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Using the Replicating Effective Programs Framework to Adapt a Heart Health Intervention

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Abstract

Heart disease is the leading cause of death in the United States. African Americans and people of low socioeconomic status suffer disproportionately from heart disease–related morbidity and mortality. In Detroit, Michigan, a primarily African American and low-income urban area, heart disease mortality is at twice the national rate. Despite evidence for the effectiveness of self-management support interventions in reducing chronic disease burden for older adults, few are adapted for communities most in need. This article describes the process of adapting Take PRIDE, an evidence-based heart disease self-management intervention, for older adults in Detroit via the Replicating Effective Programs (REP) framework. Working within a community–academic partnership, we found REP useful in facilitating the identification of diverse stakeholders, core versus adaptable elements of the intervention and barriers to implementation. We also made several modifications to the REP framework in order to better fit our project needs. Overall, we found REP to be an effective, flexible tool that allowed us to successfully adapt a disease-management intervention for this setting. Processes, lessons learned, and recommendations offered in this article may help researchers and practitioners working to expand access to self-management support for populations most affected by chronic disease.

Keywords

community intervention; aging; Black/ African American; minority health; cardiovascular disease; chronic disease; health promotion; health disparities

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SUPPLEMENTAL MATERIAL

The Supplemental Material is available with the article online at <http://journals.sagepub.com/home/hpp>.

BACKGROUND

Heart disease is the leading cause of death for men and women in the United States, contributing to about one in three deaths per year (Benjamin et al., 2017). African Americans, Hispanics, and people of low socioeconomic status are more likely to have risk factors for heart disease (e.g., high blood pressure, diabetes, obesity) compared to their White counterparts (Hozawa, Folsom, Sharrett, & Chambless, 2007; Kurian & Cardarelli, 2007). Furthermore, African Americans experience higher mortality rates and worse outcomes, such as decreased quality of life, from heart disease than Whites (Go et al., 2014; Mensah, Mokdad, Ford, Greenlund, & Croft, 2005). Although self-management interventions have shown promise for reducing morbidity associated with heart disease (N. M. Clark et al., 2014; DeWalt et al., 2006; Jovicic, Holroyd-Leduc, & Straus, 2006), these programs have not seen extensive uptake in practice settings. Moreover, few address the needs of vulnerable populations where the prevalence of heart disease is highest and self-management most needed (Jensen et al., 2016; Van Hecke et al., 2017). This may be because heart disease interventions have typically been implemented in research settings where access to resources is high (Stevens & Shojania, 2011), making it difficult to know if they will be effective in low-resource settings. In addition, processes for translating evidence-based interventions (EBIs) are generally not well documented, particularly in communities facing health inequities (Napoles, Santoyo-Olsson, & Stewart, 2013), which may further contribute to the lack of uptake in practice settings.

There are several reasons why processes for EBI adaptation to underresourced communities have not been well documented. First, a lack of resources typical among low socioeconomic status communities can pose a barrier to making and documenting appropriate adaptations (A. M. Clark, DesMeules, Luo, Duncan, & Wielgosz, 2009). Second, researchers are more likely to publish study outcomes than detailed processes of adapting and implementing the intervention carried out in the study (Riley et al., 2008). Finally, the lack of available frameworks for translation to community-based programs contribute to the difficulty in uptake of EBIs in practice settings, and vice versa, despite the demonstrated importance of both. (Napoles et al., 2013; National Institutes of Health, 2010).

One exception may be translation efforts guided by the Replicating Effective Programs (REP) framework. REP was developed to facilitate the translation of academic or research-based programs into community practice settings by offering an implementation protocol (Kilbourne, Neumann, Pincus, Bauer, & Stall, 2007). Academic–community partnerships have been shown to help advance translation and implementation of EBIs to community settings by offering resources and a systematic process for increasing community engagement (Van Wert et al., 2017). The goal of this article is to add to the growing body of literature describing REP-guided translation efforts for chronic disease prevention and management in underserved communities (Jones, Baker, Gelaude, King, & Jemmott, 2013; Kind et al., 2016; Wallace, Sussman, Anthoney, & Parker, 2013). We report on a community–academic partnership’s adaptation and translation of an evidence-based heart disease self-management program (*Take PRIDE*) (N. M. Clark, Janz, Becker, et al., 1992; N. M. Clark, Janz, Dodge, & Sharpe, 1992; N. M. Clark et al., 2014) for predominantly African American adults of low socio-economic status living in Detroit. Specifically, we describe the

application of each REP phase to translate *Take PRIDE* and offer lessons learned to inform future research and practice. We feel that this process will be particularly useful for those seeking to translate an EBI developed in a research setting to a community-based setting.

Project Overview

This study was funded as a randomized controlled trial (RCT) to assess the impact of the adapted program on health outcomes and health care utilization. The project represents a partnership among the University of Michigan School of Public Health (UM-SPH), the Detroit Area Agency on Aging (DAAA), and the Detroit Medical Center (DMC). The DAAA and DMC are leading community and health service providers for older adults in Detroit and the surrounding metropolitan area.

The original EBI, *Take PRIDE*, is based on self-regulation theory (Bandura, 1986) and centers around a process called PRIDE, which helps participants set realistic goals and assess barriers to improve their ability to self-manage their disease. PRIDE stands for *p*roblem selection, *r*esearch and observe routine, *i*dentify goals for managing health, *d*evelop a plan or strategy and *e*valuate progress/establish a reward (N. M. Clark, Janz, Dodge, et al., 1992). These steps are based on the theoretical framework developed by N. M. Clark (2003) who describes how individuals with chronic disease engage in a continuous process of observing, judging, and reacting to their own behavior to achieve a specific self-management goal (N. M. Clark, 2003). *Take PRIDE* has been tested in a RCT with both men and women in a group intervention format (N. M. Clark, Janz, Becker, et al., 1992; N. M. Clark, Janz, Dodge, et al., 1992) and with women only in both a group and an alternative self-directed format (N. M. Clark et al., 2014). In each of these trials, *Take PRIDE* participants were primarily White and over age 65. *Take PRIDE* resulted in improved self-efficacy and coping, decreased heart-related symptoms, and reduced health care utilization (N. M. Clark, Janz, Becker, et al., 1992; N. M. Clark, Janz, Dodge, et al., 1992; Wheeler, Janz, & Dodge, 2003).

Overview of the REP Framework

Developed by the U.S. Centers for Disease Control and Prevention, REP is a systematic approach to EBI translation that emphasizes fidelity to core program elements while incorporating adaptations to maximize fit in new populations and organizations. The approach was first developed to package and disseminate HIV interventions for implementation in community-based service settings and has since been used for various translation-related efforts across different types of interventions (Kegeles et al., 2000; Kilbourne et al., 2007). REP is grounded in distinct concepts and theories, namely, diffusion of innovation (Rogers, 1962) and Bandura's social learning theory (Bandura, 1977). The four phases of REP are *preconditions*, *preimplementation*, *implementation*, and *maintenance and evolution*. See Figure 1 for a flow-chart of the REP process as applied to adapt *Take PRIDE*.

PHASE 1: PRECONDITIONS

The first REP phase involves the following activities: identify need for the new intervention, select an EBI to adapt, identify barriers to implementation, and draft an intervention

package. We completed these steps in collaboration with our partners as part of the grant application process.

Identify Need

The population in Detroit is primarily African American (83%) and impoverished (40% in poverty in 2016; U.S. Census Bureau, 2011; U.S. Census Bureau, 2016), both characteristics that are associated with pre-mature incidence of heart disease (Mozaffarian et al., 2016). Wayne County, where Detroit is located, has a heart disease mortality rate over 1.5 times the national rate (Centers for Disease Control and Prevention, 2016).

Identify Effective Interventions

Because heart disease is the leading cause of mortality in Detroit and *Take PRIDE* is similar to other chronic disease management programs offered by DAAA to advance their mission to "... educate, advocate and promote healthy aging to enable people to make choices ... that will improve their quality of life," it was viewed as an appropriate program for adults in Detroit.

Identify Barriers to Implementation

We anticipated several barriers to implementing *Take PRIDE*. Because Detroit is a large city with limited access to public transportation (Fair Food Network, 2016), we knew that potential participants with limited community and individual mobility may not have a way to get to sessions. In addition, some Detroit residents have limited access to fruits and vegetables (Zenk et al., 2006) and safe spaces for walking outside, which may pose challenges to engaging in healthy behaviors related to diet and exercise. Despite some improvements in the quality and quantity of medical care in Detroit since the Affordable Care Act, barriers to accessing care persist, particularly among poor, racial/ethnic minority groups (Michigan Chronicle, 2016). Lack of support from a physician may pose an additional challenge to making healthy lifestyle changes (Paek & Lim, 2012).

Draft Intervention Package

The first step in creating the adapted intervention was to identify the core theoretical and logistical components of *Take PRIDE*. The team agreed that the all elements of the PRIDE process would be considered core, as these represented the operationalization of the self-regulation theoretical framework in all previous *Take PRIDE* studies. Next, the team agreed on three core logistical elements (1) interactive group sessions, (2) use of videos to complement educational topics, and (3) distribution of self-monitoring tools such as worksheets to track meals, blood pressure, and cholesterol readings. Interactive sessions involving experience-sharing and videos support the tenets of social learning theory—that learning can occur by observing others (vicarious experience) and by reinforcement (Bandura, 1986). The use of self-monitoring tools directly supports the self-regulatory process, providing participants with tools to observe, track, and evaluate their progress (Bandura, 1986).

Other elements of the program were considered "peripheral" and open for adaptation, including the number and content of educational sessions, the format (e.g., group and/or

phone), eligibility criteria, program materials, and primary recruitment sources. Finally, the team changed the name of the adapted program to *Take Heart*.

After confirming core elements, the intervention was packaged to include a participant workbook, health educator manual, and fidelity protocols. The original *Take PRIDE* participant workbook included information on four domains related to lifestyle change (i.e., eating healthy, being active, depression and stress, and taking medication) and steps to the PRIDE process. The *Take Heart* workbook was adapted to better accommodate expected literacy levels of the new study population and increase cultural relevance. For example, common barriers to healthy eating in Detroit (e.g., access to fresh fruits and vegetables, transportation) were incorporated, and foods at popular restaurants in Detroit were included in examples of interpreting nutritional information (see Supplemental Material for an example workbook page, available with the article online). Images were added to reflect the predominantly African American population in Detroit. The workbook was also adapted to include information on heart disease, risk factors, and healthy lifestyle recommendations as disseminated by the National Institute on Aging, Centers for Disease Control and Prevention, and the American Heart Association.

The *Take Heart* health educator manual was adapted and expanded to serve as a comprehensive program guide (see Supplemental Material for an outline of the manual, available with the article online). The manual includes four sections (1) Getting Started: Overview of *Take Heart* and the PRIDE Process, Techniques for Successful Facilitation, (2) Step-by-Step Guide to Delivering *Take Heart*, (3) Administrative Forms and Protocols, and (4) Additional Program Resources. The Step-by-Step Guide includes detailed steps and suggested wording for facilitating and guiding discussion in each session. The content of each session was modified to incorporate up to date health education techniques, including motivational interviewing (MI) (Miller & Rollnick, 2013) and teach-back (Agency for Healthcare Research and Quality, 2015). For example, open-ended questions such as “What do you know about heart disease?” are included throughout each session’s “script” for the health educator, and teach-back questions are included to review information learned after each topic is discussed.

PHASE 2: PREIMPLEMENTATION

Per REP, the preimplementation phase involved the selection of (1) a community working group (CWG) and (2) pilot-testing the adapted intervention package. To best fit our study’s needs, we conducted feedback sessions before the pilot intervention with Detroit community members, and after the pilot intervention, with pilot participants.

Community Working Group

Study partners began meeting on a bimonthly basis after receiving institutional review board approval. In early meetings, all aspects of adapting *Take PRIDE* for adults in Detroit were discussed. Based on evidence that African Americans tend to develop heart disease and related risk factors earlier than Whites (Go et al., 2014), our priority population was changed from 60 to 50 years and older. In addition, eligibility criteria were expanded to include not only individuals with established heart disease but also those with at least two of the five

most common risk factors for heart disease (i.e., high blood pressure, high cholesterol, smoking, diabetes, and chronic kidney disease). This change expanded the focus of the project to both prevention and management of heart disease.

Next, the full CWG was formed. The community–academic partnership was expanded to include staff members of local community organizations. Each CWG member provided input for further adaptations based on their expertise. For example, DAAA staff provided feedback on ideal intervention format and length based on their experience implementing other EBIs; DMC providers ensured the accuracy of medical information in program materials; and UM-SPH ensured that core elements of the EBI remained throughout the adaptation process. The group met at least quarterly.

Prepilot Feedback Sessions With Priority Population

To further guide the process of adapting the intervention, we conducted two group feedback sessions with community members from the priority population. The sessions' goals were to learn how adults in Detroit manage their heart-related conditions and to solicit input on the *Take Heart* participant workbook and intervention format. Attendees were recruited via flyers distributed by community-based agencies that partner with DAAA. Potential participants had to meet the *Take Heart* eligibility criteria to attend.

The majority of the 21 attendees were female, African American, and between 50 and 69 years old. Sessions were facilitated by UM-SPH staff using a script with open-ended interview questions. Study team staff took notes and sessions were audio-recorded and transcribed. Table 1 provides a summary of feedback from prepilot sessions. Diet change, exercise, stress, and strategies for medication adherence were most commonly mentioned as important topics to include in the workbook. Participants suggested adding content on the heart's function, pathophysiology of heart conditions and risk factors, managing stress, interpretation of blood pressure and cholesterol numbers, resources related to nutrition, patient/provider interaction, and resources for seniors in Detroit.

The intervention package was revised based on this input. Most notably, content on stress management and local resources was expanded and activities that reinforce key topics were added (e.g., stress bingo, healthy cooking demonstration). Participant incentives were selected (i.e., pedometer, stress ball, pillbox, tote bag).

Pilot-Test of Adapted Intervention

A Detroit resident was hired and trained prior to the pilot test of the intervention to serve as the health educator. UM-SPH research team members conducted the health educator training which included (1) *Take PRIDE* background, (2) self-regulation theory (Bandura, 1986), (3) *Take Heart* curriculum and structure, (4) SMART goals (Doran, 1981) and the teach-back method (Agency for Healthcare Research and Quality, 2015), and (5) use of the REDCap database to track participation and fidelity of intervention delivery. The health educator also received MI training via an online source (University of Colorado College of Nursing, 2017).

Twenty eligible adults participated across two separate pilot intervention series. The majority of participants were female, African American, and between 60 and 79 years. UM-SPH staff evaluated each session with a fidelity checklist to assess whether all intervention content in the Health Educator Manual was covered. After completing the pilot intervention, 13 of the 20 pilot participants attended a 2.5-hour feedback session. Although this step was not specified in the original REP process, we found it a useful way to maximize learnings from the pilot-test. Participants were asked to comment on session content, the PRIDE process, and the timing, structure, and delivery of sessions. Table 1 provides a summary of feedback from the postpilot session. The majority of participants did not want any information to be cut from the intervention or the workbook. In fact, participants suggested adding content on stress management and heart-related emergency symptoms such as chest pain, difficulty breathing, or nausea. Many also voiced that self-regulation as described in the workbook is not an intuitive process. A suggestion was made to provide further examples to illustrate the PRIDE process.

Based on themes from pre- and postpilot feedback sessions, further changes related to intervention *content* and *format* were made after the pilot-test. *Content-related changes* included the addition of stress management techniques (e.g., guided imagery) and signs of a heart-related emergency for men and women, resources for low cost fresh produce, tips for purchasing more affordable healthy foods (e.g., frozen vegetables), and in-home exercises (e.g., chair exercises). *Format changes* included adding (1) an extra group session (from 4 to 5) to provide more time to cover educational content, (2) two one-one phone sessions, (3) a video guiding viewers through the PRIDE process, and (4) a telephone Q&A session with a cardiologist as part of one of the group sessions. See Table 2 for a full comparison of *Take PRIDE* and *Take Heart*, including the rationale for each adaptation.

Orientation and Logistics

Per REP, this step involves identifying program champions and disseminating the intervention package to partners. We did not need to conduct specific activities related to this step due to consistent involvement of DAAA and DMC key personnel throughout the pre-condition and preimplementation phases.

PHASE 3: IMPLEMENTATION AND FACILITATION

After finalizing the adapted intervention package, next steps included further training of project staff, providing ongoing technical assistance, and conducting a process evaluation of the adaptation process.

Training of Project Staff

As noted previously, the health educator was trained during the preimplementation phase. She was evaluated by UM-SPH via mock sessions during the training period, using fidelity checklists developed by UM-SPH staff. Participants were volunteers from DAAA's partner organizations. Feedback was provided to the health educator based on the fidelity checklist and general observations. If a specific topic or activity was not covered according to the Health Educator Manual, she was asked to facilitate that section again until she was

proficient. The pilot intervention was also part of the health educator training and was evaluated using the same fidelity checklists and feedback process. Because this program is being implemented as part of a RCT, we trained UM-SPH staff on the consent process, conducting the baseline and follow-up interviews and use of REDCap.

Technical Assistance

Throughout the intervention, UM-SPH provides ongoing technical assistance to the health educator via weekly phone calls and/or in-person meetings. This assistance allows the health educator to ask questions and the UM-SPH team to offer suggestions based on completed *Take Heart Evaluation Checklist* tools.

Evaluation

The CWG discusses issues as they arise throughout the implementation phase, which allows for an ongoing informal evaluation and documentation of lessons learned and challenges. A formal assessment of intervention fidelity is conducted using *Take Heart Evaluation Checklist* tools. Checklists were created for each group and phone session to evaluate the health educator on (1) using core elements (e.g., *PRIDE*) and adaptations (e.g., group activities) as specified in the Health Educator Manual and (2) how well she engages and builds rapport with participants using key techniques (e.g., icebreakers, MI, teach-back). At the end of the implementation phase, we will conduct qualitative interviews with key project staff and program champions, as well as with program participants, to inform future adaptations and to aid in the interpretation of study outcomes. Finally, analyses comparing primary outcomes (health care utilization) and secondary outcomes (cardiac symptoms, functional health status, quality of life, self-efficacy) between the intervention and the control group will be conducted. Cost savings and return on investment analyses will also be assessed.

PHASE 4: MAINTENANCE AND EVOLUTION

This step is ongoing and involves efforts to sustain the intervention and support necessary changes during the study period (e.g., hiring and training new personnel). Following completion of the *Take Heart* study, we will work with the CWG to develop guidelines for scaling up the intervention to other low-income areas through the national network of Area Agencies on Aging (AAA). Scalability has been considered throughout the adaptation and implementation phases and part of DAAA's role is to help facilitate the process of scaling up within the AAA network. The health educator manual was created to make it easier for others to adopt and implement the intervention

DISCUSSION

REP Framework: Strengths

Overall, we found REP useful for adapting a heart disease self-management intervention for a predominately African American, low-income community in Detroit. Three major strengths of using REP for this purpose are notable. First, REP's emphasis on identifying diverse partners and stakeholders early on and securing buy-in through regular, in-person

meetings was key to the adaptation process. Second, REP helped us to identify both core elements of the intervention and those that were appropriate for adaptation. This is important because as the emphasis on effective adaption of EBIs continues, best practices for addressing the fidelity-adaptation dilemma (Castro & Yasui, 2017; Mejia, Leijten, Lachman, & Parra-Cardona, 2017) are of increased interest. Third, REP helps uncover barriers to implementation that may not be found otherwise. For example, through the preimplementation step, we learned that self-regulation was not an intuitive process for our priority population. These three strengths align with the findings of two recent studies that also used REP to adapt an HIV intervention for African American women (Jones et al., 2013) and to develop a strategy for implementing a diabetes self-management program (Wallace et al., 2013).

REP Framework: Modifications

To best fit the specific needs of our project and the priority community, we made some modifications to the REP framework. First, in addition to initial (pilot) feedback sessions with the priority population, we added *postpilot feedback sessions* to receive additional feedback from pilot participants, further informing adaptations. Next, we did not need to carry out the *orientation and logistics* phase given that program champions were engaged and informed throughout the REP process. This phase may be especially useful for projects that involve multiple sites that require training on how to implement the intervention and efforts to maintain engagement of key personnel. We found both of these modifications to the REP process to be useful for the adaptation of *Take PRIDE*. As mentioned in Wallace et al. (2013), it is important for researchers to be flexible to fit project needs, even when using a structured process such as REP.

REP Framework: Limitations

We found that the primary limitation of REP is that it does not offer explicit options for making the type of modifications needed to best fit project needs. This underscores the importance of having examples of how REP has been implemented and modified available in the literature, as in the present study. Another limitation to REP is that it takes a substantial amount of time and other resources to fully implement. In the case of *Take PRIDE*, we were able to complete all phases and steps as well as make additions to REP (i.e., postpilot feedback sessions). Other researchers, however, may benefit from an abbreviated version of REP to facilitate implementation.

Key Recommendations

Based on our application of the REP framework to translate an evidence-based heart disease self-management program for primarily older African American adults in an urban community, we offer the following recommendations:

- *Allow ample time for the preimplementation phase.* Community feedback is essential to making informed decisions about how best to adapt the intervention to fit the priority population. The process of incorporating feedback is a time-consuming but worthwhile investment. Ideally, we recommend dedicating at least 1 year to this phase, especially for large, multiyear projects. This time frame may

be shortened somewhat if researchers have recently adapted an intervention for use in this setting or if minimal adaptations are needed. Conversely, it may be necessary to extend the time frame if there is limited knowledge and/or previous intervention in the priority community.

- *Consider innovative ways to present key elements of the intervention for the priority population.* For example, self-regulation and goal setting are not intuitive processes for everyone and may be especially challenging for those with limited experience in developing behavioral goals related to health outcomes. One innovative way we addressed this was by adding a video featuring a *Take Heart* participant offering tips for guiding others through the goal-setting process. Another approach would be to invite program completers to attend ongoing sessions to help current participants better understand goal setting, action planning, and other key concepts. Program completers may have a unique understanding of the process and suggestions for how best to explain it to their fellow community members. These and other ideas for innovative adaptations can be tested during the preimplementation phase of the REP process.
- *Be flexible when applying the REP process.* We recommend applying each of the phases and steps of the REP framework to maintain the model's core structure. However, because each community and intervention has unique needs, it is important to consider whether it would be beneficial to expand on any step(s) of the process to more thoroughly address a project's adaptation needs. Any expansion or modification should also remain in alignment with preserving the core (theoretical) components of the EBI (adaptations should be strategic for the priority population; Castro & Yasui, 2017). For example, we found the addition of post-pilot feedback sessions to be particularly beneficial in gaining feedback on the effectiveness of adaptations during the preimplementation phase. The addition did not eliminate any steps of the core REP process nor disrupt core theoretical elements of the intervention but elaborated on the "pilot-testing of the package" step to provide us with more information on how well the first implementation of the adapted intervention package was received. This is just one example of how the REP process can be modified to best fit the needs of the priority population. Overall, to accommodate any modifications to the framework, it is important to remain flexible during the adaptation process.

CONCLUSION

REP offers a systematic process that helps to ensure interventions are adapted mindfully—with the involvement of diverse stakeholders, careful attention to the preservation of core elements and to the cultural relevancy of the adapted intervention. The four phases are—(1) preconditions, (2) preimplementation, (3) implementation and facilitation, and (4) maintenance and evolution—are intuitive to the adaptation of interventions for community environments, and allow room for modifications as needed. Based on our findings, we recommend that researchers allow ample time for the preimplementation phase in order to gather sufficient feedback from the community to inform adaptation and the development of

the intervention package, to best fit the community's needs. It is also important to consider innovative methods to operationalize the intervention's core theoretical components in a way the community can relate to. Finally, we recommend remaining flexible and open to expanding REP's steps to best fit adaptation needs. Given the well-established need for more EBIs that serve vulnerable populations, it is crucial to document frameworks that help researchers to cover all necessary steps for adapting interventions in a culturally sensitive manner. This article contributes to the literature on the successful adaptation of EBIs for vulnerable populations using the REP framework.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Figure 1. applying the replicating Effective Programs (rEP) Framework to adapt *Take PRIDE*

^aThe health educator was trained in the preimplementation phase to be able to facilitate the pilot-test of the adapted intervention. ^bThis step was a modification we made to the REP process, to gain further feedback from the community.

TABLE 1

adaptations Suggested in Participant Feedback Sessions

Change Suggested	Prepilot Feedback Sessions ^a	Postpilot Feedback Session ^b
Add workbook content on: heart conditions, interpretation of medical numbers, nutrition, physician interaction, and resources for seniors in Detroit	×	
Add workbook content on: heart-related emergency symptoms for men and women, how/when to respond		×
Self-regulation is not an intuitive process, add more examples to demonstrate process more clearly		×
Stress is a common barrier to disease management, add both content and strategies to reduce stress to workbook	×	×
Do not delete information from workbook—the more information, the better	×	×

^aPrepilot feedback sessions (two total) included 21 Detroit community members.

^bThe postpilot feedback session included 13 pilot intervention participants.

TABLE 2

From *Take PRIDE* to *Take Heart*: Program adaptations and rationale

	Take PRIDE	Take Heart	Rationale for Change(s)
Curriculum content	PRIDE (Problem selecting, Researching your routine, Identifying goals, Developing a plan, and Establishing a reward), medication management, exercise, diet and weight, and depression and stress	<i>Added:</i> Sections titled "Heart disease and related risk factors," "Getting the most out of your health care," "Smoking," up-to-date information in all sections <i>Deleted:</i> Depression (tied into larger stress management section instead)	Heavily based on information gathered from community members initial informal feedback sessions and postpilot sessions—majority emphasized need and desire for as much information as possible including pathophysiology of heart disease and working with physicians
Intervention format	Two (2) formats: four (4) group sessions or self-directed with weekly phone calls from the health educator	One (1) option: five (5) group sessions, two (2) one-on-one phone sessions; addition of motivational interviewing, teach-back, and SMART goal facilitation techniques	Community members advocated to add more information; DAAA suggested keeping sessions at 2.5 hours; Did not have staff capacity to offer two formats, included updated evidence-based facilitation techniques to enhance engagement and potential for behavior change
Eligibility criteria	60 years of age or older Diagnosis of heart disease and seeing a cardiologist at one of the recruitment hospitals Take daily medication for the diagnosed heart disease <i>Exclusion criteria:</i> significant mental impairment and/or terminal prognosis	50 years of age or older One (1) of seven (7) heart disease conditions: atrial fibrillation, myocardial infarction, valvular disease, pulmonary hypertension, angina, congestive heart failure, or peripheral vascular disease; or two (2) of five (5) risk factors: high cholesterol, high blood pressure, diabetes, chronic kidney disease (Stage 3 or 4) or tobacco smoking Regular access to a telephone Able to participate in group and phone education sessions	DMC recommendations and statistics showing African Americans have a high prevalence of heart disease and risk factors at a younger age than Whites; full participation in intervention cannot occur without phone access and ability to attend sessions
Primary recruitment source	Outpatient cardiology clinics, six hospital sites in Southeastern Michigan	Detroit Medical Center, Detroit Area Agency on Aging	DAAA: Prior partnership with UM-SPH, prominent community organization focused on Detroit midlife-older adult population DMC: Leading medical provider for Detroit's midlife-older adults

NOTE: DAAA = Detroit Area Agency on Aging; DMC = Detroit Medical Center; UM-SPH = University of Michigan School of Public Health.