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Research Article

Implementation and Maintenance of a Community-Based Older Adult Physical Activity Program

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Abstract

Purpose of the Study: We examine facilitators and barriers to the implementation and maintenance of Enhance®Fitness (EF), a group exercise program for older adults, at early-adopter YMCA-affiliated sites, and summarize strategies employed by EF instructors and staff to overcome challenges.

Design and Methods: This qualitative study used semi-structured phone interviews with 32 instructors, staff members, and master trainers from 24 different YMCA-affiliated sites. Interviews were digitally recorded, transcribed, and analyzed with a focus on the implementation and maintenance components of the RE-AIM framework.

Results: We identified a series of factors affecting the implementation and maintenance of EF at YMCA-affiliated sites, which can be categorized into program-specific (such as instructor training, the structure of the program, reporting requirements, and insurance coverage), and organizational (such as organizational support and infrastructure for program delivery, champions, and funding to cover the costs of program delivery). Strategies used to overcome challenges associated with these factors include identifying parts of the program that can be adapted, hiring staff and instructors that understand and support the program, and educating staff and instructors about the importance of evidence-based programs and of data collection for program evaluation.

Implications: Assessing the readiness of organizations for program delivery and the match between program goals and the needs of organizations and participants would help facilitate the successful implementation and maintenance of physical activity programs in community settings.

Keywords: Physical activity, Evidence-based practice, Healthy aging, Dissemination, RE-AIM

Physical activity has many benefits for older adults, including preventing or controlling heart disease, depression, type 2 diabetes, and frailty (Sun, Norman, & While, 2013; Taylor et al., 2004). Enhance®Fitness (EF) is an evidence-based, low-cost, multicomponent group exercise program that helps older adults at all levels of fitness maintain health and function (Wallace et al., 1998). Taught by certified EF instructors, the 1-hr classes meet three times a week and include cardiovascular endurance training, strength training with cuff weights, and dynamic and static balance, posture, and flexibility exercises. EF has been shown to meet the needs of participants with varying levels of function, strength, and ability through modified exercises that can be performed seated or using support while standing. The program includes functional fitness tests which measure participants' lower and upper body muscle strength and balance (Rikli & Jones, 1999). Having adequate muscle strength and balance helps with activities such as walking, climbing stairs, and stooping/bending/kneeling, oftentimes adversely affected by chronic conditions common to older

adults. Previous studies have measured the economic value of EF, building support for coverage of EF costs by health care plans and Medicare (Ackermann, Williams, et al., 2008). Furthermore, a recent evaluation by the Centers for Medicare & Medicaid Services of community-based wellness and prevention programs (Centers for Medicare & Medicaid Services, 2013) found promising evidence suggesting that participation in EF may drive down total healthcare costs for older adults.

A number of evidence-based programs for older adults have been adopted and implemented by organizations in communities throughout the United States (Ackermann, Finch, Brizendine, Zhou, & Marrero, 2008; Lorig, Hurwicz, Sobel, Hobbs, & Ritter, 2005; Ory et al., 2010; Yan, Wilber, Aguirre, & Trejo, 2009). Since 1993, Senior Services, a Seattle, Washington non-profit agency serving older adults and their caregivers, has served as the disseminating organization for EF. Its strategy has been to license and support community-based delivery sites throughout the country that adopt EF. To aid implementation, Senior Services offers certification classes for EF instructors at sites around the country. To aid maintenance of programs, Senior Services maintains program databases housing demographic, participation, and fitness-test data on participants. In 2014 EF reached 11,529 participants in 439 community sites in 30 states. The settings in which EF is offered are diverse: residential and retirement communities, senior housing facilities, adult day care centers, YMCAs (Ys) and private gyms, and multipurpose centers in communities (Kohn, Belza, Petrescu-Prahova, Miyawaki, & Hohman, 2014).

In an effort to scale-up the dissemination of EF, Senior Services entered in 2012 into an expanded licensing agreement with YMCA of the USA (Y-USA), a national network of mission-driven, community-based nonprofit organizations. Serving more than 22 million people each year, Y-USA is the national resource center for all Y branches, and is dedicated to strengthening communities and supporting healthy living across the lifespan. Y-USA has made dissemination of EF to people with arthritis one of its highest strategic priorities. This large-scale effort will build on the implementation and maintenance experience of 116 "early adopters," Y-affiliated sites (For the purposes of this study, YMCA-affiliated [Y-affiliated] sites included EF classes that were offered at brick-and-mortar Y locations, or EF classes that were sponsored by a Y in community locations such as churches or retirement communities.) that licensed EF independently from 2005 to 2012, before the expanded licensing agreement between Senior Services and Y-USA (Belza et al., n.d.).

Conceptual Framework

The present study is guided by the reach, effectiveness, adoption, implementation, and maintenance (RE-AIM) framework (Glasgow, Vogt, & Boles, 1999). RE-AIM is one of the most widely used frameworks for the translation of evidence-based programs; it provides a set of guidelines for translating research into practice and improving the chances programs have of working in real-world settings (Demiris, Parker Oliver, Capurro, & Wittenberg-Lyles, 2014). Of interest for the current study are the implementation and maintenance dimensions of the framework. At the user-organization level, *implementation* refers to the program agents' fidelity to the elements of a program's protocol, including consistency of delivery as intended, and the time and cost of the program. *Maintenance*, on the other hand, refers to the extent to which a program or policy becomes institutionalized or part of the routine organizational practices and policies (RE-AIM website, n.d.). The purpose of this study was to examine the implementation and maintenance of EF at early-adopter Y-affiliated sites. Our findings may inform the implementation and maintenance of EF and other evidence-based programs in community settings.

Design and Methods

This study is based on 32 semi-structured individual phone interviews with EF instructors (n = 15), master trainers (n = 2, hereafter included with instructors, since their perspectives are similar) and program staff (n = 15) from Y-affiliated sites that were currently offering or had previously offered EF as of June 2012. We opted for a qualitative study design because qualitative methods are best suited for evaluation research that seeks to gain a deeper understanding of facilitators and barriers to program implementation and maintenance (Gaglio, Shoup, & Glasgow, 2013; Steinman, Hammerback, & Snowden, 2013).

Interviews were conducted using a semi-structured interview guide including both open- and closed-ended items. Guide development was informed by the RE-AIM framework. Interview guides were pilot-tested and revised prior to subject interviews. Staff interviews included 40 questions; instructor/master trainer interviews included 36 questions. Probes and follow-up questions were used as needed. Interviews elicited information about staff and instructor professional experience and responsibility, experience with EF including barriers and facilitators, benefits of EF, participant recruitment strategies, instructor recruitment strategies (staff only), fitness checks (instructors only), and instructor performance evaluation (instructors only). In addition, we collected basic demographic information: age, education, job title, and duration of involvement with EF.

Staff and instructors were identified through administrative program records from Senior Services. Data included site name and address, and staff and instructor names and contact information. Our aim was to recruit 15 staff and 17 instructors for the study sample. This sample size was selected to achieve maximal breadth and depth of information with the goal of reaching conceptual saturation (i.e., additional interviews not returning

substantively new information) while also being feasible within the limits of study funding and staff availability. Staff and instructors were eligible to participate if they had been involved with EF in a program oversight or instructor capacity between January 2005 and June 2012, and if the class was either located at a Y, or sponsored by the Y in a community site. We identified 295 instructors and 94 staff associated with 116 Y-affiliated program sites offering EF between January 2005 and June 2012. We concluded that substitute instructors were unlikely to have sufficient knowledge regarding program adoption, implementation, and maintenance. Thus, EF instructors whose primary role was substitute instructor were excluded from the recruiting sample (n = 40). In total, we sent recruiting letters to 75 staff and 56 instructors for which complete contact information was available through Y administrative records.

Reminder recruiting postcards were sent 2 and 4 weeks after the initial recruiting letter if no response had been received. A Y-USA staff member followed up by email with staff employed by Ys to improve recruiting efforts. Staff and instructors wishing to participate in the study called a dedicated study phone line or emailed the study email account. A project coordinator tracked all incoming calls and emails, determined eligibility, and scheduled subject interviews. Out of 56 instructors approached, 19 responded, one was ineligible, one was placed on a waitlist; 17 instructors were successfully enrolled in the study. Out of 75 staff approached, 26 responded, 8 were ineligible, 1 requested to be removed from the study pool, and 2 were placed on a waitlist; 15 staff were successfully enrolled in the study. Upon completion of the 17 instructor and 15 staff interviews, we reviewed the transcripts and determined that additional interviews were unlikely to elicit substantively new information, concluding that it was unnecessary to recruit or interview additional subjects. Interviewers (BB and MPP) obtained verbal informed consent at the beginning of each interview. Subjects were mailed a $20 gift card upon completing the interview. Interviews averaged 48 min in duration (range 27–77 min), were digitally recorded, and professionally transcribed verbatim. Transcribed data was aggregated and analyzed in Atlas.ti version 7.

We used qualitative content analysis to categorize facilitators and barriers to EF implementation and maintenance. Separate staff and instructor codebooks were developed using a combination of *a priori* themes from the interview guide and emergent themes identified during early review of the transcripts. Examples of *a priori* themes include broad themes like barriers and facilitators as well as more specific themes such as "match of program with organizational mission" and "organizational infrastructure for program delivery." Two pairs of research team members double-coded a subset of staff and instructor transcripts, compared and reconciled coding until agreement exceeded 80%. Remaining transcripts were divided and coded independently. After initial coding, we used a deductive approach to identify and extract codes related to program implementation and maintenance; extracted data was then coded a second time to specifically identify barriers, facilitators, and strategies that speak to implementation and maintenance within the context of RE-AIM. Descriptive statistics were calculated for demographic items.

This study was determined exempt from review by the University of Washington Institutional Review Board.

Results

Table 1 presents the demographic characteristics of the sample. Staff were, on average, 49 years old and all had at least some college education. Staff had worked an average of 3.6 years in their current position, and 11 had also taught fitness classes at some time. Ten staff were employed by Ys, while the remaining five were employed by community-based organizations (faith-based, social services, residential site, or senior center). EF instructors were, on average, 54 years old and all had at least some college education. Mean length of time as an instructor was 5.4 years; four instructors had been in their position 10 years or more. Mean length of time instructing EF classes was 2.7 years. Ten instructors were employed by Ys, while the remaining seven were employed by other community organizations.

Several themes related to implementation and maintenance of EF at Y-affiliated sites were identified during analysis of transcripts. In the remainder of this article, we summarize these themes and present illustrative quotes.

Implementation Themes

Within the RE-AIM framework, *implementation* refers to how closely staff members from adopting organizations follow the program. The RE-AIM framework developers offer guidelines for ensuring that the intervention is delivered properly; guidelines focus on participatory approach/organizational support (buy-in), training, and availability of adequate resources (RE-AIM website, n.d.).

Organizational Support

Several study participants commented on the importance of support received from Y staff. This included marketing the class and recruiting new participants:

> "When someone comes in and they're new… they [the staff] introduce them [the new person] to me… or they hand them a schedule. They'll show them around and suggest different classes." Female instructor, 2 years experience

It also included ensuring instructors had appropriate materials and space for running the class and having substitutes for the main instructors:

Table 1. Demographic Characteristics of the Sample ($N = 32$)

Variable	Instructors and master trainers ($n = 17$), N (%) or Mean (SD)	Staff ($n = 15$), N (%) or Mean (SD)
Age	54.3 (12.2)	48.7 (13.50)
Gender		
Female	12 (71)	12 (80)
Male	5 (29)	3 (20)
Education		
Some college	5 (29)	3 (20)
College degree	8 (47)	7 (47)
More than college	4 (24)	5 (33)
Years in current position	5.4 (5.89)	3.6 (2.63)
Prior experience teaching fitness classes		
Yes	13 (76)	11 (73)
No	4 (23)	4 (27)
Length of time teaching EF class (in years)	2.7 (2.16)	N/A
Size of EF class	21.0 (7.50)	N/A

> "I started out in a small room and my class grew, and so they moved me into the gymnasium… if we need equipment, we can get it rather quickly." Female instructor, 4 years experience
>
> "…there are always substitutes available if I'm unable to teach my one class a week. The YMCA [works hard to] acquire instructors that would be adequate for the classes." Female instructor, 5 years experience

On the other hand, lack of organizational support prevented instructors from running EF smoothly. Some instructors were teaching EF in non-Y community sites, and noted the lack of cooperation/commitment they encountered in some cases:

> "[The residential site] did most of the recruiting…there was no encouragement by the staff there for people to continue in the program." Female instructor, 3 months experience

In addition, organizational policies within the Y sometimes limited instructors' ability to teach throughout their communities despite equivalent training:

> "…they will not allow instructors to substitute for other instructors at different Ys, which I find kind of silly…" Male instructor, 1 year experience

When encountering difficulties related to the organizational context of classes, study participants devised their own strategies to market classes and increase recruitment:

> "...we have students coming from an independent living place. I go there every couple of months and do a demo[nstration]. We usually get new students from that. The [class] that I do at an association, I advertise monthly in their newspaper. I try to give free classes… stimulate more students with the different programs—different discounts, different opportunities." Female instructor, 2.5 years experience
>
> "I have also suggested to pair EnhanceFitness with the pre-diabetes class. People coming in for pre-diabetes are overweight and they need to keep moving." Male instructor, 1 year experience

Instructor Training

The great majority of study participants spoke highly of the EF training sessions organized by Senior Services. They found that the training was well organized, thorough, and it prepared them well to teach the class.

> "…it was very well organized. The material was covered… very thoroughly. We had ample opportunity to ask questions… There was plenty of time to make it more personal for us, instead of just the blah, blah textbook." Female instructor, 1 year experience

Participants also noted that the training helped them understand EF as an evidence-based program that should be implemented according to the protocol, while also indicating areas where instructors have more say in how to structure exercises.

> "We sat down with a PowerPoint and went over the background of EnhanceFitness… I think it's very important to know… to be told the reasons why and the evidence behind the why was really cool." Female instructor, 1.5 years experience
>
> "What I found helpful with the whole program is that it's structured, yet you have room for initiative. In the cardio section you can incorporate stuff from your background and from their background… when it comes to the weights, it's structured and so you can't go wrong." Female instructor, 4 years experience

Participants identified some weaknesses related to the training, particularly the variability in experience instructors had coming in. While all instructors must be fitness instructors certified by a national organization prior to becoming certified EF instructors, there are no specific experience or teaching requirements.

> "I don't think that [EF instructors] have enough knowledge after a two-day training to take on the responsibility of people's health." Female instructor, 2.5 years experience

One suggestion to address the lack of experience among instructors new to EF and to teaching older adults was to encourage and support substitute teaching:

> "… subbing is a great way for people to practice what they learn… They get a feeling for it, and so I think that

is a really important thing to do…" Female instructor, 1 year experience

Fidelity

Many study participants talked about the different ways in which they adapt the exercises to fit the characteristics and needs of class members while adhering to EF protocol. Some also noted the importance of knowing the health history of class members to make sure exercises are appropriate and safe.

"I've learned that there are a few in the class where their vision is not good at all, and they have to stand close to me. I wear long pants and dark sneakers… [and] switched to these white shoes." Female instructor, 1 year experience

"I try and put each exercise in how it helps them in things that they're going to do *outside* of class. Why are we strengthening this muscle in your leg? Because if you don't strengthen your quad and your hamstrings, to stand up and sit down is always going to be a challenge to you." Female instructor, 1.5 years experience

"The health history form I just kind of review… to help me understand what the participant's particular health needs are; although, 99 percent of the time they tell me what their issues are and how we can try to work around them." Female instructor, 1 year experience

One important component of EF is the functional fitness tests (also referred to as "fitness checks"). Per the licensing agreement, instructors evaluate each EF participant through three fitness checks—the 30-second Bicep Curl, 8-foot Up-and-Go, and 30-second Chair Stand (Rikli & Jones, 1999)—at baseline and every four months of EF participation in a participant's first year, and annually thereafter. The data provides instructors, user organizations, and researchers with information about the health and functional status of class participants. Some instructors share the results with class participants.

"I make these little charts and I give them their results throughout the years. I put one in their folder so that it has more significance for them that yes, they are making progress." Female instructor, 1 year experience

"… when you retest them after four months, I think the biggest thing is for them to see how they've progressed. When you write it down and you give them the report card back, it has a lot of impact on them…" Female instructor, 1.5 years experience

At the same time, some instructors had scheduling and administration concerns related to the fitness checks, but devised ways to conduct them without interfering with the class:

"I think that the fitness checks are a good idea, but it is hard to get the time to do them…" Female instructor, 2.5 years experience

"It's kind of a challenge because I can't do two things at once. Because my classes are only half an hour apart, I have to kind of do the fitness checks either before class or during class and have my sub[stitute] lead the class while I'm doing them…" Female instructor, 1 year experience

Cost of Program Delivery

The costs associated with offering EF include a license fee, which covers the cost of training, instructor wages, and cuff weights. One of the main sources of funding for Y-affiliated sites (but not brick-and-mortar Ys) to cover the costs of the program is grants. However, organizations need to find other ways to make the program sustainable financially, and this often translates into costs for class participants.

"When we came into the grant, we actually had a phenomenal opportunity to really impact those…[who] were very low income…" Male master trainer, 2.5 years experience

"…when we first started EnhanceFitness, I think that it was kind of hard to get the higher-ups in the [non-Y] company to buy into it. There were no grant dollars involved to get it up and running." Female staff, 5.5 years experience

"I worked with [name of funder] to get this program in our [non-Y] facility, and so people didn't have to pay… The grant ran out, and when we moved to this location there was a charge." Female staff, 7 years experience

Maintenance Themes

Maintenance at the organizational level refers to the extent to which a program or policy becomes institutionalized. Guidelines for incorporating the intervention into the organizational practices and policies focus on: ensuring the availability of infrastructure for program delivery, matching program objectives with the mission of the organization, and making program duties part of employee responsibilities (RE-AIM website, n.d.).

Organizational Infrastructure for Program Delivery

EF is an instructor-led group exercise program that meets three times a week for an hour. As a result, organizations delivering EF need to ensure they have well-trained instructors, appropriate space for the class, and that the class is scheduled at a time that is convenient for older adults and does not overlap with other programs targeting the same demographic. Study participants commented on the importance of these factors for the maintenance of EF.

"We went through several really, really bad instructors that the students were complaining [about]… they were

going to quit because the ability of the instructors was so poor." Female instructor, 5 years experience

"I think that having a consistent time and space for it, we find that that really helps programs to be successful." Female staff, 6 years experience

"That was the hardest part for us scheduling-wise, because we only had so much space and so many hours that we can offer it." Female staff, 7 years experience

Match Between EF and Y mission

Study participants believed EF was a good fit with the Y because it aligned with the Y mission to strengthen community and support healthy living across the lifespan.

"I'm a huge advocate of EnhanceFitness… Here at the Y we have three focus areas. We have youth development, healthy living, and social responsibility. Without a doubt, EnhanceFitness definitely hits two of those three…" Male staff, 1.5 years experience

"Becoming certified in EnhanceFitness allowed me to really connect with the members, especially our senior group. To me it's very important, especially during the day here that we have our seniors enjoying their time at the Y with us. EnhanceFitness has definitely helped us do that here." Male staff, 1.5 years experience

EF Tasks as Part of Employee Responsibilities

The main tasks included marketing the program to the Y membership and the wider community, recruitment of participants, monitoring participation, and reporting the data to Senior Services.

"I've gone to all the local senior centers and done presentations…[and] to a lot of the assisted living facilities and some of the income-based older adult housing… I've gone into other classes that we're teaching that are geared for older adults and talked about EnhanceFitness there as well." Female staff, 6 years experience

One of the most cited barriers to maintenance of EF as compared to other exercise classes taught at the Y was the paperwork associated with monitoring participation and recording the results of the fitness checks. The main strategy for addressing this barrier was communicating with staff and instructors that monitoring and reporting are part of the whole EF package and therefore fall into the routine duties associated with delivering EF.

"There is so much paperwork that it is just ridiculous." Female staff, 2 years experience

"…as long as you keep up with [the paperwork]…and turn it in regularly, it's not a problem." Female staff, 5.5 years experience

"Well, EnhanceFitness is the only one that requires paperwork. We don't really do paperwork for any other class." Female instructor, 1.5 years experience

Champions

EF champions were crucial for recruitment of new members, and included class participants, instructors, and staff. Lack of champions affected the success of the program.

"I'm a cheerleader for every program that I have here." Female staff, 2 years experience

"There were several people who were walking advertisements for the class, they would tell one another in class the things that they were now able to do that they couldn't before." Female instructor, 1.5 years experience

"They didn't fill my position for quite some time, and so I think that not having a point person who was enthusiastic and passionate in making that a priority was a huge reason why it kind of fell through." Female staff, 3 years experience

Cost for Class Participants

Many study participants mentioned cost as a potential barrier to older adults' participation in EF. Some gave the example of competing programs that are covered by insurance while EF is not. At the same time, some mentioned the Y policy of not turning anyone away for inability to pay and providing scholarships for low income members.

"For some people who are on fixed incomes, the cost of EnhanceFitness can be difficult… I think if there were more opportunities and it was cheaper for people—or it was covered by insurance like [name of program] is—it might get more people involved." Female instructor, 1 year experience

"Some of my people … complained about the fact that they had to pay to take this class." Female staff, 7 years experience

"I think that the Y does a fantastic job by not charging. If you're not a member, it is a suggested donation." Female instructor, 1 year experience

Discussion

In this study, we employed semi-structured qualitative interviews with EF instructors and staff from Y-affiliated sites to identify facilitators and barriers to the implementation and maintenance of EF. We summarize our findings by grouping the facilitators and barriers identified by study participants into two categories, program-specific and organizational (Figure 1), and outlining key strategies that can aid the implementation of EF and other evidence-based physical activity programs in community settings.

Program-Specific Factors

EF is an effective, highly-regarded program that offers older adults an environment in which they can improve their health, and develop and maintain social connections. Our study identified a series of EF-specific factors that

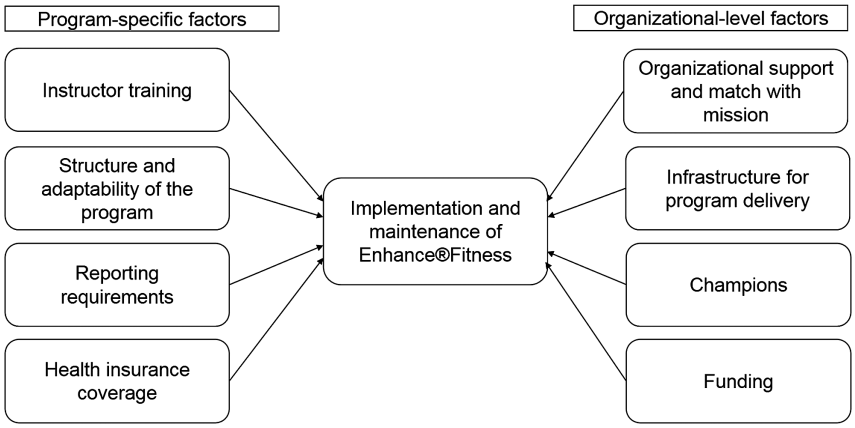

Figure 1. Barriers and facilitators to the implementation and maintenance of Enhance®Fitness at early-adopter YMCA-affiliated sites.

affected the day-to-day delivery of the program and its sustainability, which included EF instructor training provided by Senior Services, the structure of the program, reporting requirements, and insurance coverage.

Training providers to deliver the evidence-based program is an essential component of implementation (Ackermann, Finch, et al., 2008; Saunders, Evans, & Joshi, 2005). The goal of training is to prepare providers for their new tasks, as well as to create a sense of self-efficacy to support their future performance and commitment to the program (Durlak & DuPre, 2008). Study participants valued the EF training and the variety of exercises it provided, but some expressed concerns that the 2-day training sessions may not be sufficient, especially for instructors who are new to teaching fitness classes. Substituting or co-teaching may offer opportunities for new instructors to learn from seasoned instructors, or to gain independent teaching experience before running a class of their own. For highly structured programs such as EF, training is also a means to ensure fidelity, by highlighting the parts of the program that should not be changed as well as the components that can be adapted to suit the needs of class participants.

Adaptability is a program characteristic consistently related to implementation (Durlak & DuPre, 2008); it reflects the extent to which programs can be modified to fit the needs of providers and users. Although EF is offered at two levels, seated and standing, in order to accommodate the varying levels of function of older adults, adaptations are still necessary in the day-to-day running of the classes.

The evidence-based design and specific exercises of the program made EF appealing for study participants, but they also noted the risk of classes becoming monotonous and therefore less engaging. Encouraging instructor creativity within program requirements can help make the class exciting each time it is offered. Instructors benefit from exchanging ideas with other instructors, a practice encouraged by Senior Services through annual refresher courses, bi-monthly newsletters, quarterly Master Trainer conference calls, and an active Facebook group.

One core component of EF that cannot be modified is fitness checks, a highly useful tool for tracking the health and functional status of participants. These checks, which are widely used in a personal training or physical therapy environment but are not required by other group exercise programs, are often seen as cumbersome by instructors, who sometimes stop administering them. Study participants noted strategies for making the fitness checks fit more easily into the flow of the class, such as giving EF participants advance notice or doing them with the help of an assistant. In addition, the amount of paperwork associated with the delivery of EF, which allows user organizations and Senior Services to monitor participation and track the progress of program participants, was often noted as a challenge by staff members. However, in the past few years Senior Services has implemented an online data entry system (ODES), which allows instructors and staff to enter data more efficiently and offers the opportunity to create online reports at the participant, instructor, and organizational level, aiding in program evaluation. Clearly communicating administrative responsibilities with instructors and staff, including paperwork and reporting requirements, can establish expectations from the start and improve staff buy-in to the program over time.

Finally, instructors and staff expressed their disappointment that EF was not widely covered by health insurance like other physical activity programs (Nguyen et al., 2008). For older adults, particularly those on fixed incomes, a Y membership or per class fee may be financially untenable (Rimmer, Wang, & Smith, 2008); therefore, EF is forced to compete with classes and locations that are free of cost. The Y has a general philosophy that "no one is turned away due to inability to pay," which might help alleviate the problem, but many community organizations cannot provide the same kind of financial assistance. The Centers for Medicaid and Medicare Services, in their recent report to Congress, found health care costs are lower for Medicare beneficiaries participating in EF compared to nonparticipants based on a retrospective data analysis (Centers for Medicare & Medicaid Services, 2013); a prospective study is currently

underway. Demonstrated cost savings may lay the foundation for expanded coverage of EF and other evidence-based programs. These findings may provide an incentive for organizations to educate instructors and staff about the importance of collecting the data that will serve to assist health plans considering coverage of classes like EF.

Organizational-Level Factors

The successful delivery of programs by user organizations depends on organizational capacity, the capabilities, knowledge, and resources that organizations need in order to be effective (Flaspohler, Duffy, Wandersman, Stillman, & Maras, 2008). Organizational factors influencing implementation and maintenance of EF included organizational support and infrastructure for program delivery, champions, and funding to cover the costs of program delivery (Wandersman et al., 2008).

Study participants noted receiving support from people at different levels in their organization with regard to scheduling, resources, marketing, and recruiting. Such support ensured that class time and space was consistent and sensitive to the needs of older adults (i.e., morning vs. afternoon classes), class materials were available when needed, and EF staff and instructors had access to marketing materials and outreach events to help improve recruitment efforts. For instructors in particular, one important form of organizational support was the availability of substitutes to help programs run smoothly in case of instructor absence. However, finding qualified substitutes was sometimes difficult and in some cases organizational policies limited access to substitutes. Connecting trained instructors with others in their area may help develop a resource pool for EF and other physical activity programs in the community.

The presence of program champions, individuals who believe in the program and advocate for it, has long been recognized as a valuable resource for both implementation and maintenance of programs (Durlak & DuPre, 2008). Study participants agreed that enthusiastic staff, instructors and participants are invaluable resources for recruiting and retaining participants. However, staff engagement may be limited in community sites, which may not have as strong of a match between EF and organizational mission as the Y. Hiring staff and instructors that understand and support the program, as well as educating staff at various levels of the organization about the value of the program may encourage maintenance (Ackermann, Finch, et al., 2008).

Funding for class and program costs is useful (Steckler & Goodman, 1989), but outside resources may be scarce (Hartwig et al., 2006) and shifting costs to participants may cause attrition (Jancey et al., 2007). Specifically, strategic planning should include a cost analysis. Program costs include licensing fees, training expenses for instructors and substitutes, rent or facility fees, purchase of appropriate equipment, and instructor wages. These costs should be compared against existing funding or planned revenue streams, and account for any changes in funding such as the end of a one-time grant. Organizations should identify any costs in excess of funding/revenue, and assess whether this deficit will impact the sustainability of the program or whether the organization can absorb the loss to keep the program running. Making a plan for maintenance in the implementation phase may improve utilization of resources over time.

Limitations

This study has two main limitations. First, it is based on the perspectives of staff and instructors from early-adopter Y-affiliated sites. As a result, it reflects the initial efforts of offering EF in an organization such as the Y, which may differ from sites not affiliated with the Y or later adopters of the program. Organizational capacity, infrastructure and resources may be different at Ys and Y-affiliated sites whose primary mission includes physical activity, compared to community sites such as senior centers or churches whose primary mission does not include physical activity. Second, the experiences of the staff and instructors who accepted our invitation to participate in the study may not be representative of the larger group of Y-affiliated staff and instructors. Self-selection bias may be present, as recruiting relied on staff and instructors to respond to the recruiting material of their own volition. Interviews did reflect a broad range of experiences and opinions encompassing a spectrum of facilitators and barriers.

Practice Implications

Community organizations planning to offer older adult physical activity programs should take into account both program-specific and organizational-level factors that may affect the implementation and maintenance of the program (Hughes et al., 2011). On the one hand, organizations should be knowledgeable about program-specific barriers, and assess their own readiness for the implementation and maintenance of the program, including the availability of infrastructure for program delivery. Examples of infrastructure include making class space and materials available, having a sufficient trained instructor pool, and having flexibility with resources as the class grows or changes. On the other hand, such barriers can be overcome by staff and instructors if they believe in the value of the program and if there is evident organizational support for the program at all levels.

Maintenance of the program is also facilitated by continuous adaptation to the needs of class participants and finding champions who are willing to promote the program. Building relationships with participants and fostering a sense of community can help instructors retain existing participants, while engaging directly with older adults and offering them the opportunity to experience the program can help recruit new participants. Visibility in the community is important: program demonstrations, collaboration with local stakeholders, and utilizing a variety of marketing

tools can facilitate maintenance of the program by expanding its reach into the community.

Conclusion

This study contributes to the literature on the dissemination of evidence-based physical activity programs by identifying program-specific and organizational-level factors that influence the implementation and maintenance of EF at early-adopter Y-affiliated sites. Our findings underline the importance of the match between the program and mission of the organization, the adaptability of the program to participant needs and functional level, and the presence of champions for the success of the program. At the same time, the main barriers to implementation and maintenance were related to the paperwork required by the disseminating agency, the availability of trained substitute instructors, and the costs of the program for participants. Future research focused on assessing the readiness of organizations for program delivery and the match between program goals and the needs of organizations and participants would help facilitate the successful implementation and maintenance of physical activity programs in community settings.

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