framework. *Am J Community Psychol* 2012;50:370–85.
- White JA, Wehlage G. Community collaboration: if it is such a good idea, why is it so hard to do? *Educ Eval Policy Anal* 1995;17:23–38.
- Flores JE, Montgomery S, Lee JW. Organization and staffing barriers to parent involvement in teen pregnancy prevention programs: challenges for community partnerships. *J Adolesc Health* 2005;37:S108–14.
- St. Lawrence JS. B.A.R.T.: Becoming a responsible teen: an HIV risk-reduction program for adolescents. Santa Cruz, CA: ETR Associates; 2005.
- Rolleri LA, Lezin NJ, Taylor J, et al. Becoming a responsible teen: adaptation kit. Santa Cruz, CA: ETR Associates; 2010.
- Louisiana State Law. Revised Statute, Title 17: Education, RS 17:281. Subpart D-1. Permitted courses of study. Louisiana State Legislature website. Available at: <http://legis.la.gov/lss/lss.asp?doc=80423>. Accessed July 16, 2013.
- Elliott DS, Mihalic S. Issues in disseminating and replicating effective prevention programs. *Prev Sci* 2004;5:47–53.
- Tomioka M, Braun KL. Implementing evidence-based programs: a four-step protocol for assuring replication with fidelity. *Health Promot Pract* 2013; 14:850–8.
- Chinman M, Imm P, Wandersman A. Getting To Outcomes™ 2004: promoting accountability through methods and tools for planning, implementation, and evaluation. The RAND Corporation website. Available at: http://www.rand.org/content/dam/rand/pubs/technical_reports/2004/RAND_TR101.pdf. Accessed December 19, 2013.
- Center for Healthy Aging: Model health programs for communities. Evidence-based healthy aging programming: tools & checklists. The National Council Aging website. Available at: http://www.ncoa.org/news-ncoa-publications/publications/cha_tools_checklists.pdf. Accessed December 19, 2013.
- Putting What Works to Work. Case studies: Promoting Science Based Approaches to Teen Pregnancy Prevention Using Getting to Outcomes (PSBA-GTO). The National Campaign to Prevent Teen and Unplanned Pregnancy website. Available at: http://www.thenationalcampaign.org/resources/works/PWWTW_PSBA-GTO.aspx. Accessed December 19, 2013.