Contextual factors influencing readiness for dissemination of obesity prevention programs and policies

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Abstract

Within the realm of obesity prevention research, there have been many promising interventions to improve physical activity and nutrition among diverse target populations. However, very little information is known about the dissemination and replication of these interventions. In 2007 and 2008 as part of a larger obesity prevention initiative, Missouri Foundation for Health funded 19 community-based programs throughout the state that showed promise of being model practices and committed to promoting their dissemination. Semi-structured key informant interviews were conducted with 64 individuals across the grant sites to help stage their readiness for dissemination. Through these interviews, the project team was able to identify the variables that impact a program’s readiness for widespread distribution. Some factors contributing to readiness include: strong intervention planning and an existing sustainability plan; physical space available for the intervention; staff and monetary resources; administrative buy-in; community buy-in and engagement; a strong partner base and an agency with a healthy and active mission. These findings add to the literature by systematically identifying a set of key contextual variables. The qualitative data collected support a proposed framework and helps to establish a process for maintaining successful interventions based on several important factors that impact dissemination.

Introduction

Obesity is one of our most pressing public health problems. Currently, the adult obesity rates continue to increase in nearly half of US states and rates are not decreasing in any state [1]. During the past three decades, obesity rates have increased 3-fold among US children and adolescents [2, 3]. Approximately 16% of children and adolescents aged 2–19 are obese [4, 5]; yet, there is a hopeful sign in that no significant change in the prevalence of obesity was noted from 2003 to 2006 [4]. Some researchers have estimated that if the obesity epidemic continues, the youth of today may have a shorter life expectancy than their parents [6]. Given the enormous health and financial implications of the obesity epidemic, the need for identification and dissemination of successful obesity prevention interventions and policies is more important than ever.

There are several types of evidence that are important to consider for obesity prevention [7, 8].
Type 1 evidence defines the causes of obesity-related diseases and the magnitude, severity and preventability of obesity-related risk factors. It suggests that ‘something should be done’ about the obesity epidemic. Type 2 evidence describes the relative impact of specific interventions that address obesity, adding ‘specifically what should be done’ [9]. For example, Type 2 evidence from the Community Guide or the Cochrane Collaboration provides an array of effective interventions for promoting physical activity [10, 11]. Type 3 evidence (of which we have the least) shows how and under what contextual conditions interventions were implemented and how they were received, thus informing ‘how something should be done’ [7]. Studies to date have tended to overemphasize internal validity (e.g. well-controlled efficacy trials) while giving sparse attention to external validity (e.g. the degree to which findings from a study or set of studies can be generalizable to and relevant for populations, settings and times other than those in which the original studies were conducted) [12–15]. For example, Klesges and colleagues reviewed 19 childhood obesity studies to assess the extent to which dimensions of external validity were reported and how these may be related to the generalizability and dissemination potential of interventions [16]. Importantly, this research indicates some key contextual variables (e.g. cost, intervention sustainability) are missing entirely in the peer-reviewed literature on obesity prevention. Green has recommended careful consideration of the ‘best processes’ that should be used when implementing evidence-based interventions to alternate populations, places and times [14].

Having evidence is not enough on its own; to bridge the gap between evidence and practice, we need effective strategies for dissemination. According to Rabin et al. [17], dissemination is defined an active approach of spreading evidence-based interventions to the target audience via determined channels using planned strategies. Within the Diffusion of Innovation Theory, the most commonly used theory in dissemination, moving toward the dissemination of an intervention (i.e. considered an innovation because it represents a new idea or practice) does not occur instantaneously but generally follows a staged dissemination process moving from early-stage adoption (uptake of the intervention by the target audience(s)) to implementation (initial use of the intervention in practice) to late-stage maintenance (ongoing implementation and continued use of the intervention) [18]. There has been sparse research on the influences (individual, organizational, intervention characteristics and system factors) that move an intervention across the stages of dissemination. For example, previous work suggests that certain individual and organizational issues (e.g. skills, leadership, management support) may be particularly important in understanding the adoption and implementation of evidence-based approaches within areas with high chronic disease disparities [19–21].

In response to the obesity epidemic, health foundations and organizations across the United States have developed obesity prevention initiatives with a particular focus on environment and policy change [22–25]. For example, both the Robert Wood Johnson Foundation and the W.K. Kellogg Foundation have developed multi-million dollar initiatives focused on understanding the evidence base and how it can be applied in diverse communities across the United States. These initiatives place a strong emphasis on evidence base while also taking innovative approaches that maximize our understanding of external validity.

Within Missouri, the Missouri Foundation for Health (MFH) has established the Healthy and Active Communities (H&AC) Initiative to support community-based efforts in obesity prevention [24]. The H&AC Initiative targets high-risk populations, in particular youth and low-income individuals and places a special emphasis on dissemination of H&AC grantee successes.

**Background on H&AC**

The H&AC Initiative was developed in 2005 and currently funds 19 community-based obesity prevention organizations working to achieve the status of a model practice (defined by the MFH as ‘A practice exhibiting quantitative and qualitative evidence that the intervention has created some positive change to promote healthy and active living; active collaboration;
replicable program components and elements of sustainability. The Model Practice Building (MPB) grantees come from myriad different organizational profiles including public schools, health departments, non-profit community organizations and universities. The catchment area for the MFH, as well as these organizations, includes the Southern and Northeastern 75% of the state (Fig. 1). The programs received funding ranging from $148,356 to $350,000 with an average award of $306,775. Recognizing the importance of implementing, evaluating and disseminating effective practice-based work, the MFH has taken an innovative approach with these grantees by hiring three teams from academic institutions to provide specific technical assistance around these three components to help them achieve model practice status.

A critical part of this three-pronged approach by the MFH was the creation of a dissemination team focused on replication of MPB interventions. The core dissemination team was comprised three main staff members who worked in collaboration with an advisory team of professionals and practitioners to provide technical assistance to the grantees. Together, these teams reviewed the project’s approach and materials and identified resources for enhancing effectiveness. The ultimate goal of the technical assistance was the development of products (e.g., tangible how to guides) that could be disseminated to other organizations interested in replicating all or part of the H&AC grantee interventions.

During the first year of MFH MPB funding, the core dissemination team spent time introducing the

![Fig. 1. MFH grants map.](image-url)
concept of dissemination to grantees. This involved communicating the importance of active dissemination strategies (e.g. hands on technical assistance, replication guides) rather than passive approaches (e.g. mass mailings). The grantees were required by the MFH to create dissemination plans and objectives in preparation for dissemination efforts in the coming years of funding. In order to appropriately support the MPB grantees, the dissemination team also qualitatively assessed the grantees to determine the barriers and facilitators to dissemination, which interventions were most ready for full-scale dissemination, what factors contributed to readiness and what was different between those interventions that were more ready for dissemination and those that were still in the early stages.

The data from the preliminary assessment of dissemination readiness will be presented in this paper, findings regarding dissemination of the products created by the H&AC grantees are still being collected and will be presented elsewhere. The objectives of this paper are to (i) describe the challenges and barriers the grantees faced during the early phases of dissemination of their interventions and (ii) identify factors (individual, organizational and intervention characteristics) that could potentially influence dissemination of an intervention.

Methods

This study was approved by the Institutional Review Board at Washington University in St Louis.

Sample selection

From October 2008 through March 2009, interviews were conducted with 64 intervention developers, implementers and staff across the 19 grant sites. Fifty-eight percent of those interviewed were program implementers, 26% program staff, 13% both program manager and developer and 3% program developers. Thirty-nine percent of interviewees obtained a bachelor’s degree and 58% have a graduate degree. The average length of time with the organization was 5.5 and 4.2 years in their current job. Intervention developers, implementers and staff were chosen for their different perspectives on the intervention. It was thought that developers (those individuals involved in the initial development and planning of the intervention) would be able to speak to the reasons for creation of the intervention, the implementers (e.g. program managers, those individuals involved in ensuring program goals are met) would be able to speak to the successes and challenges of the intervention and the program staff (those individuals in charge of running intervention events or working on the ground level) would be able to speak to the day-to-day of the intervention. Because the grantees often represented small organizations or departments (within a larger organization) with only one or two staff members, in some cases, the implementers were also developers or the implementers were also staff members. An initial round of recruitment of grantees for interviews was conducted in fall 2008. A snowball sampling technique was used [26]. For the purpose of our study, this technique involved interviewing an initial set of individuals who then referred the interviewer to others involved in the intervention who would be able to provide additional information [26].

All interviews were conducted in person and took approximately 1 hour to complete. Participants were told that their responses would remain confidential and not reported in a way that could identify them. The preferred format for interviews was one-on-one, but in some instances, the grantees requested a small-group interview, mainly for time efficiency.

Development of interview guide

The interview guide consisted of 11 open-ended questions with associated probes designed to both learn about the background of the intervention and to begin to determine readiness for dissemination (Appendix 1). The questions were based on a previously developed dissemination framework [27]. The questions in the current study that were used to quantitatively assess stage of readiness and show good fit using confirmatory factor analysis—these results have been recently presented [27]. The current study was designed to
illuminated the middle region of the framework (i.e. qualitative factors that contribute to readiness), namely the individual, organizational and intervention characteristics (Fig. 2). This framework has been adapted from the Diffusion of Innovations theory and serves as a guide for the structure of many of the questions including those about partnerships, the evidence base for the intervention, the innovation of the intervention, modifications made to the intervention, challenges overcome, core components of the intervention, sustainability plans, potential adopters of the intervention and the view each grantee’s agency has about the importance of healthy lifestyle.

Training and administration of interviews
Before conducting key informant interviews, all interviewers underwent training in qualitative interview techniques. Each interview was digitally tape-recorded to capture important details from the interviews. Verbal consent to tape record was obtained prior to each interview.

Data analysis
Information gained during these interviews was professionally transcribed. A total of 728 pages of transcript were qualitatively coded using Atlas.ti version 5.2. The project team used a focused coding technique to identify the key themes within the interviews [28]. Each transcript was coded by one team member. The assignment of quotes to codes was then reviewed by at least one other team member. This enabled initial review of assignment of quotes to each category as well as comparison across codes. This comparison included assessment of the relationship between codes, where codes could be collapsed (same concept and different heading) and where codes might be subsumed under a broader code (creation of subcodes) [28]. This methodology helped to ensure that

![Diagram](image_url)

**Fig. 2.** Factors affecting dissemination of evidence-based interventions to prevent obesity.
those parts of the interview most pertinent to dissemination were captured. Themes within and across interventions were identified.

## Results

### Description of the interventions

The interventions conducted by the MPB grantees target a diverse range of audiences within many different settings (Table I). Thirty-seven percent of the interventions target rural areas, 32% urban areas and 26% some combination of urban, rural and suburban areas. Sixty-three percent of target audiences come from low-income populations and nearly 60% of target audiences include some racial minorities (African American and Hispanic). Many of the grantees are targeting more than one setting with their intervention. The most common sites served by the interventions are schools (n = 12) and communities or neighborhoods as a whole (n = 11).

### Forms of evidence

The interview data helped to identify a variety of forms of evidence that the grantees used to develop their interventions. While 15 of the grantees expressly mentioned the evidence base of their programs, all 19 of the interventions utilized the Community Guide and other resources (such as Missouri Department of Health and Senior Services) as the evidence base for part or all of their intervention [11, 29, 30]. Nearly, all of the grantees also developed their intervention in response to evidence collected during a needs assessment within their own communities. Two of the interventions were developed using common theoretical concepts (e.g. the socioecological framework) [31, 32].

### Identification of key factors

The key informant interviews provided us with a qualitative snapshot into the 19 MPB interventions. Our initial analysis and summary from the interviews allowed us to identify the potential factors that help move an agency through the stages of dissemination (Table II). The factors identified during the interviews support the framework by naturally falling into the three categories: individual, organizational and intervention (Fig. 1). Individual factors are those characteristics related to the grantee organization’s staff and resources (e.g. knowledge, skills, commitment). Organizational factors can be defined as the ability of the organization to work effectively with stakeholders (e.g. partnerships, leadership, community focus). Intervention factors are the attributes of the intervention (e.g. sustainability, adaptability, costs).

Further review of these factors revealed a pattern. Some grantees exhibited several of the factors impacting readiness for dissemination and some grantees exhibited fewer of the factors or exhibited factors that inhibit readiness for dissemination. From this observation, we were able to create two broad categories of grantees and potential dissemination products based upon these categories:

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### Table I. Characteristics of intervention projects, Missouri, 2008–2009

<table>
<thead>
<tr>
<th>Intervention location</th>
<th>Number of grantees</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>Rural</td>
<td>7</td>
<td>37</td>
</tr>
<tr>
<td>Suburban</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Combination</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Income level of target audience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>12</td>
<td>63</td>
</tr>
<tr>
<td>Middle</td>
<td>8</td>
<td>42</td>
</tr>
<tr>
<td>Unknown/not captured</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Race of target audience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>8</td>
<td>42</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>African American</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>Both Caucasian and</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>African American</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting for the intervention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>12</td>
<td>63</td>
</tr>
<tr>
<td>Community/neighborhood</td>
<td>11</td>
<td>58</td>
</tr>
<tr>
<td>Hospitals/health organizations</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>Before/after school programs</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Worksites</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Faith-based organizations</td>
<td>2</td>
<td>11</td>
</tr>
</tbody>
</table>

*Grantees fall into one or more category; percent does not add up to 100%
(i) Potential for limited to moderate dissemination—products that encourage intervention awareness (e.g. lessons learned, information briefs) and (ii) Potential for widespread dissemination—products that allow adoption of the intervention by other organizations (e.g. in-depth replication guides, policy briefs).

The qualitative breakdown of these factors fell into three categories is as follows:

**Intervention characteristics**

Grantees that had sustainability (existence of structures and processes that allow a program to leverage resources to effectively implement evidence-based policies and activities) plans in place within their organizations and had thought through the flexibility of their intervention fell most readily within the widespread dissemination category:

One is I think the fact that we’ve got this framework that’s very, very carefully thought out, that really outlines where you can go, and I think it helps people to see that roadmap of where they are now versus where they could be. And the other thing that I love about the program is the fact that we don’t impose anything on any school. We go in, they create what they want to do in their own school. I think if we went in and said, Here’s what you’re not doing right. You need to do this, this and this, we would not have any school wanting to work with us.
It was most important that these grantees had reflected on the cost (financial, staff, etc) of their intervention and had taken this into consideration during future planning. A program is more readily adopted if it is replicable at reasonable cost for the organizations interested in implementation. Those interventions that were more costly to replicate and less transferable faced more barriers to dissemination and fell into the limited or moderate dissemination group. In some instances, parts of the program will no longer be financially feasible once funding has ceased.

No, I mean, when the grant money is gone, we’re scared.

Those organizations that had the resources available within the agency to provide the target audiences with low-cost or free services were more ready for widespread dissemination. In some instances, these resources were financial and took away the burden of participation in the program.

And also, anytime you can add, or offer them a service that doesn’t cost them anything, as in any legwork or pain on their part, but is beneficial to them and their staff and can be like a motivator or something different, normally you don’t have a hard time.

In other instances, space and staff available to be dedicated to the intervention was an important resource.

Well I think it’s, like what [name] said earlier, having the dedicated space and the dedicated staff.

Some organizations emphasized that it was not only the availability of the intervention space but also the safety and quality of the space that impacted intervention success.

Let’s see … they definitely … having space. I mean some of those are just very logistical little things, like you know you need the space and one that it’s a safe place for the older adults to congregate. So do they have a place that’s big enough, and it’s not going to be interrupted and it’s going to be consistent and they can get to, and all of those things. It’s very logistical, but it’s very important.

So that people will stumble across it, even if they didn’t intend to, and not just a high-profile location, but a location that people feel comfortable going to.

Individual factors

Some grantees ready for widespread dissemination indicated the importance of support from administrators as a critical individual factor.

Well you have to have someone coordinating. You have to have someone that’s interested and willing to coordinate the project. Well the administrative buy-in is going to be really important.

But just having the administrative support makes you or breaks you.

Conversely, grantees that fell within the limited dissemination category tended to struggle with issues around maintaining an organized intervention structure. This could stem from several factors including the lack of a healthy and active focus and mission within the agency. Moreover, it seemed that in these instances, the ability to accurately track staff time and roles was a challenge and this made it difficult to complete all of the necessary intervention tasks.

Another challenge that we face is, for me, to keep track of all the things that they do. It’s a challenge for me. For example, thinking of dissemination, do you know I was not too recently talking with the staff, we call it the grand staff meeting, and I say, You know, I just need to know exactly where you are going… and we forget, Oh who needs to track that? Because it’s just there, it’s just something they do every week. And it has been a challenge to keep track of the things.
The challenge of unclear staff roles is further compounded by staff turnover within the organizational leadership, another barrier to widespread dissemination. In these instances, the staff is trying to determine what the program is about.

And just to kind of give you a little history of where we’re coming from, [name] gave birth to this idea, and with the help of our leaders, our CEO, and our Exec. And then … she left and she turned everything over to us, so I would say in the last year we’ve been learning what we’re supposed to be doing.

Organizational factors

The single most prominent organizational variable that impacted readiness for widespread dissemination involved the engagement of partners. For those grantees ready for more widespread dissemination, having a diverse partner base and strong involvement from the community was an important facet of being successful within the organizational realm.

We have a really big, broad group of people that we collaborate with for a variety of things. So each community is partnership based and each task force is a partnership.

The collaboration. You’ve got to have the involvement by the community. You’ve got to have multiple partners at the table, and I think that … I think that is the only way it will be truly successful, because if … I can’t, at the Health Department, do what we’ve done by ourselves. There is no way. And if we didn’t have the schools, the hospital, and the volunteers, and the school nurses … if we didn’t have those people, this would not happen.

It is equally as important that these grantees acquire support from the communities they serve and the partners they collaborate with throughout the development and implementation of the intervention.

I think it has to have partner buy-in to begin with, so I think going with saying, This is your community and we’re going to help you develop a community that’s healthiest for the people in it, as opposed to, You need to have … is the biggest thing.

And I think community support for the project before it even starts. Having a large base of people that say, Yeah this is a great idea.

Establishing a rapport with the surrounding community and knowing where to look for future partnerships helped immensely with establishing strong inter-organizational ties.

For some of the interventions facing barriers to widespread dissemination, getting buy-in and support were a challenge. For example, in some cases, getting into schools to carry out the program was very difficult:

Another one would be getting into the schools. The reason for that is that [the] public schools [are] notorious for being incredibly difficult to get into, if you’re an outside program and you’re trying to do anything. It’s like fighting tooth and nail. Anything we’ve tried to do from the organization as a whole to get with [the] public schools is always challenging.

Additionally, for those grantees with limited or moderate dissemination readiness, there were issues with getting consistent volunteers and overall buy-in within the communities.

We get volunteers for the [intervention]. Sometimes friends or people in the neighborhood or a family, or what have you. But as far as more formalized institutions, not yet, not really.

In particular, some grantees indicated that the community is not necessarily even aware that the intervention is available for their use.

I think so. It’s still surprising how many people don’t know who we are.
Establishing a rapport with the surrounding community and knowing where to look for future partnerships helped immensely with establishing strong inter-organizational ties.

**Challenges and barriers**

From these interviews, we were also able to identify some of the key challenges faced by the interventions. While challenges were an important point of differentiation between those grantees ready for widespread dissemination and those who are less ready, some challenges were common between grantees regardless of dissemination readiness (Table III). One such challenge was staff turnover:

Our agency has been going through tough times. We had 11 layoffs and four of those affected our department.

One of our challenges is staff turnover as far as within the Alliance, or our staff, not only the executive director, but the health educator, that has been an issue.

When we compared challenges among rural versus urban grantees, we found contrasts with regard to socio-contextual factors. For example, a couple of the urban grantees cited cultural barriers as a potential challenge to the intervention:

They’re not going out to the library, the public library to attend some kind of a little workshop on how to cook healthier for your family. There will be a language barrier, and they don’t want to go into those big buildings and … those institutional places, they’re intimidating.

Other urban grantees cited environment and safety (crime) as a potential barrier to the intervention:

It is a challenge for our market because for the farmers, even if they’re only ten, 15, 20 miles away, if they have a variety of other markets around town, there is a stigma about the north side that a lot of them have, I guess, inherited just from growing up in the St. Louis area or from watching the news. People tend to believe that if it’s on the north side, it’s either dangerous, scary or it’s not profitable, or whatever those things are. So the more success we have in attracting crowds, the more we can demonstrate to them that this actually is working.

These factors did not show up as readily among the rural grantees. Some unique issues to the rural grantees included lack of public transportation throughout the community. Many of these grantees were targeting several different counties and this posed a problem as well. Communication strategies are hindered because of the lack of collaboration between multiple communities:

And we try to publicize, but not everybody … not everybody reads the paper and we’ve got a weekly paper. Some of the communities don’t have any papers at all, so there’s, I mean, aside from learning that at the school, there’s no publicity out there. You have to almost think of each population there are and how to best reach them.

**Table III. Common challenges faced by grantees**

<table>
<thead>
<tr>
<th>Individual level</th>
</tr>
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<tbody>
<tr>
<td>Staff turnover</td>
</tr>
<tr>
<td>Lack of resources and staff dedicated solely to the project</td>
</tr>
<tr>
<td>Unclear staff roles</td>
</tr>
<tr>
<td>Inconsistent evaluation</td>
</tr>
<tr>
<td>Organizational level</td>
</tr>
<tr>
<td>Difficulty communicating findings</td>
</tr>
<tr>
<td>Difficulty engaging the community (e.g. parents)</td>
</tr>
<tr>
<td>Intervention level</td>
</tr>
<tr>
<td>A common desire for more of the resources necessary for the program (time, staff, etc.)</td>
</tr>
</tbody>
</table>

**Discussion**

The purpose of this study was to identify key contextual variables that could help move an intervention across the stages of dissemination. Specific
intervention, organizational and individual characteristics such as costs, leadership, partnerships and fidelity were repeatedly cited by interviewees as crucial components of a successful organization and the adoption and implementation of its intervention by partners or other organizations. The MPB grantees that possessed these characteristics were prepared for widespread dissemination while those that did not were prepared for more moderate to limited dissemination activities.

The resources necessary for implementing or maintaining interventions were widely cited by grantees as a major barrier, particularly when resources, such as a dedicated space, were a key component of an intervention. Having resources available is likely associated with having a diverse set of funding sources. This may be indicative of both a successful program and strong organizational structure. Regarding individual factors, we found that organizations and programs possessing strong leadership and management support tended to be more engaged in widespread dissemination activities. This leadership could draw funding and provide the crucial buy-in and organizational support that these obesity prevention programs needed. Conversely, when leadership was weak or absent, the organization struggled to ‘keep track of things’ as framed by one interviewee. A failure to have the intervention relate clearly to the organization’s mission was yet another potential pitfall for implementation and dissemination. Beyond organizational leadership, results from this study suggested that the importance of having involved project leaders. These project leaders were often involved in the initial development of the program and when they leave, the project often seemed to struggle.

Finally, grantees recounted how partnerships were able to support an organization and act as champions in the community. While many grantees were concerned about seeing grant funding end, partnerships may have served as a buffer for those grantees with a diverse group of partners. Additionally, partners helped engage the community and aided with enlisting community buy-in. Those grantees who failed to engage partners, build ties with the community or raise awareness of the agency and the intervention were prepared for more limited dissemination efforts.

As stated above, research on the role of costs is noticeably absent from the literature examining the potential generalizability or dissemination elements of interventions [16]. This suggests that while costs of implementing an intervention may not be on the mind of researchers, practitioners are acutely aware of how the intervention can be met by existing fiscal resources. We agree with other authors that improved reporting of these cross-cutting factors may lead to improved translation and adoption of evidence-based interventions [13, 33].

Previous studies have highlighted the importance of intervention champions or powerful leaders in movements for social change within public health (e.g. tobacco control had C. Everett Koop [34]). Organizations engaged in obesity prevention interventions can also benefit from this at the local level as evidenced by many of the MPB grantees engaged in widespread dissemination. This can be expanded generally to the importance that organizational leaders and management have in ensuring the success of an intervention [7].

The role of partners has been discussed before, in light of how effective partnerships can improve population health [35]. Our results indicate that healthy, successful and mutually beneficial partnerships can also aid in dissemination. What exactly makes a successful partnership was not revealed in the interviews, but participatory research may contain some clues. Cargo and Mercer suggest that engagement, formalization, mobilization and maintenance are stages that partnerships move through and list the key activities and challenges related with each stage [36]. In studying the successes of Active Living by Design grantees, Glasgow and King cited a ‘strategic composition of the community partnership’ [37]. As we noted above, such a strategic composition can act as a buffer when funding ends as well as helping the intervention reach more deeply into the community.

Interviews with grantees also pointed out gaps and challenges through omission. For example, theory is important for the success of public health programs and policies, yet few grantees mentioned
theory in the implementation of their intervention [38, 39]. While interviewers did query on the evidence base upon which the program was established (including any theory used to develop it), it is possible that the grantees were not familiar with the common theories. Had interviewees assisted grantees in identifying the theory base to their program, it is possible that they might have drawn a clear connection between successes and failures and the use of theory.

A key lesson learned from this first year of work with the MPB grantees is the importance of designing for dissemination [40, 41]. It is critical that a program begins with the idea of dissemination in mind and the dissemination plan fits the needs of communities that they are hoping will adopt their programs. Early dissemination planning increases the likelihood that successful programs will be maintained. A number of the challenges can be identified early on by planning for dissemination through exploratory evaluation [42, 43].

While there is richness to the type of information found through key informant interviewing, this process was imperfect and at times it was difficult to fully stage the grantees based solely on this qualitative information. Obtaining unbiased information from the grantees was also a struggle as staff associated us with the funding agency (MFH) and were perhaps wary of the repercussions of discussing their challenges in dissemination. Emphasis was placed on the confidentiality of all things disclosed during the interviews.

Dissemination of effective programs and policies requires active strategies (e.g. technical assistance) [39]. As funding agencies look toward new initiatives, it is important that they recognize the challenges in disseminating what we know works. By recognizing those factors critical to the successful dissemination of a program and by encouraging and funding dissemination planning as part of the initial call for proposals, they will ensure that their programs are geared toward dissemination from the start. A more comprehensive approach, such as that taken by the MFH, would enlist dissemination expertise to provide technical assistance from the planning phases through the final stages of a program to ensure the programs have a consistent approach to dissemination. Future analyses will add to this qualitative information with effectiveness data and quantitative readiness data to further flesh out and test our model’s strength in predicting obesity dissemination readiness and effectiveness.

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Conflict of interest statement

None declared.

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Appendix 1

Key Informant Interview Template

1.) First, we would like to know a little bit about the background of your program, which we are calling _______.

   Probes—What are your roles and responsibilities in this program?

   Who are some of the key collaborators/partners to your program and what are their roles? (Important here to probe more if they are struggling with partners—“who provided the facilities? Who provided food for the event? Who provided the informational handouts for your health fair? etc.)

   What additional collaborators/partners could help you to enhance what the program is doing?

   What made you choose to target this problem within this community?

2.) When you and your ‘team’ (this could be different depending on Q1) were developing and planning this program what made you think that it might be effective?

   Probes—Had you seen anyone else doing a similar program?

   Did you learn about it from somewhere else?

   What do you ultimately hope to achieve if your program is successful?

3.) When you wrote the grant you may have looked at other programs that were trying to achieve similar outcomes as your own. What about your program is new and different from these other programs? (let them answer first and then probe with examples if need be) Some ways in which the program could be different include its new/different approach to the program or policy, its novelty in your specific geographic area and/or with your target population or its use of existing ideas in a different or unique way.

   Probes—How did you change or modify the program to fit your target audience?

   As you began implementing your program, what changes did you make as you learned more about the target population?

4.) What are some of the challenges and issues that your program has encountered? Examples could include internal challenges such as staff turnover or changes in leadership within the organization; external challenges such as natural disasters and/or programmatic challenges such as insufficient materials or a site being too small for the program, etc.

   Probes—what strategies have been used to overcome these challenges? (here it is critical that if they mentioned a challenge that they talk about the strategies that they used to overcome it – may need to probe to get at this)

   What strategies could have been used to overcome the challenges?

5.) What are the current programmatic costs above and beyond those included in the current budget?
Probes—Do you feel you have all of the resources necessary for your program to be successful? These resources could be monetary, supplies, professional support, staff, etc.

If not what resources would be helpful?

6.) Up to this point, how has your program and the modifications that you have made to it impacted the target audience? What kinds of changes have you seen?

Probes—What kind of feedback have you received from participants about the program?

Did you collect qualitative or quantitative data to measure the changes?

Which parts of your program do you feel are most important to its success and to its possible replication?

7.) Are there any plans in place to continue the program at the end of MFH funding?

If so, how do you plan to achieve this (use probes)?

If not, what would need to be done for the program to continue (use probes)?

Probes—Are there alternative funding sources?

Is the program self-sustaining?

Do you think that the program will become institutionalized, or a permanent part of the organization/community?

If another agency were implementing this program, what recommendations would you give them?

8.) What products or lessons learned exist from the first round of the H&AC Initiative? By products, we mean manuals, booklets, handouts, videos, assessment tools, etc.

Probes—How, if at all, are you currently sharing lessons learned or products from your program with other audiences that might use them? These “audiences” would include other agencies, organizations, or communities that may find your program and products useful for their own work. Please describe the groups that you are sharing with.

What are the future products that you anticipate as a result of this second round of grants?

What are the ideal products that you would like to come out of this program? What would you need to make these products possible?

9.) In addition to those groups, you have already been sharing with, what other audiences might benefit from your program and products? These audiences could be on a local, state or national level.

Probes—in what ways might your program need to be changed to fit the needs of populations different from the ones you are targeting?

For this next question, we are going to shift focus a little bit and think about your agency as a whole rather than just your individual program.

10.) Does your agency view healthy and active living as important?

Probes—If yes, how so?

If not, what needs to happen to make this a bigger priority?

11.) Are there other individuals involved in the program that you think would be important to interview? Any collaborators that you feel could provide good insight into the program? Any program recipients that could provide insight?