



# RE-AIM for Program Planning: Overview and Applications

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If we want more evidence-based practice, we need more practice-based evidence.

—L. W. Green (2006)



## Introduction

The National Council on Aging's Center for Healthy Aging is pleased to sponsor this monograph introducing the RE-AIM framework. RE-AIM is an evolving framework designed to inform program decision-making by focusing on Reach, Effectiveness, Adoption, Implementation, and Maintenance. These five elements are critically important for service providers and decision-makers to consider when selecting an evidence-based health promotion program, or when making choices among alternative programs.

This monograph also serves as a supplement to current and future issues of the Center for Healthy Aging's popular and practical Issue Brief Series on Evidence-Based Health Promotion. In 2005, the Center published its inaugural Issue Brief in this series, introducing readers to the concept of Evidence-Based Health Promotion Programs. Issue Briefs are available at [www.healthyagingprograms.org](http://www.healthyagingprograms.org).

NCOA's Center for Healthy Aging serves as the National Resource Center for the Administration on Aging's (AoA) Evidence-Based Prevention Programs for the Elderly initiatives, which help build the capacity of the aging services network to deliver evidence-based health promotion interventions. As part of these initiatives, local aging services agencies are partnering with other community-based organizations, health care providers, and researchers to plan, implement, and sustain evidence-based programs. The evidence-based programs that are being implemented are adapted to the diversity of the population and existing services in each community, and a variety of process and outcome measures are used to assess fidelity and impact.

During the launch of AoA's Evidence-Based initiatives, the Center worked with state and local organizations to address common translation issues and challenges. It became apparent that the RE-AIM framework could be used to improve communication among project teams and the Center, and to more systematically address the variety of challenges inherent in this work. This framework has since been adopted by the Center, and its concepts applied in the development of manuals, tools, and other products for demonstration projects that can be used by local aging service providers. An understanding of RE-AIM and its application is important to maximize the usefulness of this framework as a tool for strategizing, operating projects, and making better programming decisions. Future Issue Briefs will provide more examples of how the RE-AIM framework is being utilized to support AoA initiatives and other programs.

The purposes of this Issue Brief are fourfold: 1) provide background on the development of the RE-AIM framework; 2) articulate the key elements of RE-AIM with attention to public health impact; 3) present a scenario illustrating how the RE-AIM framework can be used for planning a physical activity program; and 4) describe current initiatives and future directions for RE-AIM.

The Center invited Russell Glasgow, Ph.D., Clinical Research, Kaiser Permanente Colorado; Deborah Toobert, Ph.D., Oregon Research Institute; and Basia Belza, Ph.D., R.N., University of Washington, to collaborate on the development of this monograph. Dr. Glasgow has been instrumental in the initial development and ongoing revision and testing of RE-AIM. Dr. Toobert is the research partner in one of the AoA demonstration project teams and has used RE-AIM in a number of projects. Dr. Belza participates in the Prevention Research Center-Healthy Aging Research Network and, in collaboration with community partners, is funded to disseminate an evidence-based physical activity program in the Pacific Northwest.

## Background

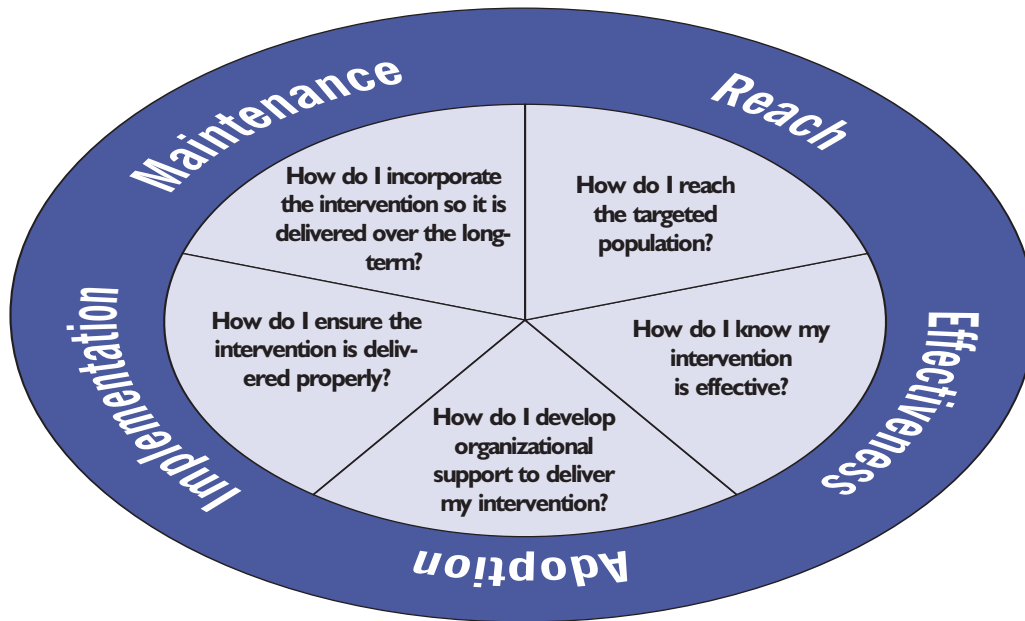
RE-AIM was originally developed as a framework for consistent reporting of research results (Glasgow, Vogt, & Boles, 1999; Glasgow, Whitlock, Eakin, & Lichtenstein, 2000), and later used to organize reviews of the existing literature on health promotion and disease prevention in different settings (Glasgow, Klesges, Dziewaltowski, Bull, & Estabrooks, 2004). More recently, RE-AIM has been used to help plan programs and improve their chances of working in "real-world" settings (Green & Glasgow, 2006; Klesges, Estabrooks, Glasgow, & Dziewaltowski, 2005). The framework has also been used to understand the relative strengths and weaknesses of different approaches to health promotion and chronic disease self-management—such as in-person counseling, group education classes, telephone counseling, and internet resources (Glasgow, McKay, Piette, & Reynolds, 2001). The overall goal of the RE-AIM framework is to encourage program planners, evaluators, readers of journal articles, funders, and policy-makers to pay more attention to essential program elements that can improve the sustainable adoption and implementation of effective, evidence-based health promotion programs.

### RE-AIM Elements

RE-AIM consists of five elements, as illustrated in Figure 1. Taken together, these elements represent the overall public health impact of a program or policy. To maximize overall impact, an intervention must perform well across all five elements; significant program weakness in any of the elements may adversely affect impact.

Despite some overlap, each of the elements has been designed to provide the necessary guidance to improve the chances of successfully adopting an evidence-based health promotion program. Note that the RE-AIM framework includes elements related to program design at both the participant level (Reach, Effectiveness, and Maintenance) and the organizational or setting level (Adoption, Implementation, and Maintenance).

FIGURE 1. Elements of the RE-AIM Framework



- “Reach” is the extent to which a program attracts its intended audience. Different program options may have varying degrees of attractiveness among diverse audiences, based on factors such as cost, access, benefits, familiarity, and program supports. The element of Reach addresses questions such as: “Will those who can benefit the most participate?” and “Will those having lower incomes be likely to participate?” Of special concern is whether the program reaches those most in need and at highest risk—and whether the growing diversity of our aging population is addressed.
- “Effectiveness,” as portrayed in the RE-AIM framework, refers to program outcomes. Minimally, it is assessed by measuring improvement on intervention targets and impact on quality of life. Additionally, it captures any adverse consequences that may occur as a result of the program.
- “Adoption” is similar to Reach, but is assessed at the level of the settings (such as community-based organizations, clinics, or worksites) involved in a program. It consists of the participation rate among potential settings and the representativeness of these settings. A key concern is whether a program can be adopted by most settings, especially those having few resources, rather than by only those funded by studies or academic institutions. The key to both Reach and Adoption is the identification of a “denominator” of eligible persons or settings for use in calculating participation rate. This can be challenging, but there are multiple approaches and tools available to help decision-makers estimate such denominators ([www.re-aim.org/2003/commleader.html](http://www.re-aim.org/2003/commleader.html)).
- “Implementation,” sometimes referred to as *intervention fidelity*, includes the extent to which different components of an intervention are delivered as intended by the program developers. Local modifications that significantly alter essential components of the program can adversely affect outcomes. Implementation is also concerned with the consistency of intervention delivery across different staff, and with the extent to which programs are adapted or modified over time. RE-AIM uses both qualitative and quantitative approaches to understand and assess fidelity (Besculides, Zaveri, Farris, & Will, 2006).
- “Maintenance” applies to both the individual participant and the setting or organization levels. At the individual level, maintenance addresses the long-term effects of the intervention on both targeted outcomes and quality-of-life indicators. At the setting level, it refers to the program’s institutionalization, or the extent to which a program is sustained (or modified or discontinued) over time.



## A RE-AIM Scenario

Consider the following illustrative scenario. A randomized trial documents a new, highly effective intervention for improving physical activity in sedentary, at-risk seniors. The encouraging results from a well-controlled research study indicate that, after 6 months, 40% of the participants achieve the Surgeon General’s recommended 30 minutes or more of moderately intense physical activity on most days of the week (US DHHS, 1996).

Think about planning to replicate this excellent new program. First assume that, of all the senior centers in your state, an uncharacteristically large 40% agree to adopt this program. Next, assume that an unprecedented 40% of all the sedentary and at-risk older adults residing around these senior centers agree to participate.

Now, reality sets in. Due to many competing demands, only about 40% of the senior centers and their instructors consistently implement the program as designed. Finally, assume that an amazing 40% of the participants who achieved positive results at 6 months were able to maintain improvements over the next 6 months. As shown in Table 1, the final result is that about 1% of the at-risk population will achieve the intended results. This scenario is not intended to discourage, but to encourage planners to think about all the RE-AIM elements and stages of program delivery when translating interventions into real-world programs. Improvements in four of the RE-AIM elements—Reach, Adoption, Implementation, and Maintenance—can enhance overall impact.

The improvements might be achieved in this scenario by, for example, providing options for other ways to increase physical activity (such as walking clubs and home-based programs), which in turn might attract organizations and seniors uncomfortable with group programs. Thus, program modifications addressing the dimensions of Reach, Adoption, Implementation, and Maintenance could result in increased activity rates across the target population.

This exercise illustrates the need to attend to all of the RE-AIM elements when selecting interventions for translation—not just focusing on the effectiveness of change reported in published studies. To date, the vast majority of research has emphasized effectiveness and largely ignored other RE-AIM elements. This scenario also shows that even small improvements in two or more of these elements can dramatically improve public health. For example, if 60% of the senior centers participate and consistently implement the program for 80% of participants, the impact triples. And even if only 40% of targeted settings participate, perhaps 60% of at-risk older adults might participate if the programs were expanded beyond senior centers to YMCAs, recreation and community centers, and housing sites. Thus, the overall performance of a program can be improved by considering all the RE-AIM dimensions and thinking about the “denominator” (for example, the number of older adults at-risk, the number of settings that can adopt the program, the number of staff that can implement the program with fidelity every day).

**TABLE 1. The Reality of Translating an Evidence-Based Physical Activity Intervention**

<i>Issue</i>	<i>RE-AIM Element</i>	<i>Success Rate</i>	<i>Population-wide Impact</i>
Potential program results	Effectiveness	40%	40%
Senior center participation rate	Adoption	40%	16%
Participation rate among at risk sedentary seniors	Reach	40%	6.4%
Consistent implementation with fidelity	Implementation	40%	2.6%
Longer-term effects	Maintenance (individual level)	40%	1.02%

## Application of RE-AIM

How can you use RE-AIM to plan your project? Start by asking yourself the questions listed in Table 2 (at the end of this publication). If you cannot answer a question based on data or experience with a program, calculate an estimate by taking into account what you know about the program, your settings, and your participants. The right side of the table lists strategies for strengthening your program within each RE-AIM element. For more detailed help in applying RE-AIM to a real-world project, including a practical exercise, automated scoring, and immediate feedback, visit [www.re-aim.org/database\\_quiz/intro.html](http://www.re-aim.org/database_quiz/intro.html).

RE-AIM may also be used as a quality-improvement exercise. Members of a project team can visit [www.re-aim.org](http://www.re-aim.org), answer the self-rating quiz questions, and write down their resulting scores, taking note of the elements on which they rated the program highest and lowest. Then, they can discuss as a group how all the team members evaluated the program, and brainstorm ideas for improvement using suggestions in Table 2.

### Current Initiatives: A Case Study

The following case illustrates the application of RE-AIM in guiding dissemination of an evidence-based group physical activity program for sedentary older adults. A partnership between senior center meal sites and several aging services providers identified low rates of physical activity as an important risk factor for chronic conditions and disability within their community. The data showed that older adult meal site participants reported multiple chronic conditions and led sedentary lifestyles. In addition, meal program attendees requested additional physical activity programming. To meet the need for a new physical activity intervention, members of the partnership researched available physical activity programs for seniors and decided to offer structured, evidence-based, group physical activity programming throughout their catchment area at their congregate meal sites.

The partners selected a program with a substantial evidence base that was appropriate for diverse older adults in various settings. The program consists of 1-hour classes that include stretching, balance, flexibility, and aerobic exercises, convening three times a week in local community sites. Instructors would be certified and trained, and a fee would be charged for the training and a program license. Community outreach and marketing materials would be available and easily adaptable.

The partnership identified resources to assist with planning and start-up costs. A large multi-purpose aging services organization agreed to coordinate the planning and implementation process, in collaboration with the other partners. The partnership agreed that the goal was to help program participants meet the Surgeon General's recommendations for physical activity (US DHHS, 1996).

The RE-AIM framework was used to plan implementation and monitor roll-out of the program. During the planning phase, partners addressed all the RE-AIM elements, trying to ensure that decisions in one area, such as Reach, were consistent with and supportive of decisions in other areas, such as Effectiveness, Adoption, Implementation, and Maintenance. Initial plans were revised during start-up and implementation phases of the program, again attending to the RE-AIM dimensions.

**Reach.** To develop a plan for Reach, the partnership reviewed existing data on participants and gathered some additional information. Data collected through annual surveys indicated that participants at the congregate meal programs were interested in attending exercise classes if they were held on site, were age-appropriate, safe, free, and taught by experienced instructors. Reasons given by meal site participants for not exercising included having pain, fear of injury, and program cost. Many of the participants suffered from osteoarthritis, a common chronic condition among older adults. Given the opportunity to exercise at the meal program sites, potential participants readily agreed to register themselves and recruit friends.

The partnership also reviewed data on at-risk populations and examined existing physical activity programming for various at-risk groups. Few programs with proven effectiveness for persons with arthritis were available in the community. For the new program, partners initially targeted sedentary adults age 60 years and older with arthritis, emphasizing ethnically diverse persons living in neighborhoods without existing physical activity programs. The classes would not be limited to people with arthritis, but a special effort would be made to recruit these persons because they are over-represented among sedentary elders and are often hesitant to be active despite proven benefits.

Research has shown that arthritis-attributable activity limitation can be prevented or reduced. For example, both aerobic and strengthening exercises can improve physical function and self-reported disability among older adults with knee osteoarthritis. In addition, among persons with arthritis who are not limited in activity, physical activity reduces the risk for functional activity limitation by 32% (Dunlop, Song, Manheim, Shih, & Chang, 2005). Arthritis self-management classes reduce pain and disability (Lorig, Ritter, & Plant, 2005). However, despite the known benefits of exercise for persons with arthritis, 44% of adults with arthritis are physically inactive (Shih, Hootman, Kruger, & Helmick, 2006).

The partnership sought settings and organizations that had already reached some members of the target population and could likely reach more. Partners met with a variety of local aging and public health organizations to learn which neighborhoods they served and which older adults participated in existing programs. The partners also worked to



identify settings that could meet space and equipment requirements (for example, chairs, storage rooms for weights). The partnership decided to start the new physical activity program in congregate meal sites in neighborhoods with large ethnic populations and few physical activity programs. The meal programs were sponsored by senior centers, senior housing providers, churches, community service organizations, and recreation centers. Before finalizing the class settings, partners conducted site visits to gauge interest among staff, volunteers, and older adults; estimated the number of participants with arthritis not engaging in physical activity; and assessed site characteristics, especially those related to safety.

**Effectiveness.** The Effectiveness of the program had been demonstrated in randomized trials and large observational studies in senior centers. In those studies, older adult participants significantly improved muscle strength and health status, and reduced falls. Since program effectiveness had been established in previous research, the partnership chose measures to gauge effectiveness of the dissemination: performance measures, quality of life, health status, attendance, and changes in overall physical activity.

**Adoption.** The first sites targeted for Adoption were selected based on the following criteria: ethnic or racial groups served; previous experience with some type of physical activity programming; appropriate space and equipment; accessibility to older adults via public transportation or walking; and experience in recruiting and managing volunteers able to assist with recruitment and class logistics. Although these criteria would exclude some meal sites serving sedentary elders with arthritis, the partners wanted to begin their efforts with sites that were likely to succeed. The focus would be on sites that met all the criteria, but inquiries from other sites wanting to conduct the program would be welcomed and considered on an individual basis.

The partnership reviewed 20 sites and found that five were both appropriate and willing to adopt the program. Once the sites were selected, the project team began to estimate the number of people in the target population. They started by estimating how many sedentary older adults with arthritis attended each meal site at least once per month. Then, using census and risk-factor data, they determined the number of sedentary older adults with arthritis residing in the neighborhood surrounding each meal site. Thus, despite the lack of exact numbers, the partners were able to make an “informed guess” to guide planning, set recruitment goals, and monitor Reach. Data on the older adults who participated in the five meal programs (50 at each site) indicated that, of the 250 meal participants, 80% or 200 had arthritis and were not regularly physically active. The partnership set a recruitment goal of 40% of this target population, or 80 people.

The next priority was to recruit people who were not participating in the meal program but were connected to the sponsoring organization, such as other residents of senior housing or other members of a senior or community center. About 100 older adults were estimated to be in this group—about 20 at each of the five sites. Conservatively, 50% of these adults had arthritis, were sedentary, and could participate in a group-based exercise program. A recruitment goal of 20% was set for this group, or ten additional people program-wide.

The partnership also wanted to reach older adults in the surrounding neighborhood who were unconnected to the sponsoring organization. These people would be difficult to attract, but the partners recognized the importance of reaching out to people who could benefit from the program regardless of their connection to current services. Five hundred older adults in this group were estimated to reside across the five neighborhoods. Considering the ethnic and economic composition of the neighborhoods, the partners estimated that 50% of these people had arthritis and were sedentary. A goal was set to reach 10% of this group—another 25 people program-wide.

Across these groups—sedentary older adults with arthritis at the sites (participating in the meal program or not) and those residing in the surrounding neighborhood but unconnected to the sponsoring organization—the goal was to recruit 115 people.

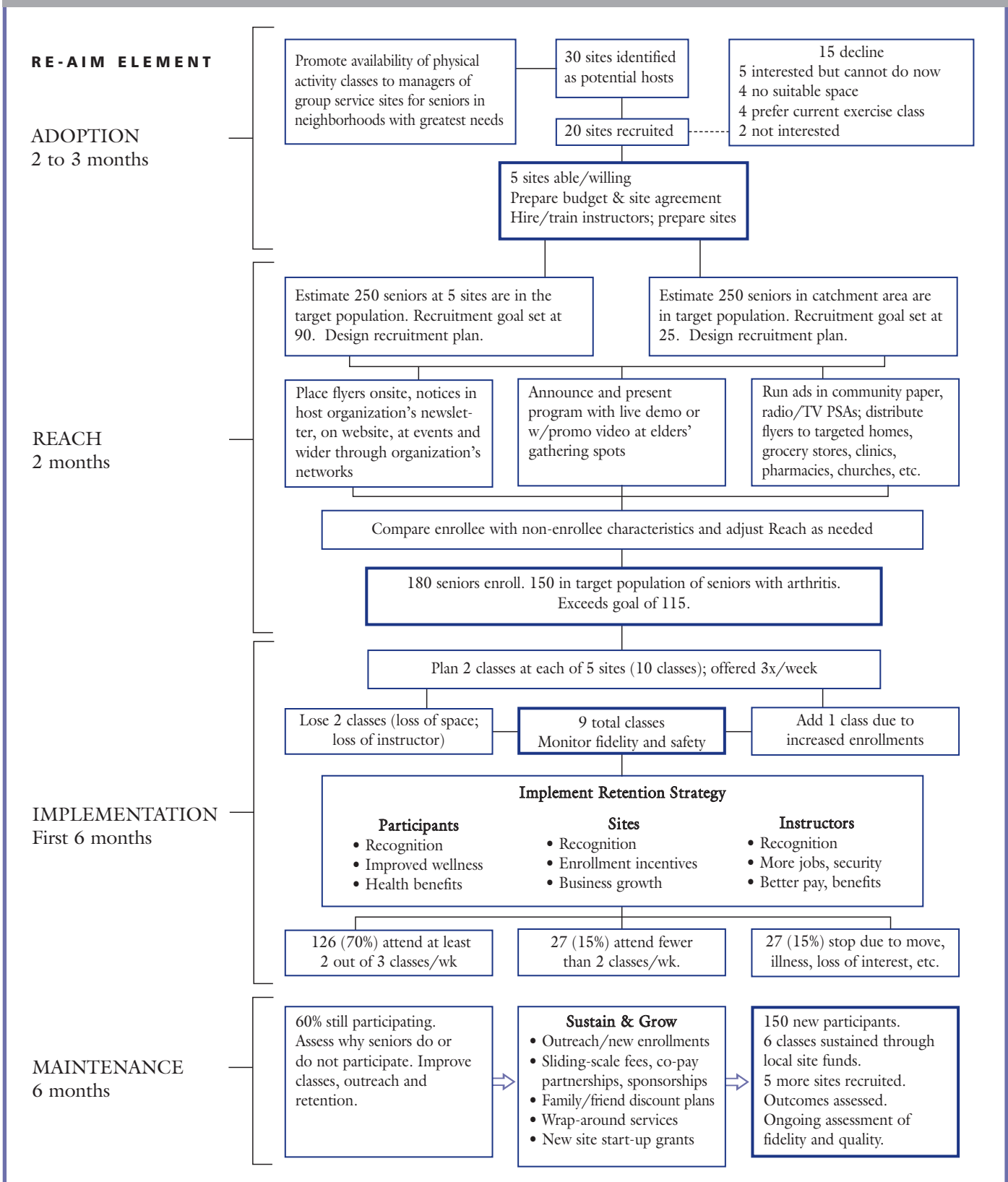
To recruit participants to the new physical activity program, partners and sponsoring organizations (that is, organizations operating the meal sites) used a variety of marketing materials and channels, including presentations to groups of older adults; newsletter and local newspaper announcements; and flyers in local clinics, pharmacies, grocery stores, libraries, and other places frequented by older adults. Physically active older adults with arthritis were asked to participate in the presentations and tell their stories in local news outlets, describing the improvements in their lives.

The hard work paid off when 180 people signed up for the program, 150 of whom had arthritis, representing 30% of those in the target population and exceeding the original goal of 115 people. Figure 2 illustrates the recruitment strategy and success rates for different populations.

**Implementation.** Implementation of the new physical activity program was measured by program attendance, and number and quality of exercise classes offered.

Attendance was taken at each site and at each class. At many sites, a program participant took attendance, a practice which encouraged participants to bond and take ownership of the program. Classes were available three times per week at each site. The attendance logs indicated that about 70% of participants routinely attended two or more classes/week. About 15% of participants attended two or fewer classes/week. After the first week, about 15% of the

**FIGURE 2. Planning Using RE-AIM: Physical Activity Programs**





participants did not attend any classes. There were a variety of reasons for missing classes, such as lack of interest, conflicts with the days and times, and unexpected health problems or the health of family or friends.

Two classes were offered at each of five sites for a total of 10 classes offered. The sponsoring organization at one of the meal sites decided not to implement the program after there was a change in staff, leaving the 10 enrollees in one class unable to take the program. One class was dropped because the site could not find space, and at another site a class was added because of increased interest in the program. Therefore, a total of nine classes were offered.

The manager at each coordinating agency visited each class to monitor the instructors. Visits occurred within each instructor's first month and every 6 months thereafter. Managers reported that most of the instructors led the classes safely and with maximum benefit for the participants. Nonetheless, one instructor with a class of 14 people required additional help. A master trainer worked with the instructor to improve her skills, but because of the delayed skill development it is likely that this instructor's class did not receive the full benefit for at least 6 months. Another instructor was terminated after failing to maintain program fidelity, even with help from a master trainer. These experiences illustrate the implementation challenges and adaptations often required in the real world.

**Maintenance.** To be true to the RE-AIM framework, the partnership addressed Maintenance from the outset. Because of limited funding, it was not possible to offer participants a choice in physical activity programs, but the partners attempted to maximize appeal of the one selected program by modifying the aerobic component based on the choice of activity by ethnic group. Some ethnic groups elected to dance, others took a brisk walk outside. This type of modification permitted choice while maintaining fidelity to the original program. Feedback about improvements in muscle strength and balance, based on performance measures, was provided to instructors and participants as a means of promoting maintenance. Participants also completed annual written surveys to assess maintenance (volunteer translators read the surveys to participants for whom English was not a first language and then summarized their responses). To enhance site-level maintenance, instructors received updated program information on an electronic list serve, attended an annual all-day workshop, and were able to call on a program manager for ongoing support and assistance. Partnerships with additional community agencies were established to secure more instructors and financial assistance. After 12 months, 60% of initial enrollees were still exercising, many more had enrolled and new sites were added.

**Summary.** Is this level of detail really necessary? The answer is yes, if you want to establish a realistic plan for your pro-

gram and anticipate the challenges that could undermine the program's impact and overall success. Table 2 and the preceding text offer practical suggestions for boosting overall program impact by substantially improving any one of the RE-AIM elements. The main difference between this approach and the typical planning process is that RE-AIM focuses on participation and results at multiple levels—and studies both the *numerator*, or number of participants (and settings), and the *denominator*, or number of *potential* participants (and potential settings)—whereas the traditional method focuses only on the numerators—how many people participate and how many settings offer a program.

## Key Points and Future Directions

As mentioned earlier, RE-AIM is an evolving framework to help translate research into practice. It is intended to help users focus on issues important for public health, and on factors related to long-term impact on both targeted and non-targeted outcomes (such as unintended consequences and health disparities). Probably the greatest need at the present time is for more and better data on the RE-AIM dimensions of Adoption and Maintenance. Impact on the setting-level RE-AIM factors of Adoption, Implementation, and Maintenance (sustainability) are just as important as the individual-level results, which are reported much more frequently.

There are ample opportunities for using RE-AIM to improve program planning. RE-AIM has been used extensively as a framework for the planning of a national conference on the dissemination of evidence-based physical activity programs. Another use of RE-AIM is to provide a structure for researchers and aging services providers to frame questions. There is growing interest among evaluators to collect data on each of the RE-AIM elements. Finally, RE-AIM could be used as a helpful framework for organizing staff in-services and training programs.

## Action Steps

One of the primary goals of the Center is Evidence-Based Issue Briefs, is to provide guidance and action steps for researchers, community service providers, and policy-makers on health promotion programming for older adults; more specifically, to help disseminate evidence-based health promotion programs across the aging services network. The Center's publications strive to engage, educate, and energize the aging services network. If this introduction has piqued your interest in the RE-AIM framework, and you want to know more about how RE-AIM can serve your quality-improvement efforts, visit the Web site at [www.re-aim.org](http://www.re-aim.org), or take a look at the accompanying list of



Additional Resources and References. A good place to begin is to take the RE-AIM Self-rating Quiz and discuss results among your team members. Visit NCOA's Center for Healthy Aging Web site at [www.healthyagingprograms.org](http://www.healthyagingprograms.org) to learn about evidence-based health promotion programming and how it can help older adults in your community enhance their health and well-being.

## Additional Resources

Behavioral Risk Factor Surveillance System (BRFSS):  
<http://www.cdc.gov/brfss/index.htm>

Cancer Control Planet:  
<http://cancercontrolplanet.cancer.gov>

Community Tool Box: <http://ctb.ku.edu>

NCOA's Center for Healthy Aging:  
<http://www.healthyagingprograms.org>

RE-AIM: <http://www.re-aim.org>

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**TABLE 2. Planning Questions Using a RE-AIM Framework**

<i>RE-AIM Element</i>	<i>Questions to Ask</i>	<i>Practical Ways to Address the Question</i>
<b>REACH: Who is intended to benefit from the program?</b>	What percent of your target population (those who are intended to benefit from your program) will participate in the program?	<p>Estimate the number and percentage of people in the local population that have the targeted risk factor (e.g., sedentary adults with chronic conditions).</p> <p>Estimate the approximate percent of this targeted population that will be appropriate for the planned program (e.g., cognitively and physically able to participate in a group-based program). Record the number of people in the target population who are appropriate participants.</p> <p>Consider if the population “appropriate” for this program is too limiting. Are people being excluded who are at high risk and could benefit from the program? If so, recalculate the size of the target population.</p>
	How do you reach the target population?	<p>Conduct focus groups or discussion sessions with potential participants. Conduct a needs assessment in the target group and/or with organizational settings.</p> <p>Offer programs in locations already serving high-need populations.</p> <p>Develop program recruitment and retention strategies that appeal to the diversity of your target population (diverse in income, cultures, age, gender, health status, and other characteristics). Use multiple channels of recruitment (e.g. newsletters, local papers, other classes, case managers, programs of partner organizations). Think about which organizations, events, and settings already have a connection with your target population.</p> <p>Ask community partners to help you identify potential barriers to participation and ways to overcome them. Ask members of the target population to help with recruitment. Encourage program participants to recruit their peers.</p> <p>Develop ways to track the effectiveness of different recruitment materials and strategies.</p>
	Does your program reach those most in need? Are participants representative of the targeted population?	<p>Monitor who actually participates in the program. Are these the people with greatest risk? If not, consider how outreach and recruitment activities can be modified. Talk with people who decline to participate and those who drop out.</p> <p>Examine the data on the characteristics of your participants. Do your programs have the same or larger proportions of people with risk factors as the community population? For example, compare data on your participants to data from the Behavioral Risk Factor Surveillance System (BRFSS).</p>

**TABLE 2. Planning Questions Using a RE-AIM Framework — CONTINUED**

<i>RE-AIM Element</i>	<i>Questions to Ask</i>	<i>Practical Ways to Address the Question</i>
<b>REACH:</b> Who is intended to benefit from the program? <i>(Continued)</i>	Does your program reach those most in need? Are participants representative of the targeted population? <i>(Continued)</i>	Calculate the participation rate of your target population. What percent of the target population is participating in your program? (For assistance with calculations and detailed explanations of Reach, see <a href="http://www.re-aim.org/2003/calc_reach.html">http://www.re-aim.org/2003/calc_reach.html</a> .)
<b>EFFECTIVENESS:</b> How do you know if your program is effective?	Is your program achieving the outcomes that you had set?	<p>Use some of the most applicable measures and methods from the original intervention study. Compare your results to the published results.</p> <p>Use specific, reliable, and sensitive (responsive to change) measures of behavior change.</p> <p>Consider multiple outcome measures, especially at first, so that you can examine the impact of your program on a variety of outcomes (e.g., improved muscle strength, function, symptom management, mental health, reduced falls, weight).</p> <p>Measure program retention. Document who drops out and when. Try to learn why.</p> <p>Track the costs of various aspects of the program, including recruitment, retention, staffing, training, equipment, space, and evaluation.</p>
	How do you improve the effectiveness of your program?	<p>Incorporate more tailoring to individual participants (e.g., multiple languages, group- and home-based programs).</p> <p>Support ways to improve activity levels through social connections and improvements in the environment (e.g., find a walking buddy, create safe and interesting walking routes).</p> <p>Use goal setting. Ask participants to set modest goals. Provide positive reinforcement of even modest improvements.</p> <p>Identify a few simple strategies to support behavior change that staff, volunteers, and participants can use. Build to more complex behavior change methods. Offer incentives.</p>
	How do you track the short term impact of your program?	<p>Track participation in every class. Low participation rates and high drop-out rates indicate a problem. Talk to participants and to people who drop-out.</p> <p>Supervisors and managers should observe the classes or other program activities. Use a checklist to record what you see, and provide feedback to instructors and program leaders.</p>



**TABLE 2. Planning Questions Using a RE-AIM Framework — CONTINUED**

<i>RE-AIM Element</i>	<i>Questions to Ask</i>	<i>Practical Ways to Address the Question</i>
<b>EFFECTIVENESS:</b> How do you know if your program is effective? ( <i>Continued</i> )	How confident are you that your planned program is being implemented without adverse consequences (e.g., injuries during physical activity)?	Establish a system for recording any adverse events. Track these events and understand their causes.
	How do you improve assessment of effectiveness?	Evaluate the effects of specific program components to identify which elements are essential.
<b>ADOPTION:</b> How can you ensure that your program will be adopted by those settings that have connections to people in the target population?	What percent of appropriate settings do you estimate will participate in your program?	<p>Define criteria for “appropriate” setting. Remember that, in general, the broader the criteria, the more likely you are to reach a diverse population.</p> <p>Estimate the number and percentage of settings or organizations in your targeted group that meet your defined criteria.</p> <p>Record the number of settings that you exclude from participation and why. Record the percent of targeted settings that agree to participate. Record reasons that settings refuse to participate. Do you need to revise your criteria?</p> <p>Evaluate the representativeness of participating settings or organizations by comparing differences between those participating and those not participating. What are their characteristics, such as type and size of organization, previous experience with health promotion programs, number of members/clients/participants, and policies regarding health promotion programming?</p>
	How do you develop organizational support to deliver your intervention?	<p>Recruit settings that have the highest rates of contact with targeted participants.</p> <p>Convene meetings with leadership and staff from a variety of settings, with the purpose of describing the program and working together to see how the program can fit within their organization.</p> <p>Help organizations to see the need for health promotion or risk-reduction programming. Help them understand the critical role that their organizations play in reaching those people at greatest need. Demonstrate the advantage of this new program over existing or alternative programs. Develop recruitment materials outlining program benefits and required resources.</p> <p>Provide technical assistance and resources for planning and implementation. Provide different cost options and ways to customize the program.</p>

**TABLE 2. Planning Questions Using a RE-AIM Framework — CONTINUED**

<i>RE-AIM Element</i>	<i>Questions to Ask</i>	<i>Practical Ways to Address the Question</i>
<p><b>ADOPTION:</b> How can you ensure that your program will be adopted by those settings that have connections to people in the target population? (Continued)</p>	<p>How do you develop organizational support to deliver your intervention? (Continued)</p>	<p>Conduct formative evaluation with settings that choose to adopt the program and those that decline. Try to understand the differences in these organizations and how the adoption decision impacted them.</p> <p>In general, programs with the following characteristics will be easier to adopt:</p> <ul style="list-style-type: none"> <li>• Low complexity</li> <li>• Easy-to-understand program communications and materials</li> <li>• Compatibility with organizational values</li> <li>• Low disruption to organization</li> <li>• Minimal start-up time</li> <li>• Limited risk of poor or uncertain results</li> <li>• Observable results so everyone can see the benefits</li> <li>• Ease of making improvements or updates in the program</li> <li>• Ease of customizing the program to different populations or locations</li> </ul>
<p><b>IMPLEMENTATION:</b> How do you ensure that your program is delivered properly (e.g. with fidelity)?</p>	<p>Are different components delivered as intended?</p> <p>Can different levels of staff implement the program successfully?</p> <p>What parts of the program are flexible or adaptable, without decreasing program efficacy?</p>	<p>Start with a pilot project to assess how the program will work in various delivery settings and for various intervention staff.</p> <p>Provide staff with continuous training and technical assistance.</p> <p>Provide clear protocols and implementation guidelines.</p> <p>Involve staff in the planning and implementation stages.</p> <p>Think about what parts of the program, if any, can be automated.</p> <p>Prepare a plan to acquire and use existing resources so as to maximize performance.</p> <p>Monitor and provide staff feedback and recognition for implementation.</p> <p>Routinely assess fidelity of the program as implemented. Compare actual implementation to parent study intervention and your original implementation plan.</p> <p>Track resource consumption. Is it consistent with maximizing performance?</p>



**TABLE 2. Planning Questions Using a RE-AIM Framework — CONTINUED**

<i>RE-AIM Element</i>	<i>Questions to Ask</i>	<i>Practical Ways to Address the Question</i>
<p><b>MAINTENANCE:</b> How can you help participants to stay engaged and sustain positive behavior changes over time?</p>	<p>Does the program produce lasting effects (1-2 years or longer) at the individual level?</p>	<p>Design the program to address specific barriers to maintenance.</p> <p>Provide choice in programs. Let people choose among effective program components so they can find what works best for them.</p> <p>Incorporate self-monitoring and provide feedback to participants.</p> <p>Help participants incorporate new changes into their daily lives.</p> <p>Increase social-environmental supports and policies supporting individual behavior change.</p> <p>Provide continuing contact with participants through face-to-face meetings, telephone calls, mailings, and the internet. Provide booster and follow-up sessions.</p> <p>Plan for relapse. Understand that many events will interfere with program participation and lifestyle improvements, and make plans to address these.</p> <p>Conduct long-term follow-up assessments. Learn why changes are maintained for some participants, but not for others.</p>
<p>How do you incorporate the program so it is delivered over the long term?</p>	<p>Can organizations sustain the program over time—even after initial funding and enthusiasm?</p>	<p>Ensure that existing staff have the skills to continue the program; incorporate these skills into job descriptions.</p> <p>Ensure that supervisors and others know how to monitor quality and fidelity, and can successfully guide the program.</p> <p>Ensure that organizational leadership, including board members, know about the program and endorse its value to the organization.</p> <p>Ensure that partners are engaged and understand the importance of their various contributions.</p> <p>Reduce level of resources required. Provide incentives and policy supports.</p> <p>Continue contact and technical assistance to participating organizations or settings.</p> <p>Regularly meet with organizational staff, leaders, and participants to learn what they like and what works. Make changes as feasible, attending to fidelity.</p> <p>Monitor which organizations continue the program and which do not. Explore what differentiates these two groups and see if you can do something that would help with sustainability.</p>





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