Program: Evidence-Based Disease Prevention: Nutrition

Organization: Alamo Area Council of Governments, San Antonio, TX

Project Title: Evidence Based Prevention Program for Bexar County

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: Carol Zernial
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Evidence Base

Bexar County Area Agency on Aging bases its intervention on the research conducted by the Diabetes Prevention Research Group. The study, *Reduction in the Incidence of Type 2 Diabetes with Lifestyle Intervention or Metformin*, was published in the February 7, 2002 New England Journal of Medicine. It was the first large American study to show that diet and exercise could effectively delay the onset of diabetes in a group of overweight adults already showing glucose intolerance. Researchers hypothesized that some risk factors for diabetes such as elevated plasma glucose concentration in a fasting state, overweight, and a sedentary lifestyle, are modifiable with lifestyle interventions or the administration of the drug metformin.

Original Research Evidence

Participants included 3234 non-diabetic persons with a mean age of 51 and mean body mass index (weight in kilograms divided by the square of the height in meters) of 34. Sixty-eight percent of participants were women and forty-five percent were of a minority group.

Researchers randomly assigned participants into three groups: placebo, metformin therapy (850 mg/day), or lifestyle modification. Lifestyle changes included a low-fat diet, 30 minutes of moderate physical activity on most days of the week (with a goal of 150 minutes per week), and a weight loss of 7%.

Researchers found that after 2 years of follow-up, results showed that the incidence of diabetes in the lifestyle intervention group was only 4.8 cases per 100 persons, compared to 7.8 in the metformin group and 11.0 in the placebo group . When compared with placebo, the lifestyle intervention group reduced the incidence of diabetes by 58%, while metformin reduced incidence by 31%.

This study showed that although both lifestyle interventions and the drug metformin can reduce the incidence of diabetes, lifestyle changes are significantly more effective.

Adaptation of Model

Whereas original research required participants to go to a health center for the intervention, this program will be delivered in the community in places such as nutrition centers and churches. Medications, which were also part of the original study, will not be offered as part of this program.

Project's Overall Design

The goal of this project is to prevent or delay the onset of Type 2 diabetes among Hispanic elders, or to mitigate its severity through a culturally sensitive nutritional program. The program combines low fat/low glycemic meals and nutrition education with health screening/monitoring and a physical activity program.

Seniors will be recruited through various nutrition centers in the local area. A health screening will be provided to participants that includes, blood glucose, cholesterol, and blood pressure measurements.

Special meals will be provided to participants of the program Monday through Friday for lunch that will be prepared with the local "tex-mex" flavor. Cooking sessions will be held to teach participants how to prepare foods in a way to reduce the risk of diabetes.

The physical activity promotion portion of the program will be based on a health education program developed by OASIS called HealthStages. Participants will receive education on physical activity, diet, and self-management at the nutrition centers 3 times per week.

Peer Educators will be trained and available at the nutrition sites as a way to encourage participants to continue with the nutrition and physical activity programs.
This proposal also includes other activities such as providing incentives for participation and access to transportation.

Target Population

The target population is low-income Hispanic elders who participate in the Title III nutrition program. Three centers are targeted in the first year, three additional in the second year, and two more in the third year for a total of 930 seniors served.

Anticipated Outcomes

- A 7% weight loss and at least 150 minutes of physical activity per week during the first year of the program
- Maintenance of these changes (weight loss and physical activity) for 3 years.
- A replicable model of community-based diabetes risk reduction through an OAA supported Nutrition program.
- San Antonio Senior Diabetes Cookbook
- Dissemination at local, state and national levels -- through web, TV documentary, organizational channels and national conferences.

Evaluation Design

The Impact Evaluation will include a comparison of self-reported health status and health screening data. Screenings will take place every six months and will include measures of body fat, in addition to blood glucose to identify participants with pre-diabetes or diabetes. Responses from 24-hour dietary recalls will be collected along with activity sign-up sheets to monitor participants' progress.

Results from this program will also be compared with another local program that focuses on health screenings and medication management. This alternate program does not include meals or physical activity components. Participants from each program who are in the pre-diabetic state will be compared to look for efficacy and efficiency of the comprehensive program versus the specific interventions of the alternative program.

The Process Evaluation will include activities such as regularly scheduled interviews with program staff to keep up with program activities and progress. Progress will be recorded for both clients and staff of the congregate meal sites. This evaluation will be conducted throughout the first year to identify positive or negative attitudes that may affect adherence to the program.

Partnerships

- Bexar Area Agency on Aging (AAA) will be responsible for project management, ongoing evaluation of progress, oversight of the grant budget, preparation of reports, and communications with all partners.
- City of San Antonio Department of Community Initiatives (Title III-C Nutrition Centers) will oversee the nutrition portion of the program.
- The Texas Diabetes Institute will assist with health screenings and provide consultations to participants, make referrals to health care professionals, and provide a dietician and diabetic educator to train staff.
- University of Texas Health Science Center will conduct health screenings provided by nursing students.
- Metropolitan Health District will provide the supplies for the health screenings in addition to the hardware and software needed to develop participant health profiles.
- Our Lady of the Lake University is the research partner and is responsible for project evaluation.
- OASIS will provide physical activity at participating centers 3 times per week, in addition to education on physical activity, diet, and health self-management.
- The San Antonio Restaurant Association will provide the Family Kitchen sessions.

Program: Evidence-Based Disease Prevention: Nutrition

Organization: Montachusett Opportunity Council

Project Title: Healthy Eating for Successful Living in Older Adults

Project Period: 10/01/2003 TO 09/30/2006

Project Contact: Mary Giannetti and Anne Lee
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Model

The Healthy Eating for Successful Living in Older Adults program focuses on encouraging seniors to look at nutrition strategies in a positive proactive manner and allowing them to understand the control they have in these matters. Education and self-management strategies are stressed along with a behavior change approach being a core component. The focus of this program is to stress heart and bone healthy nutrition strategies to help maintain one's wellness and independence and prevent chronic disease development or progression.

Adaptation of Model

This initiative was created as part of the John A. Hartford Foundation funded Model Programs Project led by NCOA. The model was created based on literature and evidence reviews, and will be implemented by this community-based organization as it was designed.

Project's Overall Design

The nutrition intervention is a behavior-focused model encouraging individuals to look at nutrition strategies in a positive proactive manner. The program is a six-week workshop that meets once a week for two and half hours each time. Upon completion of the six-week workshop, the senior participants will demonstrate a positive change of eating and or exercise lifestyles.

The sessions are focused around the food guide pyramid. The process of goal setting and problem solving techniques are applied and participants keep an exercise and diet journal. The groups are facilitated by a layperson and the participants' learning is self-directed as they are a part of the group problem solving. A nutritionist is a resource to the groups to help answer technical questions and support the facilitator. Sessions five is held at a grocery store and session six is a cooking demonstration. These sessions are highly interactive and allow participants to read food labels, discuss cooking methods, and try new foods**.** About a month after the workshop has ended the group gets together for a luncheon. This is an opportunity to make use of learned skills and a

time to discuss individual experiences with the program. At this meeting post questionnaires are completed.

Partnerships

National Council on Aging
Lahey Clinic
Montachusett Opportunity Council
Elderly Nutrition Programs
Community based senior groups
Health clinics/ physician groups
Churches
YMCA/ exercise facilities

Target Population

Participants will be 60+year-old community residents from diverse backgrounds and locations. The ideal number of participants enrolled in a session would be between 8-12.

Site selection is based on organizational readiness and fit, strength of resources and skills of co-leaders and volunteers. Also important is the sites existing partners in the community and collaboration potential with other health care and senior groups.

Anticipated Outcomes

The program goals are to foster improvement in nutrition lifestyle and focuses on all its components, food, exercise, behavior change, and social support. Participants' lifestyle changes will be measured by a pre and post questionnaire. Also a client satisfaction survey will monitor program quality assurance and participants' satisfaction with the program. The Model will prove to translate successfully to a wide range of diverse community groups. The program will be cost effective for the organizations and sustainable into their existing programs and services. The sites will develop and strengthen collaboration with community partners and health care entities.

Program: Evidence-Based Disease Prevention: Disease Self-Management

Organization: Senior Service Centers of the Albany Area, Inc.
(Senior Services of Albany)

Project Title: Women Take PRIDE in Managing Heart Disease

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: Linda Austin
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Evidence Base

The "Women Take PRIDE" (WTP) intervention was developed and tested by researchers at the University of Michigan School of Public Health. It is a four-week education and behavior modification program for women over the age of 60 who have heart disease.

Original Research Evidence

The original research, done by N. Clark PhD and published in March 2000, studied the effect of the heart disease management program "Women Take Pride" on physical functioning, symptom experience, and psychosocial status.

Using a randomized controlled trial, researchers recruited participants from 6 different hospitals. A total of 309 women were selected for the intervention group and 261 were selected for the control group. Participants were at least 60 years old, had a diagnosis of cardiac disease, and were seen by a physician approximately every 6 months. Researchers collected data by telephone survey at baseline, four months, and twelve months to compare the two groups.

Results showed that at 12 months post intervention, participants in the intervention group had better physical functioning and improved ambulation, were less symptomatic, and had lost more body weight than control group participants. Additional research published in 2003 examined hospital billing data from a 36-month period, and showed that participants in the intervention group had 46% fewer in-patient days and 49% lower in-patient costs than participants in the control group.

Adaptation of Model

Senior Services of Albany will adapt this model by making it more applicable to community settings. Rather than using the hospital setting, this project will modify the recruitment techniques and implement the program in familiar places to seniors, such as community rooms in senior housing complexes. Referrals will also be generated from health care providers and insurers.

Project's Overall Design

This project seeks to demonstrate the effectiveness of both providing the intervention and recruiting participants in a community setting. Participants of the program attend classes for 2 1/2 hours per week. Classes are led by a University of Michigan trained health educator and use standardized materials developed by the University of Michigan.

Participants learn general principles of heart disease management, but are encouraged to choose one problem in which to apply the PRIDE process (**P**roblem identification, **R**esearching one's routine, **I**dentifying a management goal, **D**eveloping a plan to reach it, **E**xpressing one's reaction/establishing rewards for making process). Examples of tools used in the PRIDE process include pedometers, walking logs, diet logs and stress management materials.

During week one, participants select one problem on which to focus the PRIDE program, and track their behavior around this problem. Week 2 includes reporting behavior, setting a goal, and developing a plan to achieve that goal. Any difficulties experienced in trying to reach their goal will be shared during week 3. Additional education is also given during week 3 on personal and social support in achieving goals. The last week of the program, participants will learn how to share their accomplishments with each other and their family and friends. Motivational phone calls are made weekly during the program and at the four and six month marks.

WTP focuses on:

- Improving functional status - both physical and social
- Improving symptom experience and general health outcomes
- Improving the knowledge of and access to community resources

Target Population

This WTP demonstration primarily targets African American women 60 years of age and older, living in the inner cities of Albany and Rensselaer counties, as well as women over 60 years living in rural areas of both counties. All participants must have a diagnosis of heart disease.

Anticipated Outcomes

- Improved general health status; perception of health and symptom experience
- Improved functional status; physical functioning, role functioning, and social functioning
- Improved knowledge of community resources to assist women over the age of 60 in managing their heart disease.

Evaluation Design

An extensive evaluation will be conducted throughout the implementation period in order to assess the outcomes and document lessons learned in program implementation.

The Impact Evaluation will involve collecting data in person at baseline and 4 months, and then by mail at 12 months. General health status and functioning will be measured using the Short Form 36 Health Survey (SF-36). Specific tools will be developed in order to measure knowledge of community resources, as well. Other measures included in the impact evaluation consist of body weight and symptom experience (presence, frequency and level of bother) of the participants.

The process evaluation will be conducted to document important aspects of the implementation period and to incorporate lessons learned into ongoing program improvements. Participants will complete questionnaires at the end of the 4-week sessions to assess satisfaction with content, delivery, access to the program, convenience of time and location, transportation to the program, and to make any recommendations they might have. Attendance and dropout rates will also be evaluated. Additionally, facilitators will complete implementation logs that record their observations of program strengths, weaknesses, and recommendations.

Partnerships

- Senior Services of Albany will have the recruitment, promotion, and scheduling responsibilities as well as the over all management of the project.
- Northeast Health is a not-for-profit network of healthcare, supportive housing, and community services. They will be providing the health educator services, including educational sessions, participant assessments, follow-up calls and data collection.
- The HealthNow Foundation, Inc. is a not-for-profit health services and research foundation. They will help identify participants for the program by advertising the program to the enrollees of their supplemental insurance program "Senior Blue", and by requesting that participating physicians make referrals to the program.
- Albany County Department for Aging is the Area Agency on Aging and will work with other Departments for Aging and County Health Departments to help recruit participants for the program. They will also help select potential sites for implementation of the program, as well as secure transportation for participants.
- University at Albany, State University of New York, School of Public Health will complete the evaluation for the program.

Program: Evidence-Based Disease Prevention: Disease Self-Management

Organization: Elders in Action, Portland, OR

Project Title: Healthy Changes: A Community-Based Diabetes Education and Support Program

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: Vicki Hersen
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Portland, OR 97204
Telephone: (503) 823-5373

Evidence Base

Elders in Action has based its program on the Chronic Disease Self-Management Program developed by Stanford University. This program is a 6-week workshop designed for people with various chronic diseases. Participants attend 2-hour sessions once a week reviewing topics such as exercise, medication, communication, nutrition, fatigue and pain. The program builds upon the idea of self-efficacy, defined by Stanford as "the confidence one has that he or she can master a new skill or affect one's own health."

Original Research Evidence

The original research, led by Kate Lorig at Stanford, was published in 1996. The study evaluated the effectiveness of a chronic disease self-management program on changes in health behavior, health status, and health service utilization.

A group of 952 participants age 40 or older, all with chronic disease (heart disease, lung disease, stroke or arthritis), were randomly assigned to a treatment group or a control group, and health behaviors, health status and health service utilization were measured by questionnaire.

After 6 months, results showed that those in the treatment group had improvements in weekly minutes of exercise, frequency of cognitive symptom management, communications with physicians, self-reported health, health distress, fatigue, disability, and social/role activities limitations. Hospitalizations and days in the hospital were also less for the treatment group.

Adaptation of Model

Elders in Action will implement this program in community settings such as senior centers and churches. They will also be adding a new component to the program: one-on-one assistance to participants to help locate resources, identify problems, explore solutions, and communicate with health care providers. Volunteer Ombudsmen will be trained to fill these roles and are described below.

Project's Overall Design

Elders in Action will conduct a 3-year education and support program for older adults with diabetes. The goal is to increase the ability of program participants to self-manage, on a day-to-day basis, diet and physical activity aspects of their diabetes. Program elements include:

- Weekly classes and support meetings held at 8 community sites;
- Community outreach and presentations provided by trained volunteer community educators;
- One-on-one advocacy and problem-solving assistance to be provided by trained volunteer Ombudsmen.

There are three main components to the weekly classes: Education, Support, and Community Resources. The education component consists of weekly classes that are an hour and a half in length. They include both diabetes-specific interventions and broader self-management interventions. Participants can attend as many sessions as needed. The support component has participants discussing their goals, action plans, and success. Connecting with community resources is the last element, which encompasses participants sharing information on available resources such as exercise or cooking classes in addition to how to work effectively with health care providers.

Community Educators will be trained by Elders in Action on diabetes self-management and will provide presentations, assist with the education process at the sites, and identify individuals who may benefit from the Ombudsman or peer support.

The Ombudsmen will be volunteers who serve as catalysts in helping participants access community services, research resources, negotiate and solve problems, understand medical paperwork, communicate more effectively with health care providers and self-manage their diabetes.

Target Population

The target population is adults age 55 and over with diabetes who reside in Multnomah, Clackamas, and Washington Counties in Oregon. The program will target low-income, ethnic seniors (including African American, Native American and Pacific Islanders), and geographically diverse populations.

Anticipated Outcomes

Program participants will experience:

- Increased physical activity;
- Weight loss or decrease in body mass index;
- Increased sense of empowerment and satisfaction in communicating with health care providers;

- Increased self-efficacy and problem solving skills;
- Increased use of community resources.

Evaluation Design

The impact evaluation will look at factors such as participant satisfaction, diversity of participants, improvement in diabetes-specific diet and physical activity measures, improvement in self-efficacy and problem-solving skills, increased use of community resources, as well as an increase in sense of empowerment in communicating with health care providers. Several different evidence-based tools, including questionnaires, program records, and focus groups, will be used to collect the data in each of these areas.

The process evaluation will assess the implementation of the program and any barriers or problems that may arise. This evaluation will be completed on several different levels. First, an Advisory Committee for Elders in Action will meet quarterly to review the progress of the project and make suggestions for change. Second, the Project Ombudsmen and community educators will hold monthly team meetings to discuss their on-site experiences with the project and possible recommendations for program improvement. Finally, the lay leaders and project site managers will meet bi-monthly to assess the implementation of the project.

Partnerships

- Elders in Action is a community-based consumer advocacy organization. It also serves as the independent Advisory Committee for the local Area Agency on Aging.
- Multnomah County Aging and Disability Services is the Area Agency on Aging (AAA) and will facilitate project linkage with the project partners and local aging network.
- Oregon Research Institute will be responsible for data gathering and analysis, as well as the design of the project evaluation.
- Providence Center on Aging, part of the Providence Health System, will serve as the health care provider. They will be responsible for health-related training for staff and volunteers, as well as development and enhancement of the educational curriculum.

Program: Evidence-Based Disease Prevention: Physical Activity

Organization: City of LA Department of Aging (DOA)

Project Title: Increasing Physical Activity for Sedentary Older Adults in Los Angeles

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: Laura Trejo
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Evidence Base

The proposed intervention uses the OASIS HealthStages program, a community-based health education program designed for older adults and The Cooper Institute's *Active Living Every Day* course. The intervention emphasizes healthy aging by helping participants set personal goals and develop self-management skills.

Original Research Evidence

HealthStages is based on James Prochaska's Transtheoretical Model or "Stages of Change" Model. This model states that individuals are at different levels of readiness to change behavior, and thus, strategies for change must be structured accordingly. The stages of change are: Pre-contemplation, Contemplation, Preparation, Action, and Maintenance.

HealthStages was initiated and piloted in three cities where OASIS centers are located and is currently being offered in all 26 OASIS cities. The program Crosses the Stages of Chage with key health topics such as nutrition, exercise, memory, disease management, mental health, and general health promotion. *ExerStart!* is a moderately paced exercise program, designed to accommodate older adults who are out of shape or who have not been exercising due to injury or illness and is part of the HelathStages program.

The *Active Living Every Day* course, developed by The Cooper Institute, is based on the research study, Project ACTIVE, which was conducted at The Cooper Institute in Dallas, Texas. This groundbreaking research showed that teaching people lifestyle skills such as setting realistic goals, identifying and addressing barriers to physical activity, and developing social support systems helps people become and stay physically active.

Adaptation of Model

The intervention model will consist of two classes, *Active Living Every Day*, a 20-week behavior modification course and *ExerStart!.* Participants will take the two classes in conjunction with each other starting with *Active Living Every Day,* and then adding *ExerStart!* after the second class of *Active Living Every Day.*

Project's Overall Design

The goal of this project is to increase physical activity among sedentary older adults over three years. The project will recruit older adults that are at risk and encourage them to incorporate physical activity into their lives. Participants will be screened prior to taking part in the class in order to determine their current activity and fitness levels.

The model will consist of weekly one-hour behavior change instruction provided by the *Active Living Every Day* curriculum and a total of 90 minutes of light to moderate physical activity through the *ExerStart!* class. The total intervention will result in a maximum of 20 hours of behavior modification instruction and 1,080 hours of physical activity.

Participants in recruitment classes will be personally invited by the local coordinator, class instructor or key individual at the class site to register for the intervention. Participants are not required to take recruitment classes to participate in the intervention; however, experience has shown this method to be most successful.

The local coordinator and project partners will also work with other community agencies to develop a community-wide awareness campaign to reach other segments of the population of sedentary older adults.

Target Population

The target population is sedentary older adults in the Los Angeles area who are serviced by the OASIS center and two nutrition centers. The OASIS centers currently serve 22,400 seniors; a population that is 47% African American, 48% Caucasian, 1% Hispanic, 3% Asian, and 1% other. Approximately 69% are widowed, single, or divorced. Nearly 45% have annual household incomes under $30,000. Of the two nutrition centers, one serves a population that is 33% African American, 27% Hispanic, 21% Caucasian, and 19% other. The second center services a population made up of 91% Caucasian (primarily Russian speaking), 4% African American, and 5% other.

Anticipated Outcomes

- Increased fitness levels in older adults participating in exercise classes.
- Increased number of minutes per week older adults are engaged in physical activity.
- Increased number of older adults who indicate an intention to make changes related to their health or physical conditions in order to help reduce the risk of falling.
- Increased number of older adults suffering from chronic conditions who have indicated an intention to increase physical activity in order to help control and/or manage their condition.
- Improved attitudes towards physical activity.

- Increased awareness of community services to support physical activity.
- Increased confidence (or self-efficacy) levels of older adults to increase physical activity.

Evaluation Design

The Impact Evaluation will be based upon the data collected in the pre and post surveys. Pre and post-intervention fitness level testing will be conducted, as well. Stages of change measures will be collected through self-reporting mechanisms included in the curriculum.

The Process Evaluation is in the development stages.

Partnerships

- The City of LA Department of Aging (DOA) is the Area Agency on Aging (AAA) and grantee for this project. They will be responsible for overseeing the project activities and ensure effective implementation for all partners.
- Delta Sigma Theta Center for Life Development is a Community Aging Service Providers (CASP) and nutrition center. They will serve as one site for implementation of the HealthStages program.
- Jewish Family Services nutrition centers of Los Angeles is also a CASP, and will assist with marketing, recruiting, and implementing the HealthStages curriculum at their site.
- Tenet California, as the health provider organization, will ensure the quality and appropriateness of the health components of the program and assist in coordinating service provisions between its hospitals and project partners.
- Saint Louis University is the research organization. Saint Louis University is a CDC funded Prevention Research Center (PRC) and will assist with applying evidence-based disease prevention research into the program design and implementation. They will be responsible for the project evaluation.
- The OASIS Institute, an organization with a history of developing and disseminating curriculum-based programs for older adults, will be responsible for project implementation.

Program: Evidence-Based Disease Prevention: Nutrition

Organization: Little Havana Activities & Nutrition Centers of Dade County, Inc., ("LHANC")

Project Title: Preventive Nutrition Cardiovascular Disease Program

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: Rosa M. Carranza, M.S., R.D., L.D./N
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Evidence Base

The American Heart Association Eating Plan for Healthy Americans is based on these new dietary guidelines, released in October 2000:

- Eat a variety of fruits and vegetables. Choose 5 or more servings per day.
- Eat a variety of grain products, including whole grains. Choose 6 or more servings per day.
- Include fat-free and low-fat milk products, fish, legumes (beans), skinless poultry and lean meats.
- Choose fats and oils with 2 grams or less saturated fat per tablespoon, such as liquid and tub margarines, canola oil and olive oil.
- Balance the number of calories you eat with the number you use each day. (To find that number, multiply the number of pounds you weigh now by 15 calories. This represents the average number of calories used in one day if you're moderately active. If you get very little exercise, multiply your weight by 13 instead of 15. Less-active people burn fewer calories.)
- Maintain a level of physical activity that keeps you fit and matches the number of calories you eat. Walk or do other activities for at least 30 minutes on most days. To lose weight, do enough activity to use up more calories than you eat every day.
- Limit your intake of foods high in calories or low in nutrition, including foods like soft drinks and candy that have a lot of sugars.
- Limit foods high in saturated fat, trans fat and/or cholesterol, such as full-fat milk products, fatty meats, tropical oils, partially hydrogenated vegetable oils and egg yolks. Instead choose foods low in saturated fat, trans fat and cholesterol from the first four points above.
- Eat less than 6 grams of salt (sodium chloride) per day (2,400 milligrams of sodium).

- Have no more than one alcoholic drink per day if you're a woman and no more than two if you're a man. "One drink" means it has it has no more than 1/2 ounce of pure alcohol. Examples of one drink are 12 oz. of beer, 4 oz. of wine, 1-1/2 oz. of 80-proof spirits or 1 oz. of 100-proof spirits.

Original Research Evidence

- American Heart Association Eating Plan for Healthy Americans (evidence-based dietary guidelines)
- Report of the Expert Panel on Awareness and Behavior Change to the Board of Directors, American Heart Association, 1996
- Nicklas, BJ, Katzel, LI, Bunyard, Dennis, KE, and Goldberg AP. Effects of an American Heart Association diet and weight loss on lipoprotein lipids in obese, postmenopausal women. American Journal of Clinical Nutrition, 66: 853-859, 1997.
- American Heart Association Scientific Position on Cholesterol Screening for Adults and Children, 1996.
- Müller H, Lindman AS, Brantsaeter AL, and Pedersen JI. The serum LDL/HDL cholesterol ration is influenced more favorable by exchanging saturated with unsaturated fat in the diet. Journal of Nutrition, 133: 78-83, 2003.
- Corti MC, Guralnik JM, Salive ME, Ferruci L, Glynn RJ, and Havlik RJ. Clarifying the direct relation between total cholesterol levels and death from coronary heart disease in older persons. Annals of Internal Medicine, 126: 753-760, 1997.
- Fox EA, Boylan LM, Shields CE and Wallerich CS. Influence of dietary factors on plasma cholesterol values in free living elderly. Journal of the American Dietetic Association, 90 (suppl): A-97, 1990

Adaptation of Model

Model: Dietitian led education/counseling model with group sessions and interactive activities, goal setting and monitoring which will be disseminated through LHANC's fourteen (14) senior centers to its Hispanic participants.

Project's Overall Design

The goals of this project are a) to increase knowledge of nutrition among Hispanic elders who are at risk for cardiovascular disease and obesity; b) to foster behavior change through group sessions and interactive activities; and c) to test whether the American Heart Association guidelines and materials can be utilized in a dietitian led model targeted to Hispanic elders. Nutrition education sessions will be offered to seniors attending Little Havana's senior centers. Participants will be screened for cholesterol and weight, and 100-125 seniors at risk for cardiovascular disease will be included in an intensive nutrition education and counseling program.

Target Population

The target population is Hispanic elders, a group at high risk for cardiovascular disease and obesity. Specifically, this program will target the Hispanic elderly participants of LHANC's fourteen (14) senior centers – approximately 1,800 elderly.

Anticipated Outcomes

- Reduce dietary fat consumption, saturated fat and cholesterol, using the American Heart Association Eating Plan for Healthy Americans.
- Reduce body weight by 5% and/or BMI to 27 or less.
- Lower total cholesterol by 6%.

Evaluation Design

To be developed

Partnerships

- Miami-Dade County Public Health Department will serve as an advisor in the development/selection of the curriculum for the nutrition workshops and nutrition education intensive sessions with sub-group. They will assure that the appropriate information on cardiovascular disease is included in the lesson plans. the health department will also provide staff to develop and implement the evaluation.
- The National Alliance for Hispanic Health will provide research-based data to the project, including data on current disparities in healthcare among Hispanics; help in the development of the evaluation; and help with the interpretation of final outcomes.
- The Alliance for Aging, the Area Agency on Aging (AAA) for Miami-Dade and Monroe Counties, will help in the promotion of this program beyond Little Havan's Activities and Nutrition Centers (LHANC) senior centers. The Alliance will serve as a link to other elderly service providers in the community when the program is expanded beyond Little Havana.
- The American Heart Association will provide technical assistance related to the implementation of the dietary guidelines, provide guidance related to selection of the curriculum, and provide materials in Spanish for the program.

Program: Evidence-Based Disease Prevention: Falls Prevention

Organization: North Central Area Agency on Aging, Hartford, CT

Project Title: Evidence-Based Fall Prevention in Senior Centers

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: Robyn Harper-Gulley
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Evidence Base

North Central Connecticut AAA bases its intervention on the *Yale Frailty and Injuries: Cooperative Studies of Intervention Trials (FICSIT)* and other random controlled trials. Because evidence suggests that modifying known risk factors can reduce the risk of falling, this project follows the design of the original research by using a fall risk assessment followed by specific interventions to change behavior and ultimately reduce the number of falls an individual experiences.

NCAAA will adapt protocols from the Connecticut Collaboration for Fall Prevention (CCFP) for use in senior centers. The Connecticut Collaboration for Fall Prevention is a collaboration of hospitals, outpatient rehabilitation facilities, home care agencies and primary care providers serving greater Hartford. The goal of CCFP is to imbed fall risk assessment and management into the health care of seniors by enhancing the knowledge, skills, and fall-related practices of relevant clinicians. CCFP is funded by the Donaghue Foundation and is directed by investigators at Yale University.

Original Research Evidence

The original FICSIT research done by Tinetti *et al* in 1994 studied 301 men and women at least 70 years of age who had at least one of the following risk factors for falling:

- Postural hypotension;
- Sedative use;
- Use of four prescription medications or more;
- Impaired strength or range of motion in the arms or legs;
- Impaired gait, balance or ability to move safely from the bed to a chair, the bathtub or the toilet.

The study's objective was to modify these risks through interventions that included adjusting medication, changing behavior and exercise. All participants received a home

visit from a nurse practitioner who performed a baseline falls assessment, and a physical therapist who assessed risk factors related to muscle strength, joint impairment, as well as transfer and balance skills within the home setting.

Subjects in the intervention group received additional home visits from a physical therapist, who gave instructions on the exercise program and taught balance and transfer skills.

Control group subjects received home visits from social work students and were referred to the usual health care providers based on their initial assessments.

Results showed the intervention group subjects fell 35% of the time, while control group subjects fell 47% of the time. Additionally, "a smaller percentage of those in the intervention group than those in the control group still had the [identified] risk factor at the time of reassessment."

Adaptation of Model

Whereas the original research was primarily conducted in home settings, this project focuses on the community setting. It will adapt the original model by implementing the risk factor screening, assessment and intervention in the participating senior centers. With the help of professionals from the CCFP, the program will be adaptable for implementation directly by senior center staff and volunteers, consultants, community organizations, or health care providers who are part of the CCFP network. Project coordinators also plan to make the intervention adaptable in other community settings such as senior housing and adult day centers.

Project's Overall Design

The goal is to embed a sustainable evidence-based fall prevention program within greater Hartford senior centers by enhancing fall prevention-related knowledge and behavior, while also building or enhancing relationships between senior centers and relevant community and health care organizations.

Objectives are to develop, implement, evaluate, and disseminate a fall prevention program that is based on research targeting the following risk factors:

- Balance, gait, and vision impairments
- Postural hypotension
- Multiple medication use
- Home hazards

The proposed intervention will include an initial falls assessment in which participants will report the number of falls in the past year. Those with fewer than 2 falls can participate in a balance maintenance program at the center. Those with 2 or more falls will have a risk factor assessment and possibly participate in management strategies related to their identified risk factor at the senior centers. Some examples of these strategies include:

- Gait and/or balance training (maintenance or progressive)
- Medication grid, regular review, or reduction

- Appropriate footwear
- Environmental intervention/home safety evaluation
- Adequate fluid intake

Target Population

The target population is older persons living in the area serviced by the North Central Connecticut AAA. Senior centers were chosen to capture a socio-economically, ethnically, and functionally diverse population. During the first year, 3 senior centers will be targeted with culturally tailored fall prevention programs (660 seniors served). During the second and third years, 8 additional centers will be included (4,000 seniors exposed). An additional 5,500 will be reached through an additional 30 senior centers. At-risk seniors who do not usually participate in senior services will also be targeted.

Anticipated Outcomes

- Reduced falls in senior center clients
- Increased fall prevention knowledge and behaviors in center staff and clients
- A sustainable evidence-based fall prevention strategy embedded in three senior centers in the first year, and in eight more centers during years 2 and 3
- Development and/or enhancement of relationships between senior centers and relevant community and health care organizations

Evaluation Design

The Impact Evaluation will help determine the intervention's effect on participating seniors and center personnel. It will include developing interview-based questionnaires for use with participants and staff, continuous recruiting and interviewing of staff and seniors, as well as matching and randomizing participating centers beginning in year 2 or 3. Additionally, databases will be developed on all collected data to allow for statistical analyses.

Primary outcomes for seniors will be measured as self-reported falls. Primary outcomes for professional staff and volunteers will be measured as change in fall prevention-related knowledge and behaviors in staff. Secondary outcomes for seniors will be measured as change in fall prevention-related knowledge and behaviors, change in confidence in performing activities without falling, and self-reported fall injuries.

The Process Evaluation will allow ongoing monitoring of program activity and determine where increased efforts might be needed. The evaluation will include summarizing the number of center personnel and seniors participating in the fall prevention program. It also will generate tables and graphs to illustrate both trends in fall prevention program participation and gender, ethnic and racial information to illustrate the diversity of participating seniors. Summary tables also will be developed each year documenting the specific number of fall prevention activities and educational materials at each center.

Partnerships

- North Central Connecticut Area Agency on Aging (AAA) will provide an Ex Officio member of the project's core group who will bring expertise regarding the regional network of senior services and will ensure collaborations are made with existing community-based senior service programs and services.

- Professionals from the Connecticut Collaboration for Fall Prevention (CCFP) will provide training and oversight to senior center staff, volunteers and consultants by professionals from CCFP (Drs. Baker and Tinetti and Ms. Gottschalk)
- Connecticut Hospital Association/Connecticut Association for Home Care will help tie together health care-based efforts with community-based efforts. This work will build on and be integrated into the Connecticut Collaboration for Fall Prevention (CCFP) described below.
- Hartford Area Senior Centers are the Community Aging Service Providers (CASP) and consist of 41 centers serving a combined membership of 62,506 seniors. The Centers will provide the setting and the participants for the program. They will help identify existing programs and relationships, as well as methods to incorporate evidence-based fall prevention assessments and interventions.
- The Center on Aging at the University of Connecticut Health Center will act as the research organization for the project and will be responsible for collecting and analyzing data, as well as evaluating the program.

Program: Evidence-Based Disease Prevention: Physical Activity

Organization: Neighborhood Centers, Inc. (NCI)

Project Title: NCI Activity Centers for Seniors (NCI-ACES)

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: Chris Pollet
P.O. Box 271389
Houston, Texas 77277-1389
Telephone: (713) 669-5260

Evidence Base

The proposed intervention will be based on a population-based health promotion model. Senior Center members who regularly (3-days/week, 1-hour/day) participate in structured physical activity – aerobics, stretching, balance and strength training – led by qualified personnel, will gain significant fitness and health benefits.

Original Research Evidence

Wallace J.I., Buchner D.M., Grothaus L., Leveille S., LaCroix A.Z., Wagner E.H. *Implementation and Effectiveness of a Community-Based Health Promotion Program for Older Adults.* Journal of Gerontology, 1998, Vol. 33A, No. 4, M301-06.

Adaptation of Model

This will be a replication of the Lifetime Fitness Program (Seattle) in a different environment with a more ethnically diverse and lower-income population.

Project's Overall Design

The goal of this project is to increase the physical activity levels in older adults through a managed physical activity program at 20 senior centers in Houston, Texas. The senior centers are located in impoverished, urban settings. Outreach and engagement activities will be implemented, as well as health screenings and assessments.

Target Population

The project will target people age 50 and older who are serviced by the NCI Senior Centers. This population is low-income, predominantly African-American, Hispanic, and Asian elderly persons who are at significant risk of chronic diseases.

Anticipated Outcomes

- By the end of Year 1, participants age 50 and older will be participating actively in an evidence-based, well-managed physical fitness program at the NCI Senior Centers.
- Those participating in the physical activity program on a consistent basis will experience significant improvements in fitness at 4-month intervals and health status at annual intervals.

Evaluation Design

Participants will receive baseline fitness tests (chair stand, arm curl, 8-foot up-and-go) and health screenings (BMI, glucose and cholesterol tests, blood pressure and a physical exam), followed every 4 months by repeat fitness tests and annual health screenings. Participants will review and help maintain weekly activity records. Participant attendance will be recorded, and their satisfaction will be monitored.

Partnerships

- NCI is the Community Aging Service Provider (CASP)
- Harris County Area Agency on Aging (AAA)
- Christus St. Joseph Hospital Community Outreach is the healthcare provider organization
- University of Houston Graduate School of Social Work
- Texas Southern University Center on Aging and Intergenerational Wellness
- Care for Elders of Harris County, a local partnership supported in part by the
- Robert Wood Johnson Foundation's Community Partnerships for Older Adults
- Program

Program: Evidence-Based Disease Prevention: Medication Management

Organization: Partners in Care Foundation, Burbank, CA

Project Title: A Community Based Medication Management Intervention

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: W. June Simmons
101 S. First Street, Suite 1000
Los Angeles, CA 91502
Telephone: (818) 526-1780, extension 101

Evidence Base

The Vanderbilt University Medication Management Model has been shown to prevent medication-related adverse events such as falls, and provides both healthy and frail community-dwelling clients with medication review services. The program was designed to improve the use of medications among elderly home patients with chronic conditions by identifying and eliminating medication errors.

Original Research Evidence

The intervention is adapted from a medication management study published in 2002 by Vanderbilt University researchers S. Meredith, P.H. Feldman, D. Frey, L. Giammarco, K. Hall, K. Arnold, N.J. Brown and W.A. Ray.

The objective of the study was to test the efficacy of a medication management program in home health agencies. Four main medication problems were addressed: unnecessary therapeutic duplication, cardiovascular medication problem, use of psychotropic drugs in patients with possible adverse psychomotor or adrenergic effects, and use of nonsteroidal anti-inflammatory drugs (NSAIDs) in patients at high risk of peptic ulcer complications.

Participants included Medicare beneficiaries, age 65 and older, who were clients of the home health agencies between October 1996 and September 1998. They each had at least one of the identified medication problems, and were projected to be with the home health agency for at least 4 weeks. The study included an intervention group of 130 participants who received the medication improvement program, and a control group of 129 people who received usual care.

Results of the study showed medication improvement of 50% in the intervention group and 38% in the control group. This effect was strongest for therapeutic duplication, which showed 71% improvement for the intervention group and 24% for the control group.

Adaptation of Model

Whereas the original research focused the program in home health agencies, Partners in Care will adapt this program to the community setting by implementing the intervention in two types of sites: LA City Senior Centers and a Medicaid Waiver program site.

Project's Overall Design

Partners in Care will conduct a medication management project for seniors receiving a continuum of community-based social service programs in Los Angeles. The goal of the intervention is to identify, prevent, and resolve medication errors among seniors identified as "high risk."

The objectives are:

- To implement the intervention in at least 3 senior centers and at least 2 Medicaid Waiver programs;
- To evaluate the outcomes of the intervention, which includes assessment recommendations and follow-up by a pharmacist;
- To disseminate findings through a medication management website.

The intervention is a structured medication review for high-risk participants, conducted by a consultant pharmacist or pharmacy intern. Core components include screening, assessment, consultation, and follow-up. The program uses guidelines established by an expert panel for resolving three high-risk medication problems: unnecessary therapeutic duplication, cardiovascular medication problems, and use of psychotropic drugs in patients with a reported recent fall or confusion.

Target Population

During the first year, 3 diverse senior centers will be targeted with culturally tailored medication management programs (600 seniors served). In addition, two Medicaid Waiver sites for low-income frail elderly called Multi-Purpose Senior Services Programs (MSSP) in California will be targeted. All of these sites primarily serve low-income, minority elders.

Anticipated Outcomes

Results of screening medication errors will show:

- Number of errors detected
- The types of recommendations by the pharmacists
- Outcomes of the recommendations

The project will also produce a tested community-based model for medication management that is effective and is reasonable in cost to implement in the Aging Services Network.

Evaluation Design

The Impact Evaluation will look at the following participant outcomes: number of clients screened, number and type of medication errors identified, type of recommendations made by the pharmacist, and the outcomes of those recommendations. Self-reported health status will also be evaluated at baseline and at a six-week follow up appointment.

The Process Evaluation will monitor outcomes to ensure that the intervention was implemented in accordance with the stated plan. Any problems or difficulties in adapting the intervention will be identified as "lessons learned". An advisory group will meet quarterly to monitor the success of the implementation.

Partnerships

- Partners in Care Foundation will be responsible for the day-to-day management of the project including coordinating outreach, scheduling, planning and delivery of services, data tracking, training oversight of students, and financial management.
- LA City Area Agency on Aging (AAA) will work with Partners in Care to expand medications screening and management in at least three senior centers and will help identify seniors who may be in need of this program.
- LA County AAA will assist in project planning and diffusion strategies.
- Healthcare partners include two geriatricians who will provide medical review of guidelines and procedures, in addition to providing linkage to healthcare providers when needed.
- Kate Wilber, PhD, Associate Professor of Gerontology at the University of Southern California(USC), will serve as the evaluator for this program.
- The University of Southern California School of Pharmacy will provide consultation and Pharm.D interns for the program.
- Senior Centers of the City of Los Angeles will serve as one type of site for the intervention.
- The Multi-Purpose Senior Services Program in California, a Medicaid-Waiver program for low income frail elderly, will also serve as a type of site for the intervention.

Program: Evidence-Based Disease Prevention: Disease Self-Management

Organization: Philadelphia Corporation for the Aging (PCA)

Project Title: Chronic Disease Self-Management for African American Urban Elders

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: Bethea Eichwald
642 North Broad Street
Philadelphia, PA 19130
Telephone: (215) 765-9000 ext. 5556

Evidence Base

The intervention will use the Chronic Disease Self-Management Program (CDSMP), a model developed by K. Lorig *et.al* at Stanford University. This program is a 6-week workshop designed for people with various chronic diseases. Course leaders are non-health professionals who have chronic disease and are trained by CDSMP representatives. Course topics include coping strategies, such as action planning and feedback, behavior modeling, problem-solving techniques, and decision-making. Participants are taught how to cope with frustration, fatigue, and pain. They also learn how to exercise appropriately, use medications appropriately, and communicate effectively with family, friends, and health professionals.

Original Research Evidence

The original research, led by Kate Lorig at Stanford, was published in 1996. The study evaluated the effectiveness of a chronic disease self-management program on changes in health behavior, health status, and health service utilization.

A group of 952 participants age 40 or older, all with chronic disease (heart disease, lung disease, stroke or arthritis), were randomly selected for a treatment group or a control group.

Health behaviors, health status and health service utilization were measured by questionnaire.

After 6 months, results showed that those in the treatment group had improvements in weekly minutes of exercise, frequency of cognitive symptom management, communications with physicians, self-reported health, health distress, fatigue, disability,

and social/role activities limitations. Hospitalizations and days in the hospital were also less for the treatment group.

Adaptation of Model

Whereas the original study focused on white, middle income, older adults through a healthcare organization, the Philadelphia Corporation for Aging will be testing the utility of the program on a low income, primarily African American older population, who are served through the aging network.

Other modifications to the original program include: the use of a community outreach worker, an initial health profile, linking participants to other health promotion activities at the senior center and a discounted fitness membership at the senior center upon completion of the program.

Project's Overall Design

PCA and its partners will demonstrate how an evidence-based disease prevention program can be translated into community programs in the Aging Services Network. They propose to demonstrate a team approach among 4 organizations that can be replicated within the Network. The overall goal is to enable participants to assume a major role maintaining their health and managing their chronic health conditions.

The objectives are:

- To increase lifestyle skills that assist in managing chronic conditions
- To increase knowledge of personal risk factors associated with chronic disease
- To increase personal responsibility in the management of chronic disease

PCA will implement the 6-8 weeks CDSMP courses in a senior center with experience in health promotion activities. Outreach will be conducted using a lay community outreach worker who will spread the word about the program. Various means will be used to recruit participants including newsletters and weekly senior radio programs. Referrals will be generated from both outreach activities and the health care partner.

Target Population

The target population is elderly African American persons with at least one chronic disease. The geographic focus will be the area surrounding the CASP. Of the older persons who reside in this area, more than 85% have at least one chronic condition. Common conditions reported include 62.3% with high blood pressure, 55.6% with arthritis, 29.3% with diabetes, and 19.3% with a heart condition.

Anticipated Outcomes

- Improved self efficacy
- Improved health behaviors
- Improved self-reported health status and symptom management
- Reduced visits to physician, reduced use of ER, and fewer hospitalizations

Evaluation Design

The Process Evaluation will provide Philadelphia Corporation on Aging with a basis from which to monitor and improve the program's efficiency and effectiveness over the span of the project through continuous feedback. Measures for this evaluation will include program attendance, session evaluation questionnaires, and direct observations and interviews of partner staff to provide feedback on the team process.

The Impact Evaluation will use similar outcome measures as used in the original study by Lorig *et al*. Four main areas will be assessed: health status, health behaviors, self-efficacy, and health care utilization. Outcome measures for each respective are include:

- Health Status - chronic conditions, self-rated health, energy/fatigue, symptoms, coping with symptoms, and the illness intrusion scale
- Health Behaviors - physical activity and communication with doctor
- Self-Efficacy – confidence in managing chronic disease symptoms
- Health Care Utilization - physician visits, hospitalizations, ER visits, and skilled nursing facility/intermediate care

Partnerships

- PCA is the Area Agency on Aging (AAA) and grantee for this project. PCA will have the overall administrative responsibility for the project, including monitoring the project progress and making reports to the AoA.
- The Community Aging Service Provider (CASP) is the Center in the Park, a multi-service senior center with more than 5,000 members. As the primary site for this CDSMP intervention, they will lead educational workshops, administer evaluations, and oversee the data collection and transfer to the research organization.
- The research organization is the Community and Homecare Research Division in the Jefferson College of Health Professions, Thomas Jefferson University. Their responsibilities include completing the evaluation of the intervention and the team functioning.
- Albert Einstein Health Care Network is the healthcare provider for this program. They will assure the quality and appropriateness of the health components of the program by making sure information adheres to national standards for chronic diseases. Additional tasks include providing support for health screening events, as well as support from appropriate hospital departments that deal with the identified chronic diseases.

Program: Evidence-Based Disease Prevention: Disease Self-Management

Organization: Sheltering Arms Senior Services of Houston, Texas

Project Title: Healthy IDEAS: Evidence-Based Disease Self-Management for Depression

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: Jane Bavineau,
3838 Aberdeen Way
Houston, TX 77025
Telephone: (713) 685-6506

Evidence Base

The Healthy IDEAS program is a community-based depression model program. Using routine interactions with clients at community aging service provider (CASP) organizations, basic depression screenings are used to identify people at risk. The screening consists of two research-based depression screening questions, and uses the Geriatric Depression Scale (GDS) as a follow-up to these questions.

Original Research Evidence

Healthy IDEAS (Identifying Depression, Empowering Activities for Seniors) was first introduced into the Houston Area in 2002 by a regional team of aging network, mental health, and health services professionals. It is a model program that has been administered nationally through the National Council on the Aging and funded by the John A. Hartford Foundation.

Adaptation of Model

Sheltering Arms will expand the Healthy IDEAS program by adding or enhancing three new components: Health and wellness promotion, medication management, and depression prevention, detection, and treatment.

The health and wellness promotion will emphasize the benefit of exercise, stress management, and nutrition on depressive symptoms.

The medication management portion will highlight the polypharmacy and medication misuse that is so common in the senior population. The CASPs will work with prescribing physicians, provide education to clients and family members, and monitor medication side effects.

Sheltering Arms will also offer additional education and training to CASP staff to improve the recognition of depression.

Project's Overall Design

Sheltering Arms Senior Services proposes to build upon the Healthy IDEAS project. The goals of this project are:

- To prevent or detect depression through effective, evidence-based screening and health promotion education;
- To promote more effective treatment through appropriate mental health referrals;
- To decrease symptomatology and improve functioning in depressed elders who participate in the depression self-management program;
- To improve linkages between community aging service providers and healthcare practitioners;
- To prevent recurrence of the disease through regular depression screening.

Clients of the CASPs are given a basic depression screening during routine interactions with staff. Depending on their score on the Geriatric Depression Scale (GDS), clients are then given preventive educational information, the opportunity to participate in behavioral activation therapy (a depression self-management program provided by the CASP), and/or channeled to professional health or mental health care.

CASP staff are given information and education by academic partners who are knowledgeable about mental health and who serve as coaches for the organizations.

Target Population

This project will target a diverse older population residing in Houston, Harris County, Texas. Special efforts have been made to target Asian, Hispanic, and older women of all racial backgrounds living on low income.

Anticipated Outcomes

- More effective partnerships will be developed between community aging service providers, healthcare organizations, academic researchers and consumers.
- The evidence-based depression self-management intervention will be refined to increase recognition, promote effective treatment, and prevent excessive functional disability due to depression.
- Culturally and socio-economically diverse populations of older adults at risk for unrecognized or under-treated depression will be identified and will receive tailored intervention.

Evaluation Design

The Process Evaluation will use semi-structured interviews to obtain input about the feasibility, utility, and outcomes of the intervention. Measures used in the evaluation include: the size of the population for whom the intervention is made available, the number of potential participants screened, the number of people eligible in both mild-moderate and severe categories, the number of participants in each severity category who participate in the intervention, and reasons for participant refusal.

The Impact Evaluation will include a Client Satisfaction Questionnaire to be completed by clients and their family members, a modified version of the questionnaire to be

completed by providers, in addition to focus groups conducted with clients and agency providers. A self-reported health status will also be completed using the GDS and the SF-36 to assess depressive symptoms and functional status.

Partnerships

- Care for Elders-Sheltering Arms is the local Community Aging Service Provider (CASP) and grantee for this project. They will provide a project coordinator and nurse consultant to help coordinate training, intervention, and evaluation activities.
- Baylor College of Medicine along with the Houston Center for Quality Care and Utilization Studies are the academic research partners who will conduct data analyses and the evaluation of the program.
- The Harris County Area Agency on Aging (AAA) will be responsible for identifying and selecting CASPs to implement the program. They will also be promoting the Healthy IDEAS model to other agencies in the area.
- A National Advisory board consisting of three researchers in the field of depression will review the progress of the intervention and provide guidance on the evidence base.
- The Consumer Advisory Council of *Care for Elders* will provide feedback on the cultural relevance of the approach and the materials used in the intervention.

Program: Evidence-Based Disease Prevention: Falls Prevention

Organization: Southern Maine Area Agency on Aging

Project Title: A Matter of Balance

Project Period: October 1, 2003 to September 30, 2006

Project Contact: Peggy Haynes
465 Congress Street, Suite 301
Portland, ME 04101
Telephone: (207) 775-1095

Evidence Base

Southern Maine will be using the Matter of Balance (MOB) program for their intervention, a program that aims to reduce the risk of falling, stop the fear of falling cycle, and improve activity levels among community dwelling older adults. "It is a comprehensive approach to maximizing activity engagement and function and reducing fall risks." The program is designed for small groups of older adults living independently in community settings or senior housing. Coping strategies are taught that focus on the fear of falling and ways to reduce the risk of falling, including changing attitudes and self-efficacy, as well as exercising to improve balance and strength.

Original Research Evidence

The Matter of Balance program was developed by the Roybal Center for Research in Applied Gerontology at Boston University and the New England Research Institutes with funding from the National Institute on Aging.

Adaptation of Model

For the purposes of this intervention, the model has been adapted to use lay leaders rather than health care professionals as facilitators.

Project's Overall Design

The Matter of Balance/Volunteer Lay Leader (MOB/VLL) program is designed to reduce the fear of falling, stop the fear of falling cycle, and improve the activity levels among community-dwelling older adults. The goal of the program is to use volunteer lay leaders as facilitators, in order to make the program affordable to offer in the community setting.

A variety of classes and activities are held, which address the physical, social and cognitive factors associated with falling, and also incorporate an introduction to exercise. Strategies include:

- Promoting the view of falls and fear of falling as controllable
- Setting realistic goals for increasing activity
- Changing the environment to reduce fall risk factors
- Promoting exercise to increase strength and balance

Target Population

The target population is low-income seniors in the geographic areas of York and Cumberland Counties (particularly the City of Portland) during year one, expanding statewide during years two and three. Franco Americans and Native Americans tribes will also be targeted as part of this program.

Anticipated Outcomes

- Strategic plan to implement MOB/VLL with trained lay leaders
- Design and implement a process evaluation of the dissemination of MOB/VLL
- Implement the MOB/VLL program in the greater Portland area in the first 18 months, and expand the program statewide by the third year.
- Plan for evaluating effectiveness of the training program for lay leaders
- Design and conduct a participant satisfaction survey
- Measure the effectiveness of lay led MOB/VLL classes
- Prepare and submit presentations for national conferences

Evaluation Design

The Process Evaluation will track all design and implementation activities in order to assess problems encountered and successful completion of activities. Data will be collected concerning the procedures, problem identification, and problem solving. An analysis of this data will be presented to the Advisory Committee at regular meetings.

The Impact evaluation will compare outcomes for participants of the MOB/VLL to outcomes for participants of MOB that used professional leaders. Measures that were used to evaluate the original MOB evidence based program will be used for the VLL program, as well. These measures include the Howland-Pearson Scale, the Sickness Impact Scale, and Pearlin & Schoolers Mastery Scale. To evaluate specific improvements for MOB/VLL participants, baseline data will be compared with outcomes at 6 months and 1 year.

Partnerships

- Southern Maine is the Area Agency on Aging (AAA) and grantee for this project. They will develop and lead a Project Advisory Committee (PAC) to oversee the translation of MOB/VLL to a lay leader model.
- Partnership for Healthy Aging is the Community Aging Service Provider (CASP) and will be responsible for the project management and implementation.
- The Geriatric Center at the Maine Medical Center, a nonprofit community hospital, will serve as the health care provider. They will assure the quality and appropriateness of the health components of the program, as well as promote the coordination of the program with social service community.

- The University of Southern Maine School of Social Work will serve as the academic partner and will design and conduct the evaluation of the intervention.
- Other partners include: City of Portland Department of Health and Human Services, Maine State Housing Authority, and the Maine Department of Human Services, Bureau of Elder and Adult Services. These agencies will serve on the PAC.

Program: Evidence-Based Disease Prevention: Disease Self-Management

Organization: Area Agency on Aging of Western Michigan, Grand Rapids, MI

Project Title: Improving Self Management of Chronic Disease in the Elderly: A Partnership Between Managed Health Care Providers and the Aging Network.

Project Period: September 30, 2003 TO September 29, 2006

Project Contact: Nora Barkey
1279 Cedar NE
Grand Rapids, MI 49503
Telephone: (616) 456-5692

Evidence Base

This intervention will be based on the Chronic Disease Self-Management Program (CDSMP) developed by K. Lorig *et al* (1999) at Stanford University. The CDSMP is a self-management program designed to address a broad spectrum of chronic diseases. The program seeks to promote increases in participants' positive health behaviors, health status, and self-efficacy with regard to disease management and to reduce inappropriate health care utilization. Participants complete a 6-8 week workshop, taught by a trained lay leader, covering topics such as managing disease symptoms, medication management, and communications with health care providers. Workshops offer highly interactive strategies such as skills mastery, modeling, and group problem solving.

Original Research Evidence

The original research, led by Kate Lorig at Stanford, was published in 1996. The study evaluated the effectiveness of a chronic disease self-management program on changes in health behavior, health status, and health service utilization.

A group of 952 participants age 40 or older, all with chronic disease (heart disease, lung disease, stroke or arthritis), were randomly assigned to a treatment group or a control group.

Health behaviors, health status and health service utilization were measured by questionnaire.

After 6 months, results showed that those in the treatment group had improvements in weekly minutes of exercise, frequency of cognitive symptom management,

communications with physicians, self-reported health, health distress, fatigue, disability, and social/role activities limitations. Hospitalizations and days in the hospital were also less for the treatment group.

Adaptation of Model

Western Michigan Area Agency on Aging is pairing with a managed care company to recruit participants, as well as using enhanced outreach through trained lay leaders from the community.

Project's Overall Design

The Area Agency on Aging of Western Michigan will conduct a three-year program using the Chronic Disease Self-Management Program (CDSMP) and enhanced outreach. The project seeks to model how the aging network in partnership with a managed care plan can improve the health outcomes for older adults.

Participants will complete a health risk assessment and will be assigned an outreach worker to follow them through the program. The CDSMP workshop will be offered in familiar aging network settings.

Half of the participants in this project will be referred by a managed care organization, while the other half will be referred by a Community Aging Service Provider (CASP). Participants will receive enhanced outreach services from CASP workers who have been trained in the principles of CDSMP and motivational interviewing. All enrollees will be offered participation in the CDSMP.

The overall goal is to implement the Stanford CDSMP and maintain the fidelity of the program for 200 participants

Target Population

The project targets seniors living in Kent County, Michigan. Four hundred adults, age 60 and older, who have one of four chronic conditions, will be enrolled in the study. Each of the four partner CASPs target one or more under-served populations. This project will ultimately serve both African-American and Hispanic elders living in urban and rural settings.

Anticipated Outcomes

- An ongoing project assessment that will result in continuous quality improvement
- Knowledge and skills of aging network staff will be strengthened with regard to chronic disease self-management.
- Increased appropriate health behaviors, improved health status, decreases health care utilization, and increased sense of self-confidence on the part of participants receiving the CDSMP
- An assessment of the effectiveness and cost savings derived from using the CDSMP will indicate a reduced cost to patients and insurers for those receiving the CDSMP.

Evaluation Design

The Impact Evaluation will include a series of surveys to measure health-related outcomes. CDSMP pre-surveys will be completed on all enrollees at intake. Mid-Project surveys will be completed after attendees complete the CDSMP classes, and a final survey will be completed six months after completion of the classes. Evaluators hope to determine whether changes in health outcomes (health status, health care utilization) vary with changes in health behaviors and self-efficacy.

The Project Team will be responsible for the Process Evaluation. Representatives from each partner will maintain documentation of meetings and notes on their clients for the purposes of continuous quality improvement and recording lessons learned.

Partnerships

- Western Michigan Area Agency on Aging (AAA) will be in charge of the day-to-day management for this program. They will be responsible for coordinating the partners and the CDSMP workshops.
- Priority Health, a local managed care organization, will act as the health care providers, and help identify participants for the program. They will also be responsible for administering the Health Risk Assessment to participants.
- Four Community Aging Services Providers (CASPs) in the Kent County area will also help identify participants for the program. They will also participate in the CDSMP training, assist participants in various forms for this project (informed consent, HRA, outcomes assessments), and encourage participants to incorporate
- Grand Valley State University, Kirkhof School of Nursing, will provide research support and be responsible for the program evaluation.

Program: Evidence-Based Disease Prevention: Physical Activity

Organization: Partners in Care Foundation

Project Title: Healthy Moves for Aging Well

Project Period: 10/01/2003 TO 09/30/2006

Project Contact: June Simmons
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Los Angeles, CA 91502
818-526-1780 extension 101
jsimmons@picf.org

Model

In 2002 Partners assembled a pilot intervention to increase physical activity through in-home exercise to frail, low-income elderly in community care management programs. The rational for this approach is that relatively few evidence-based programs exist that focus specifically on improving health outcomes among frail elderly. The physical activity portion of this intervention is modeled after a research tested approach called **LifeSpan: A Physical Assessment Study Benefiting Older Adults**. The LifeSpan Assessment was born out of a need to assess the fitness levels of older adults. This program was developed by researchers of kinesiology and health promotion at California State University, Fullerton. Additionally, the Brief Negotiation Model of Change is implemented and taught during the training of the Care Managers who will ultimately deliver the physical activity training, and the volunteers who will follow-up and help reinforce participants.

Project's Overall Design

This intervention utilizes Care Managers (CMs) from community-based care management agencies to teach evidence-based exercises to home-bound, frail, low-income elderly clients. The clients will be assessed, taught a variety of safe exercises, and monitored by their CMs and volunteer peer coaches. These volunteers will be recruited and trained by the agencies to contact the senior participants and conduct telephone coaching and monitoring. CMs will monitor their clients' participation during their regularly scheduled appointments and reassess them at 6-month intervals.

Prior to implementation, the CMs will attend a training session led by a Behavior Change Educator and a Fitness Expert Consultant who will orient them to the project and teach them how to reinforce principles of behavior change for the physical activity intervention. CMs and volunteer peer coaches will learn how to use behavior change

techniques to engage clients in agreeing to improve healthy lifestyles. The target population will also attend an orientation session where they will take part in a functional fitness test developed by Roberta Rikli and Jessie Jones at the California State University, Fullerton and administered by the CMs. The Behavior Change Educator and Fitness Expert Consultant will conduct regularly scheduled telephone follow-up support sessions with the CM teams.

Both client and CM satisfaction with the program will be explored using survey instruments. The clients will also take part in a follow-up functional fitness test to determine their progress.

Partnerships

- Senior Care Network, Huntington Memorial Hospital
- AltaMed Health Services
- Jewish Family Services

Target Population

Frail, low-income (dually eligible) home-bound elderly who are current clients of the selected Care Management agencies.

Anticipated Outcomes

Studies have shown that physical activity is the single most powerful health intervention available in improving the health status among older adults. This intervention is intended to:

- Improve levels of physical activity in frail elders enrolled in care management programs;
- Strengthen and advance geriatric care management practice by training care managers in principles of behavior change; and helping them to apply these principles in motivating clients to enhance the level of physical activity in their daily lives;
- Be widely replicable in care management agencies throughout the country.