

PROGRAM DESCRIPTION

Programa de Manejo Personal de la Diabetes (Spanish Diabetes Self-Management Program) is designed to help Spanish-speaking adults with type 2 diabetes self-manage and improve their blood glucose levels, understand how their health problems affect their lives, and improve their general health. The program is based on self-efficacy theory and focuses on the medical, emotional, and role management of living with diabetes.

The program is delivered over 6 weeks through 2½-hour workshop sessions (12–16 participants) that are held weekly in a community setting (e.g., senior center, church, library, hospital). Using a highly detailed manual, two trained peer leaders, one or both of whom must have diabetes, facilitate the workshop sessions. The sessions are highly interactive and cover the following subjects: (1) techniques to deal with the symptoms of diabetes, including fatigue, pain, hyperglycemia, hypoglycemia, stress, and emotional problems (e.g., depression, anger, fear, frustration); (2) appropriate exercises for maintaining and improving strength and endurance; (3) healthy eating; (4) appropriate use of medications; and (5) how to work more effectively with health care providers. Participants develop weekly action plans, share experiences, and help each other solve problems they encounter in creating and carrying out their self-management programs. Each participant receives a copy of the companion book (*Tomando Control de su Salud: Una guía para el manejo de las enfermedades del corazón, diabetes, asma, bronquitis, enfisema y otros problemas crónicos*), an audio relaxation CD (*Relajación muscular progresiva y un jardín de flores*), and an audio exercise CD with a booklet (*¡Hagamos ejercicio!*). All workshop sessions are facilitated in Spanish without translators, and all participant materials are in Spanish.

Before delivering the workshop, peer leaders must complete a 4-day Leader Training. Peer leaders also must be fluent in Spanish. Training is available for individuals to become master trainers, who then are qualified to train others to lead the workshop sessions.

DESCRIPTIVE INFORMATION

Areas of Interest	Health and wellness
Outcomes	Review Date: April 2013 <ul style="list-style-type: none"> ▶ Health status ▶ Diabetes management self-efficacy
Ages	<ul style="list-style-type: none"> ▶ 18–25 (Young adult) ▶ 26–49 (Adult) ▶ 50–60 (Older adult) ▶ 61–74 (Older adult) ▶ 75–84 (Older adult)
Genders	<ul style="list-style-type: none"> ▶ Female ▶ Male

Races/Ethnicities	Hispanic or Latino
Settings	<ul style="list-style-type: none"> ▶ Church ▶ Community-based organization ▶ Continuing care retirement community ▶ Health center ▶ Home ▶ Outpatient ▶ Senior center ▶ Other community settings
Geographic Locations	<ul style="list-style-type: none"> ▶ Urban ▶ Suburban ▶ Rural
Funding	Partially/fully funded by National Institutes of Health
Adverse Effects	No adverse effects, concerns, or unintended consequences were identified by the developer.
Implementation History	<p>Programa de Manejo Personal de la Diabetes was first offered as part of a randomized controlled trial in 2002 and was first disseminated to the public in 2008. It is currently being implemented in 20 States, the District of Columbia, and Puerto Rico, as well as in Argentina, Colombia, Costa Rica, Guatemala, Panama, and Spain. Approximately 2,000 participants have received Programa de Manejo Personal de la Diabetes. A list of organizations implementing the program can be found at http://patienteducation.stanford.edu/organ/dsmpspansites.html</p>
Adaptations	The program has been adapted for use by American Indians and English speakers, as well as Australian and Canadian users. The program also has been adapted for online use, and the program materials have been translated into Chinese.

QUALITY OF RESEARCH

Review Date: April 2013

Documents Reviewed

The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

Study 1

Lorig, K., Ritter, P. L., Villa, F., & Piette, J. D. (2008). Spanish diabetes self-management with and without automated telephone reinforcement: Two randomized trials. *Diabetes Care*, 31(3), 408–414. PubMed abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/18096810>

Supplementary Materials

Stanford Patient Education Research Center. (2012). *Program fidelity manual: Stanford self-management programs 2012 update*. Palo Alto, CA: Author.

Outcomes

Outcome 1: Health Status

Description of Measures	<p>Health status was assessed with the following measures:</p> <ul style="list-style-type: none">▶ A1C BIOSAFE kits. Each participant self-administered the BIOSAFE Laboratories Dried Blood Spot Hemoglobin A1C Assay, which indicates the average level of a person’s blood sugar over the past 3 months. The assay requires three 50-μl drops of capillary whole blood to be placed on a specialized paper card and dried. The card is then placed in a waterproof outer envelope for shipping via regular mail to BIOSAFE Laboratories for testing.▶ Health Distress Scale. Using a scale ranging from 0 (none of the time) to 5 (all of the time), participants were asked to indicate how much time during the past month (1) they were discouraged by their health problems, (2) they were fearful about their future health, (3) their health was a worry in their life, and (4) they were frustrated by their health problems. Higher scores indicate greater frequency of distress about health.▶ Spanish Hypoglycemia Scale. Participants were asked whether they had each of the following symptoms of hypoglycemia (i.e., low blood sugar) in the past week: morning headaches, nightmares, night sweats, lightheadedness, shakiness or weakness, intense hunger, or times when they passed out, fainted, or lost consciousness, even for a short time. Response options include “no,” “yes,” and “don’t know.” The scale score is the sum of the number of “yes” responses, and a higher scale score indicates that the participant had a higher number of hypoglycemia symptoms in the past week.▶ Spanish Hyperglycemia Scale. Participants were asked whether they had each of the following symptoms of hyperglycemia (i.e., high blood sugar) in the past week: increased thirst, dry mouth, decreased appetite, nausea or vomiting, abdominal pain, frequent urination at night (getting up to urinate three or more times a night), or severely high blood sugar (blood glucose readings of 300 mg or higher). Response options include “no,” “yes,” and “don’t know.” The scale score is the sum of the number of “yes” responses, and a higher scale score indicates that the participant had a higher number of hyperglycemia symptoms in the past week.▶ A single item from the National Health Survey, which participants used to self-rate their health: “Would you say your health in general is excellent, very good, good, fair, or poor?”
Key Findings	<p>A randomized controlled study with a longitudinal follow-up compared the effects of Programa de Manejo Personal de la Diabetes with participants who received the program immediately after random assignment (intervention group) and those who received the program after 6 months (wait-list control group). All participants (i.e., those in the intervention group and those in the wait-list control group who received the intervention) were assessed at baseline, at 6 months after baseline, and at 18 months after baseline. (The 6-month assessment was used as the control group’s baseline in the 18-month follow-up analyses.) Findings included the following:</p> <ul style="list-style-type: none">▶ From baseline to the 6-month follow-up, participants in the intervention group had a greater improvement than control group participants in A1C levels ($p = .04$), health distress ($p = .009$), symptoms of hypoglycemia ($p = .042$), and symptoms

	<p>of hyperglycemia ($p < .001$). All analyses controlled for demographic variables, baseline levels of the outcomes, and baseline activity limitation (a measure of the impact of disease on role activities) due to baseline differences on this variable.</p> <ul style="list-style-type: none"> ▶ From baseline to the 18-month follow-up, all participants who received the intervention had improvements in A1C levels ($p = .03$), health distress ($p < .001$), symptoms of hypoglycemia ($p = .002$), symptoms of hyperglycemia ($p = .005$), and self-rated health ($p < .001$).
Studies Measuring Outcome	Study 1
Study Designs	Experimental
Quality of Research Rating (0.0–4.0 scale)	3.6

Outcome 2: Diabetes Management Self-Efficacy

Description of Measures	<p>This outcome was assessed with the Spanish Diabetes Self-Efficacy Scale, which consists of 8 items regarding the participant's confidence in his or her ability to manage aspects of diabetes. Using a scale ranging from 1 (not at all confident) to 10 (totally confident), participants rated each item (e.g., choosing appropriate foods, knowing what to do when blood sugar is higher or lower than it should be). The scale score is the mean rating for the items, with higher means indicating greater diabetes management self-efficacy.</p>
Key Findings	<p>A randomized controlled study with a longitudinal follow-up compared the effects of Programa de Manejo Personal de la Diabetes with participants who received the program immediately after random assignment (intervention group) and those who received the program after 6 months (wait-list control group). All participants (i.e., those in the intervention group and those in the wait-list control group who received the intervention) were assessed at baseline, at 6 months after baseline, and at 18 months after baseline. (The 6-month assessment was used as the control group's baseline in the 18-month follow-up analyses.) Findings included the following:</p> <ul style="list-style-type: none"> ▶ From baseline to the 6-month follow-up, participants in the intervention group had a greater improvement than control group participants in diabetes management self-efficacy ($p < .001$). The analysis controlled for demographic variables, baseline levels of the outcome, and baseline activity limitation (a measure of the impact of disease on role activities) due to baseline differences on this variable. ▶ From baseline to the 18-month follow-up, all participants who received the intervention had an improvement in diabetes management self-efficacy ($p < .001$).
Studies Measuring Outcome	Study 1
Study Designs	Experimental
Quality of Research Rating (0.0–4.0 scale)	3.4

Study Populations

The following populations were identified in the studies reviewed for Quality of Research.

Study	Age	Gender	Race/Ethnicity
Study 1	<ul style="list-style-type: none"> ▶ 18–25 (Young adult) ▶ 26–49 (Adult) ▶ 50–60 (Older adult) ▶ 61–74 (Older adult) ▶ 75–84 (Older adult) 	<ul style="list-style-type: none"> ▶ 61.9% Female ▶ 38.1% Male 	100% Hispanic or Latino

Quality of Research Ratings by Criteria (0.0–4.0 scale)

Criterion	Ratings	
	Outcome 1	Outcome 2
Reliability of Measures	3.9	3.8
Validity of Measures	3.2	2.5
Intervention Fidelity	3.1	3.1
Missing Data and Attrition	3.8	3.8
Potential Confounding Variables	3.4	3.4
Appropriateness of Analysis	4.0	4.0
Overall Rating	3.6	3.4

Study Strengths

According to the study article, Spanish measures were translated from English, back translated, and standardized through a consensus meeting of all translators. Measures then underwent standard psychometric testing, including internal consistency, test-retest reliability, convergent validity, and discriminant validity. Peer leaders received 4 days of training in the use of the detailed protocol, and a fidelity manual was available. Intensive follow-up resulted in very few missing data. Comparisons of study completers and noncompleters indicated that these groups did not differ on most baseline characteristics. Individuals were randomized into intervention and wait-list control groups. Data analyses were appropriate for the measures used and the study design, including analyses of covariance that

controlled for demographic variables, baseline levels of the outcome, and variables with significant baseline differences between intervention and control groups. Paired t-tests were used to compare scores from baseline and 18-month assessments.

Study Weaknesses

Variations among Spanish-speaking cultures could affect the validity of the measures. Although measures underwent psychometric testing, there was little discussion about the validity results for each measure. As noted by the investigators, because program participants could not be blinded, there is the possibility of an attention effect. The absence of a control group for the longitudinal study limits the interpretation of the data from the 18-month assessment.

READINESS FOR DISSEMINATION

Review Date: April 2013

Materials Reviewed

The materials below were reviewed for Readiness for Dissemination. The implementation point of contact can provide information regarding implementation of the program and the availability of additional, updated, or new materials.

González, V., Lorig, K., Sobel, D., & Minor, M. (2007). *Tomando Control de su Salud: Una guía para el manejo de las enfermedades del corazón, diabetes, asma, bronquitis, enfisema y otros problemas crónicos*. Boulder, CO: Bull Publishing Company.

González, V., Lorig, K., Villa, F., Marin, M., Alvarez, S., & Rosas, M. (2009). *Programa de Manejo Personal de la Diabetes: Manual de los instructores*. Palo Alto, CA: Stanford Patient Education Research Center.

González, V., Lorig, K., Villa, F., Marin, M., Alvarez, S., & Rosas, M. (2012). *El Programa de Manejo Personal de la Diabetes: Guía para el taller de entrenadores (master trainer manual)*. Palo Alto, CA: Stanford Patient Education Research Center.

Stanford Patient Education Research Center. (1995). *¡Hagamos ejercicio!: Guía ilustrada para el disco de ejercicios* [Booklet]. Palo Alto, CA: Author.

Stanford Patient Education Research Center. (2008). *Implementation manual: Stanford self-management programs 2008*. Palo Alto, CA: Author. Retrieved from http://patienteducation.stanford.edu/licensing/Implementation_Manual2008.pdf

Stanford Patient Education Research Center. (2010). *Stanford self-management fidelity tool kit (volume 1)*. Palo Alto, CA: Author.

Stanford Patient Education Research Center. (2012). *Program fidelity manual: Stanford self-management programs 2012 update*. Palo Alto, CA: Author. Retrieved from <http://patienteducation.stanford.edu/licensing/FidelityManual2012.pdf>

Stanford Patient Education Research Center. (2013). *Certification guidelines*. Palo Alto, CA: Author.

Stanford Patient Education Research Center. (2013). *Master trainer agreement and certification form*. Palo Alto, CA: Author. Retrieved from http://patienteducation.stanford.edu/licensing/CDSMPMT_auth.pdf

Stanford Patient Education Research Center Facebook page, <https://www.facebook.com/pages/Stanford-Patient-Education-Research-Center/144537370630?ref=sgm>

Stanford Patient Education Research Center Web Site, http://patienteducation.stanford.edu/programs_spanish/diabetesspan.html

Stanford University. (1995). *Programas educativos para la salud: ¡Hagamos ejercicio!* [CD]. Palo Alto, CA: Author.

Stanford University. (1995). *Programas educativos para la salud: Relajación muscular progresiva y un jardín de flores* [CD]. Palo Alto, CA: Author.

Stanford University. (2012). *Manejo Personal de la Diabetes: T-trainer's manual*. Palo Alto, CA: Author.

Other dissemination materials:

- Participant health survey
- Sample message from electronic mailing list

Readiness for Dissemination Ratings by Criteria (0.0–4.0 scale)

Criterion	Rating
Implementation Materials	3.4
Training and Support	3.4
Quality Assurance	3.4
Overall Rating	3.4

Dissemination Strengths

Program materials provided to support implementation are extensive and detailed. Materials identify program requirements, including who should implement the program, the target population, and detailed recommendations

(based on experience) to help ensure successful implementation. The implementation guide addresses issues related to cultural competence. The participant book, *Tomando Control de su Salud*, is easy to follow, with large print. The Stanford Patient Education Research Center Web site provides an overview of the program, including training schedules and cost information. Three levels of training are available—leader, master trainer, and train the master trainer—and certification requirements for each level are expected to strengthen fidelity. The corresponding training manuals are easy to follow; each level of training appears to engage participants with didactic and interactive activities. The fidelity manual includes tools for assessing whether a peer leader is implementing the program with fidelity, and the results of the assessment may indicate whether the peer leader needs further training. The corresponding fidelity toolkit contains an exhaustive “must do” checklist and sample scenarios, agendas, and visuals. Course evaluations and client health surveys are available in Spanish to help evaluate participant outcomes and program quality. Extensive Spanish-language evaluation materials for assessing client outcomes are available for download from the Stanford Patient Education Research Center Web site.

Dissemination Weaknesses

The audio exercise CD is outdated, and the corresponding illustrated booklet does not offer a sufficient explanation on how to perform the exercises or address the types of challenges an older adult with type 2 diabetes may face (e.g., feeling faint, falls). Sample menus do not sufficiently incorporate a dietary sampling of ethnic foods across common Latino subgroups. The training manuals contain some formatting inconsistencies, which reduce their overall quality. The Stanford Patient Education Research Center Web site lists training information and requirements for multiple self-management programs and cross-trainings that involve more than one program, which may be confusing to potential implementers. The fidelity manual and toolkit are available in English only and, thus, may not be accessible to peer leaders who only speak Spanish. It is unclear how the provided measures can be used to assess program outcomes.

COSTS

The cost information below was provided by the developer. Although this cost information may have been updated by the developer since the time of review, it may not reflect the current costs or availability of items (including newly developed or discontinued items). The implementation point of contact can provide current information and discuss implementation requirements.

Implementation Materials

Item Description	Cost	Required by Developer
<i>Tomando Control de su Salud: Una guía para el manejo de las enfermedades del corazón, diabetes, asma, bronquitis, enfisema y otros problemas crónicos</i>	\$15.16 per participant book	Yes
<i>Programas educativos para la salud: ¡Hagamos ejercicio! (Spanish Exercise Program)</i>	\$9.60 per CD and booklet	Yes
<i>Programas educativos para la salud: Relajación muscular progresiva y un jardín de flores (Spanish Relaxation Program)</i>	\$9.60 per CD	No

Item Description	Cost	Required by Developer
Implementation Manual: Stanford Self-Management Programs 2008 (English only)	Free (available for download from the Stanford Patient Education Research Center Web site)	No
Program license, valid for 3 years	<ul style="list-style-type: none"> ▶ \$500 for organizations offering up to 30 workshops and 6 Leader Trainings over the 3-year period ▶ \$1,000 for organizations offering 31–90 workshops and 12 Leader Trainings over the 3-year period 	Yes
4-day, off-site Leader Training for at least 2 people per organization (includes reproducible <i>Manual de los instructores; Tomando Control de su Salud: Una guía para el manejo de las enfermedades del corazón, diabetes, asma, bronquitis, enfisema y otros problemas crónicos; ;Hagamos ejercicio!</i> CD and booklet; and <i>Programas educativos para la salud: Relajación muscular progresiva y un jardín de flores</i> CD)	Free, if offered by master trainers from a licensed agency	Yes
4-day, off- or on-site Master Trainer Training (includes reproducible Master Training Manual; reproducible <i>Manual de los instructores; Tomando Control de su Salud: Una guía para el manejo de las enfermedades del corazón, diabetes, asma, bronquitis, enfisema y otros problemas crónicos; ;Hagamos ejercicio!</i> CD and booklet; and <i>Programas educativos para la salud: Relajación muscular progresiva y un jardín de flores</i> CD)	<ul style="list-style-type: none"> ▶ Off-site training at the developer's site: \$900–\$1,600 per participant (lower cost for nonprofessionals with chronic illness) ▶ On-site training: \$16,000 for up to 24 participants, plus trainer travel expenses 	No
Phone and email technical assistance	Free	No
Electronic mailing list for master trainers	Free	Yes
Fidelity manual and toolkit for Stanford self-management programs (English only)	Free (available for download from the Stanford Patient Education Research Center Web site)	No

Additional Information

The trainings are conducted in Spanish without interpreters, and peer leaders and trainers must be able to speak, write, and read Spanish fluently. Bulk discounts are available for the participant book, the Spanish exercise CD and booklet, and the Spanish relaxation CD. In addition to the program licensing options provided, other configurations are available upon request. T-training, which trains participants to conduct Master Trainer Training, is available through a free apprenticeship with a trainer from Stanford University. The Stanford Patient Education Research Center offers free technical assistance to help implementers use or adapt the free downloadable evaluation measures to fit the needs of their communities; however, evaluation is not a required part of the program's implementation.

OTHER CITATIONS

Jernigan, V. B., & Lorig, K. (2011). The Internet diabetes self-management workshop for American Indians and Alaska Natives. *Health Promotion Practice, 12*(2), 261–270. PubMed abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/20534807>

Lorig, K., Ritter, P. L., Laurent, D. D., Plant, K., Green, M., Jernigan, V. B., & Case, S. (2010). Online diabetes self-management program: A randomized study. *Diabetes Care, 33*(6), 1275–1281. PubMed abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/20299481>

Lorig, K., Ritter, P. L., Villa, F. J., & Armas, J. (2009). Community-based peer-led diabetes self-management: A randomized trial. *Diabetes Educator, 35*(4), 641–651. PubMed abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/19407333>

TRANSLATIONAL WORK

The Stanford Patient Education Research Center, part of the Department of Medicine at the Stanford University School of Medicine, has developed, tested, and evaluated self-management programs in English and Spanish for individuals with chronic health problems over the past 30 years. The first program was the Arthritis Self-Management Course, which became the prototype for other self-management programs. Programa de Manejo Personal de la Diabetes was developed and piloted in Spanish and is modeled after Tomando Control de su Salud, the Spanish version of the Chronic Disease Self-Management Program developed for Spanish speakers. Programa de Manejo Personal de la Diabetes is offered by more than 60 organizations throughout the United States, the District of Columbia, and Puerto Rico and, internationally, in Argentina, Colombia, Costa Rica, Guatemala, Panama, and Spain.

U.S. organizations with licenses to provide Programa de Manejo Personal de la Diabetes were approached by the Director of the Stanford Patient Education Research Center, Dr. Kate Lorig, with a request for information about their experiences in translating the program in their own communities. Responses from eight organizations, which include health centers, national nonprofit organizations, and State and local health departments, are summarized here in relation to the six categories of translational work.

Planning/Partners

All eight organizations have strong collaborative relationships with public, private, and nonprofit organizations, including the Administration for Community Living's Administration on Aging, health foundations, public health services departments, county aging and adult services departments, parks and recreation departments, housing authorities, organizations for health care professionals, churches, community-based groups, and senior centers. The planning process and the establishment of partnerships were often facilitated by the advisory committee or stakeholder team, composed of representatives of State Units on Aging, Medicaid programs, county governments, community-based organizations, AARP, universities, and others.

Adoption

Organizations decided to adopt Programa de Manejo Personal de la Diabetes for several reasons: (1) the program meets an unmet need in the communities served by the organizations, where there are high levels of poverty and high percentages of Hispanic residents with diabetes; (2) scientific and anecdotal evidence supports the use of the program; (3) the program was developed specifically for Spanish-speaking individuals with diabetes, with an emphasis on self-management and skill building to empower participants to better care for themselves; (4) the program is manualized and structured, and the 6-week workshop series allows for information to be imparted at a slower rate to avoid overwhelming older adults with a large amount of information communicated in 1 or 2 days of diabetes classes; (5) integrating the program into existing services was an ideal alternative to the usual practice of referring patients to other programs; and (6) graduates of the program are eligible to become peer leaders.

Reach/Recruitment

Organizations focused on areas with the highest levels of poverty and health disparities, as well as areas with underserved and uninsured Latinos. Participants were recruited during community-based events and at housing facilities for older adults, senior centers, health centers, community centers, churches, city-sponsored lunchrooms, and hospitals. An effective recruitment tool was word-of-mouth: participants who enjoyed the workshop and saw results shared their experiences with their peers and health care providers, which led to subsequent referrals. Hosting agencies and other community partner groups helped with recruitment by announcing new workshops. Other recruitment efforts included advertising in regional newspapers and specialized publications targeted to the senior population; using brochures and flyers; using a Web site to post workshop information, information about the advisory committee, and former participants' testimonials; and using social media (i.e., Facebook). One organization mentioned participating in meetings of organizations as an effective way of reaching organizations and their constituents. To recruit eligible individuals, this organization also partnered with a medical provider that offered free glucose, cholesterol, blood pressure, and glaucoma screenings. Incentives (e.g., key chains, pens) were sometimes offered to participants, and some organizations ended their workshops with a graduation ceremony, which included certificates and a token gift for each participant who completed the program. Although initial interest in the program was often high, most organizations reported that they experienced some challenges with participant recruitment, including participants' lack of commitment to the full 6-week program, low literacy skills, lack of transportation, and lack of child care. One organization helped overcome participants' literacy concerns by emphasizing that they did not need to take notes or pass an exam to complete the program.



Implementation

The implementation process included assessing the need for bilingual and bicultural staff; identifying, training, and coordinating peer leaders and master trainers; coordinating workshop dates, times, and locations; recruiting participants; supervising workshop leaders and ensuring that they adhered to the curriculum; collecting and analyzing data; and reporting program results. Mechanisms were developed to purchase and distribute incentives for participation. One organization offered a class before the first workshop session began, which helped peer leaders and participants complete forms and become familiar with the content of the program. One successful strategy was to hold regular team meetings to focus on strengths and challenges, as well as establish prompt corrective actions when needed. Positive relationships with the advisory committee and other community leader partners were extremely helpful in implementing the program. One organization maintained ties with the developer's master trainers and included its own master trainers in the developer's electronic mailing list to keep staff up to date on the content of the program. The organizations identified several challenges to implementation, including finding new community settings to host sessions and trained peer leaders to expand facilitation of the program. Workshop scheduling was more complex than anticipated, usually because of competing activities for participants or the community setting hosting the session. Another barrier was the unanticipated need for child care for the participants' caretakers; many participants were older adults, and their caretakers often had to attend the workshops. One organization reported that some participants were unable to complete the series for a number of reasons (e.g., extended personal illness, caregiving responsibilities, difficulties arranging transportation, unexpected travel), which led to an accommodation that allowed participants to return to a later series in order to complete the program.

Effectiveness

Positive outcomes in self-reported health and health management–related indicators were reported by six of the eight organizations, either anecdotally or through statistical analyses of data. These outcomes included improvements in nutrition, physical activity, symptoms of hypoglycemia, self-perception of health, and symptoms of depression. Participants also had a decrease in health care utilization (e.g., physician visits, emergency room visits, nights spent in the hospital) and improved relationships with health care professionals. Participants reported that they had more confidence in their management of diabetes, in their ability to prevent discomfort from interfering with activities, and in their use of relaxation techniques. They also reported that they had a strengthened social support network.

Maintenance

Most of the eight organizations were committed to continuing and expanding the program through funding from governmental agencies, foundations, corporations, individuals, and special events. Organizations must ensure that community partners remain engaged, as collaboration with established community partners is key. One organization is building infrastructure to receive referrals from health partners and provide follow-up services, as well as to provide program-related outreach and education to health groups in the community. One organization's partner agency is pursuing strategies for obtaining insurance reimbursement through Medicare, which may provide an option for delivering services to older adults. Several organizations experienced the ongoing challenge of managing staff turnover and maintaining a large pool of peer leaders. This concern can be addressed by ensuring that peer leaders are not overworked and by taking advantage of available trainings (e.g., Leader Training, Master Trainer Training). One agency has paired up with local colleges to train public health students to be peer leaders, in exchange for credits toward their degree.

Site With Translational Work	References Describing Site's Translational Work, by Category					
	Planning/ Partners	Adoption	Reach/ Recruitment	Implementation	Effectiveness	Maintenance
Citrus Health Network	Reference 1	Reference 1	Reference 1	Reference 1	—	Reference 1
Dignity Health at Mercy and Memorial Hospitals	Reference 2	Reference 2	Reference 2	Reference 2	Reference 2	Reference 2
Healthy Aging Regional Collaborative, Health Foundation of South Florida	Reference 3	Reference 3	Reference 3	Reference 3	Reference 3	Reference 3
American Diabetes Association—Colorado Area	Reference 4	Reference 4	Reference 4	Reference 4	Reference 4	Reference 4
Office for Health Promotion, Puerto Rico Department of Health	Reference 5	Reference 5	Reference 5	Reference 5	Reference 5	Reference 5
San Diego County Health and Human Services Agency, Behavioral Health Services, Salud Program	Reference 6	Reference 6	Reference 6	Reference 6	Reference 6	Reference 6
Center for Health Futures at Florida Hospital (Central Florida)	Reference 7	Reference 7	Reference 7	Reference 7	Reference 7	Reference 7
Island Peer Review Organization	Reference 8	Reference 8	Reference 8	Reference 8	Reference 8	Reference 8

Reference Number	Reference
1	Documentation submitted by Citrus Health Network, Inc., February 2013
2	Documentation submitted by Dignity Health at Mercy and Memorial Hospitals, February 2013
3	Documentation submitted by the Healthy Aging Regional Collaborative, Health Foundation of South Florida, February 2013
4	Documentation submitted by the American Diabetes Association–Colorado Area, February 2013
5	Documentation submitted by the Office for Health Promotion, Puerto Rico Department of Health, February 2013
6	Documentation submitted by the San Diego County Health and Human Services Agency, Behavioral Health Services, Salud Program, February 2013
7	Documentation submitted by the Center for Health Futures at Florida Hospital (Central Florida), February 2013
8	Documentation submitted by Island Peer Review Organization, Inc., February 2013

CONTACTS

To learn more about implementation or research, contact:

Kate Lorig, Dr.P.H.
Stanford Patient Education Research Center, Stanford
University School of Medicine
(650) 723-7935
lorig@stanford.edu

Additional program information can be obtained through the following Web site:

http://patienteducation.stanford.edu/programs_spanish/diabetesspan.html