

FALLS FREE INITIATIVE:

Promoting the National
Action Plan to Prevent Falls

Exploring Practice in Home Safety for Fall Prevention

The Creative Practices in
Home Safety Assessment and
Modification Study



About the National Council on Aging

MISSION

- To improve the lives of older Americans.

CORE VALUES

- Social and economic justice
- Respect and caring for all
- A passion for innovations
- Integrity and excellence

CORE COMPETENCIES

Advocacy

- Being a national voice and advocate

Innovation

- Fostering and diffusing innovations
- Developing and deploying interactive decision-support systems

Collaborative Leadership

- Organizing and mobilizing a nationwide network of collaborating organizations and leaders
- Creating and leading strategic alliances and partnerships

IMPACT AREAS

For all older adults

- Improving health and reducing disability
- Increasing participation in meaningful work and volunteer activities

For low-income older adults

- Increasing access to benefits and resources

For frail and “at-risk” older adults

- Enhancing ability to live in communities with dignity, choice and financial security

WHO WE ARE

Founded in 1950, the National Council on Aging (NCOA) is a nonprofit organization with a national network of more than 14,000 organizations and leaders. Our members include senior centers, area agencies on aging, adult day service centers, faith-based service organizations, senior housing facilities, employment services, consumer groups, and leaders from academia, business, and labor.



Home Safety Council

Our Mission

The Home Safety Council (HSC) is a 501(c)(3) nonprofit organization dedicated to helping prevent the nearly 21 million medical visits that result on average each year from unintentional injuries in the home. Through national programs, partnerships and the support of volunteers, HSC educates people of all ages to keep them safer in and around their homes.

About the Home Safety Council

Established in 1993, the Home Safety Council serves as a national resource for home safety education and information. We believe that *a safe home is in your hands* and that's why our daily commitment is to provide families with the knowledge to implement safety practices in their home. Through relationships with educators, policy makers, safety communities, researchers and media, the Home Safety Council delivers timely information and recommendations for the public. This valuable information could spare them and their loved ones from a serious home-related injury. To learn more about the Council's programs, partnerships and resources, visit the Home Safety Council at www.homesafetycouncil.org.

Why Home Safety?

Unintentional home injury is a major public health problem in the United States. According to the Council's *The State of Home Safety in America*[™] research report, each year on average preventable injuries in the home:

- Result in nearly 20,000 deaths
- Cause nearly 21 million medical visits
- Are the fifth leading cause of death overall
- Are 2.5 times more likely to cause injury than car crashes
- Cost our nation \$380 billion
- Are largely preventable when home safety practices are put into action at home

How We Promote Our Mission

We work hard to share information through our programs, partners, and resources to keep families safe at home. Our body of work includes:

- School and community outreach to educate kids and their parents from coast-to-coast
- Research and data collection on unintentional injuries in the home to help target educational programs
- Online safety resources to provide the public with easy access to free information and comprehensive tools designed to improve understanding of unintentional home injuries and offer effective ways families/households can safeguard their loved ones
- Corporate outreach to assist companies of all sizes in developing effective methods to share home injury prevention information with their employees, families and customers
- Grassroots outreach teaming HSC with partner organizations to extend safety messages into local communities
- Seasonal consumer awareness campaigns that deliver timely and "calendar relevant" safety tips to the public through media and web-based outreach
- Risk group outreach to target groups with the highest incidence of home injury and develop customized educational programs tailored to their needs
- Children's educational programs to teach home safety lessons to elementary age kids in the classroom and on the Internet through specially-designed lesson plans, activities and games
- Advocacy and public affairs initiatives to support home safety research, and promote healthy and safer communities
- Awards and recognition for corporations and individuals who champion the cause

The Home Safety Council believes that education is the first step to a safer home and that's why our mission of education and empowerment is so important to the health and well-being of families everywhere.



The Archstone Foundation

The Archstone Foundation is a philanthropic leader committed to addressing the issues of Older Americans.

About the Archstone Foundation

The Archstone Foundation is a private non-profit grantmaking organization founded in 1985, whose mission is to contribute toward the preparation of society in meeting the needs of an aging population. It has awarded more than \$65 million in grants since its inception. The Archstone Foundation is currently focusing the majority of its resources to address the following four issue areas, with an emphasis on funding California-based initiatives:

- Fall Prevention;
- Elder Abuse and Neglect;
- End-of-Life Issues; and
- Responsive grantmaking to address emerging needs within society's aging population.

The Archstone Foundation and Fall Prevention

Fall prevention is an exceptionally important issue for the Archstone Foundation because falls are an enormous threat to the health and well-being of older adults. It is estimated that one in three adults age 65 and older fall each year. While most falls result in minimal injury, more than 20 to 30 percent of adults age 65 and older suffer serious injury from falls, particularly hip fractures and head injury. Of those hospitalized for a hip fracture 40% never return home or live independently again, and 25% will die within one year.

The loss of independence that follows a serious fall may lead to institutionalization, contributing to escalating health care costs and an incalculable human cost. Yet many falls can be prevented. The Archstone Foundation is a major supporter of the Falls Free Summit as part of its work to help prevent falls among older adults.

The Archstone Foundation strives for lasting change and working in partnership with others. To learn more about the Archstone Foundation and the work of its grantees visit www.archstone.org.

Exploring Practice in Home Safety for Fall Prevention

The Creative Practices in Home Safety Assessment and Modification Study

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Section One

Purpose of the Home Safety Study

In the United States, falls are the leading cause of serious and/or fatal injuries among people age 65 and older. Fully one third of people over the age of 65 who live in the community fall each year; the incidence increases to 50 percent for those over the age of 80. Older adults who have fallen previously or who stumble frequently are two to three times more likely to fall within the next year (Tinetti 1988; Teno 1990).

In March 2005 the National Council on Aging (NCOA), in collaboration with the Archstone Foundation and the Home Safety Council, released the landmark, evidence-based *National Action Plan* to prevent falls, a consensus document developed through a two-day Falls Free™ Summit of many of the nation's leading experts in fall prevention. With the help of a National Advisory Group, the Summit participants were carefully selected through an environmental scan designed to identify leading experts, researchers, and organizations working to address fall prevention. The 36 strategies contained within the Plan reflect the best thinking of these experts as to what should be done to reduce falls and fall-related injuries in older adults. Strategies focused on risk factor management and reflected current research in physical mobility, medications management, home safety, environmental safety, and cross-cutting issues. For a copy of the *National Action Plan*, please go to: www.healthyagingprograms.org.

Since the release of the *National Action Plan* in March 2005, there has been uneven progress in implementing the home safety strategies of the plan. To help advance those strategies (outlined in Appendix A), NCOA, in collaboration with the Home Safety Council and the Archstone Foundation, initiated the *Creative Practices in Home Safety Assessment and Modification Study* (Home Safety Study).

In the study, we were interested in how organizations identify funding sources and implement strategies to sustain programming and meet growing needs. We were also interested in identifying partnerships that enabled this work and the strategies that were used to recognize and nurture those partnerships. The stated objectives of the *Home Safety Study* were to:

- Identify a maximum of ten programs that provide creative and effective home safety assessment and modification services as part of a comprehensive fall prevention program featuring community-based components;
- Discern components of home safety programs in need of further development;
- Catalog partnerships and funding strategies that facilitate development and implementation of home safety interventions;
- Identify community-based strategies that could be reproduced for broader use; and
- Catalog organizations that can be targeted to receive this report.

It is important to note that we undertook a study of *creative practices*, as opposed to best practices. Attention to creative practices recognizes that the field of home safety for fall prevention is rapidly developing. In addition, home safety interventions offered in the context of comprehensive fall prevention programs vary dramatically with respect to the mission, setting, and personnel of the parent organization. These differences make direct comparison of various programs difficult.

What You'll Find Here

The purpose of this report is to provide the reader with insights and ideas for implementing new or strengthening existing home safety assessment and modification programs. The report reflects a variety of organizations' programs. It should help the reader locate strategies that are feasible for adoption and/or modification in other facilities. It is designed to be succinct and easy to read and is divided into three sections.

Section One: The first section lays out the background and objectives for the *Home Safety Study*. It also explains why we are focusing on fall prevention, and more importantly, on home safety. A brief overview of the study follows. The ten programs chosen to represent the creative practices are named in this section. The reader will also find a discussion of what was learned in the study as well as ideas for action and improvements. The section concludes with a discussion of the limitations of the *Home Safety Study*.

Section Two: Section two offers descriptions of the ten programs selected as creative practices. Each program review opens with the Home Safety Workgroup summary and thoughts about the creative practices demonstrated in the program. Each review also includes:

- An overview of the parent organization
- The home safety program and its key partnerships
- Referral and funding sources of the program
- Assessment processes
- A link to a more comprehensive fall prevention program
- A link to quality modifications
- A consumer education component
- Examples of Home Modification Activities
- Evaluation processes
- Evidence used to support the program
- Future plans
- Replication potential and available materials for replication
- Program contact information

Section Three: The last section of this report includes a variety of support documents and resources, including:

- References
- *National Action Plan* strategies relevant to this study
- Members of the Home Safety Workgroup
- A description of study processes and results
- The Web-based self-nomination instrument
- The evaluation criteria used in this study
- The telephonic assessment tool
- Media release
- Overview of general funding sources
- Additional home safety-related resources and Web sites

Why Falls? Why Now?

Contributed by: Judy Stevens, PhD, National Center for Injury Prevention and Control, CDC

For adults over age 65, falls and injuries from falls are a major threat to health, independence, and quality of life. Older adults want to live independently and age in place; a fall can threaten that desire and is often seen as the beginning of a decline that will end with a nursing home admission. One out of three older adults falls each year (Hornbrook et al., 1994; Hausdorff et al., 2001), and those who fall are much more likely to fall again. While many are not injured, 20 to 30 percent of falls cause moderate or serious injuries such as fractures or head traumas, which are associated with significant morbidity, reduced mobility, decreased functioning, and loss of independence (Alexander et al., 1992; Sterling et al., 2001).

Falls have a significant economic impact. In 2000, the direct medical cost for falls was \$19 billion (Stevens 2006). This is comparable to the costs of treating cancer or arthritis (Hodgson 1999). Most of these costs were for treating nonfatal injuries. Fractures accounted for just more than a third of all nonfatal injuries and 61 percent of costs. Medical expenditures for women, who made up 58 percent of the older population, were two to three times higher than expenditures for men, regardless of whether medical care was received in a hospital or in an outpatient setting such as a clinic or doctor's office.

The majority of falls among community-dwelling seniors occur in and around their home. Research has demonstrated that improving home safety—either by assessments and modifications by occupational therapists for people who have fallen, or through home modifications as part of a comprehensive fall prevention program—reduces the chances of future falls. However, many programs focus solely on reducing home hazards to the exclusion of other effective approaches, such as exercising to improve muscle weakness, poor gait, and balance problems. Population-based fall prevention programs must use a multi-faceted approach in order to achieve maximum impact (Rand Report, 2003).

Demonstrating effectiveness is essential for any fall prevention program. Unfortunately, measures of fall frequency are susceptible to recall bias. Alternative measures of program effectiveness are available. For example, functional changes are highly correlated with fall risk and can be measured objectively. Programs can evaluate their impact by using validated instruments to assess participants' functional abilities before and after going

through the program. Such documentation is critical for sustaining financial support as well as for justifying the expansion and dissemination of effective programs.

Why Home Safety?

Contributed by: Elizabeth Walker Peterson, MPH, OTR/L, FAOTA, Jon Pynoos, PhD, and In Hee Choi, MIPA

Falls in the home result from a complex interaction among hazards in the home environment, physiological limitations, and risk taking (Lord et al., 2006). Hazards in the home often create conditions that lead to trips or slips, and thereby pose a risk for older adults, who may already have multiple intrinsic risk factors for falls (Perrell et al., 2001). Unfortunately, falls within and around the home are common. Kochera (2002) reported that the majority (55 percent) of fall injuries among older people occurred inside the house, and 23 percent of falls occurred outside but near the house, while 22 percent occurred away from home.

Although most older adults prefer to stay in their own homes and communities as long as possible, these settings often lack supportive features (e.g., accessible storage areas, wide doorways) and have numerous fall hazards (Stevens et al., 2001). The bedroom, stairs, and bathroom are generally the most common areas for falls within the home (Rogers et al., 2004). Some of the most common environmental risk factors for falls include inadequate lighting, changes in floor surfaces or slippery surfaces (e.g., non-slip-resistant bathtub surfaces), problems associated with stairs (e.g., absence of handrails), and clutter and tripping hazards (e.g., throw rugs) (Gill et al., 2005).

The purpose of environmental modification strategies is to reduce and/or eliminate risk factors in the physical environment associated with falls. These modifications, particularly home modifications, attempt to match the demands of a particular environment to a particular person or people whose capabilities have declined (Lawton & Nahemow, 1973). Such interventions include not only abating hazards but also adding supportive features (e.g., grab bars, handrails).

Evidence pointing to the important role of home safety in fall prevention has grown in recent years. While Nikolaus et al. (2003) and Cumming et al. (1999) demonstrated success in preventing falls through interventions that emphasized home modifications, the evidence supporting inclusion of home hazard assessment and modification as part of *multicomponent* interventions for community-dwelling older people is particularly strong (Rand, 2003, Gillespie, 2003). Evidence suggests that several key elements are important when implementing effective home modification interventions to prevent falls. These include:

- Involving a professional healthcare provider, such as an occupational therapist, in the delivery of the home safety intervention (Cumming et al., 1999; Close et al., 1999; Gallagher & Brunt, 1996; Hogan et al., 2001; Kingston et al., 2001; Lightbody et al., 2002; Tinetti et al., 1994; and van Haastregt et al., 2000);

- Targeting older adults who have a history of a fall or one or more fall risk factors (Close et al., 1999; Gallagher & Brunt, 1996; Hogan et al., 2001; Kingston et al., 2001; Lightbody et al., 2002; Tinetti et al., 1994; and van Haastregt et al., 2000);
- Completing a comprehensive home assessment (Close et al., 1999; Gallagher & Brunt, 1996; Hogan et al., 2001; Lightbody et al., 2002; Tinetti et al., 1994; and van Haastregt et al., 2000; Cumming et al. 1999) ;
- Providing assistance in mitigating identified hazards (Close et al., 1999; Tinetti et al., 1994; Lightbody et al., 2002; Cumming et al., 1999); and
- Providing follow-up visits or contacts as part of the intervention (Tinetti et al., 1994; Cumming et al., 1999)

In order to determine the most effective approach to home safety evaluations, more research is necessary. However, results of studies evaluating the *Matter of Balance* (Tennstedt et al, 1998) and *Stepping On* (Clemson et al., 2004) programs suggest that enhancing older adults' confidence in their ability to perform common activities of daily living without falling (falls self-efficacy) is an important component of complex interventions designed to reduce falls and safely increase activity levels in and around the home. Strategies to increase falls self-efficacy include creating opportunities for older adults to master fall prevention skills (e.g., creating and implementing plans to address identified hazards) (Clemson et. al., 2003) and using "cognitive restructuring" techniques (Lachman et al., 1997). The cognitive restructuring techniques used in the *Matter of Balance* program are designed to help older participants shift from "task interfering" thoughts to "strategy-relevant" thoughts that motivate them to begin eliminating home hazards. Both *Matter of Balance* and *Stepping On* empower older adults to take actions that will result in reduced fall risk by helping program participants recognize their own existing skills as well as the limits of their physical abilities, develop new skills, and build strong support networks.

How the Home Safety Study Was Conducted

The *Home Safety Study* was undertaken in four phases. A detailed description of each is provided in Appendix B. First, leading content experts were invited to join the Home Safety Workgroup by NCOA leadership. Second, Workgroup members collaborated with NCOA leaders to develop:

- Evaluation criteria for *Creative Practices* reflecting available evidence and excellence in program development and evaluation;
- Screening questions intended to identify programs meeting eligibility criteria for the study;
- A self-nomination instrument; and
- A telephonic interview guide intended for use in later phases of the study.

In the third phase, a nationwide call for study applicants was made. The search strategy utilized processes that had proven successful in previous NCOA-led searches for best practices. The fourth and final phase of the study involved a careful evaluation of high quality programs that met a variety of inclusion criteria.

Members of the Home Safety Workgroup are listed in Appendix C. Screening criteria, the Web-based self-nomination instrument, and strategies used to make the call for self-nominations to a broad, national audience are provided in Appendix D. A description of the evaluation criteria used to identify ten *Creative Practices* is found in Appendix F.

In response to a national call for programs and practices, 232 programs or individuals accessed the Web-based application form. Ultimately, 60 self-nominations were submitted for consideration. NCOA staff reviewed them and identified 25 that met the criteria that the Workgroup had weighted heavily (refer to Appendix F). Representatives from each of those 25 programs completed an in-depth telephone interview conducted by an NCOA staff member or Workgroup member. The self-nominations, support materials, and findings from the interviews were reviewed during a two-day meeting of NCOA staff and Workgroup members that led to the selection of ten *Creative Practice* programs. A detailed description of the study results and processes used to identify ten *Creative Practices* is provided in Appendix B.

The National Media Release announcing the names of those selected programs is provided in Appendix H. Detailed program descriptions are contained within this report. The Home Safety Workgroup's assessment of each highlighted program is also provided. We congratulate the ten selected organizations for the work they are doing to promote the safety and well being of the older adults residing in their communities:

Holy Redeemer Home Care: LifeAssess, Philadelphia, PA
Neighborhood Health Agencies: Senior HealthLink, West Chester, PA
Neighborhood Senior Services: Home Injury Prevention Program, Ann Arbor, MI
Community Outreach Services Home Safety Unit: Open Hands: Santa Fe, NM
Pitt County Council on Aging: SPICE for Life, Greenville, NC
Saint Elizabeth Home Care Services: Fall Risk Reduction Project, Lincoln, NE
Stanford University Medical Center Trauma and Emergency Services: Farewell to Falls, Stanford, CA
Touchmark's Senior Retirement Community Health and Fitness Clubs: Fall Reduction and Awareness Program, Beaverton, OR
TriHealth Senior Link: Home Safety Check, Cincinnati, OH
VNA of Care New England: Steady Strides, Warwick, RI

The Workgroup unanimously chose to include one special-mention program in this review that is currently undergoing evaluation at Thomas Jefferson University, in Philadelphia, PA: ***Project Able*** from the Center for Applied Research on Aging and Health.

Ideas for Action: Creative practice programs offer a diverse array of strategies for readers.

Many aspects of the programs described in this report are widely replicable. At the same time, their structures and approaches suggest ways others can create develop and/or improve their own home safety efforts.

Lead Organizations

The Workgroup was pleased with the wide variety of service organizations taking the lead in promoting safe home environments as part of a comprehensive fall prevention intervention. These organizations reflected an array of providers working in both aging and healthcare services networks. Four of the programs selected as *Creative Practices* are led by home care agencies; three are led by senior service agencies. One of the programs is led by a trauma center based at a university medical center and another by a hospital system. Finally, one of the selected programs was provided as part of a for-profit lifestyle community.

Many of the programs selected as *Creative Practices* began when a community champion in fall prevention or a resource person on staff initiated the home safety and modification effort. Similarly, a few passionate staff and community champions often led the efforts to institutionalize and sustain programming. The resulting *Creative Practices* are a testament to the difference a few, highly motivated people can make in their communities.

Partnerships

Strategically established partnerships served as a common element across selected programs. The nature of the partnerships varied depending upon the needs of the organization sponsoring the home safety program and the professional or lay resources available within a given community. Collaborative ventures within a community often supported the provision of effective services and appropriate follow-up. Recognizing the limits of their mission or scope of services, several programs selected as *Creative Practices* carefully established rich volunteer programs over time that complimented or extended their services.

The strong working relationship between the *LifeAssess* program and a local Senior Care Collaborative of aging service providers is one example of an effective, creative partnership. The Collaborative, which was developed through a grant from Wachovia, provides *LifeAssess* participants with easy access to a variety of services. Another effective partnership is modeled by the mutually beneficial relationship between the *Senior HealthLink* program and area schools of nursing. The nursing students, who work under supervision, provide initial fall prevention screens for *Senior HealthLink* participants. In turn the students obtain valuable, community-based learning experiences. The *Senior HealthLink* has developed strategic partnerships with faith-based volunteer organizations including Random Acts of Kindness Everywhere. ((Project RAKE) and Good Works. As a result, the service capability of the program has greatly expanded.

Opportunities for Improvement: Partnerships

- First responders such as firemen, EMT, or ambulance workers are in contact with seniors at high risk for falls and therefore could serve as important partners for fall prevention programs.
- Given the increasing pool of retired volunteers expected in the next decade, there is great potential to involve retired healthcare personnel, carpenters, and construction workers in home safety initiatives.
- High school or college students seeking “service hours” or students seeking credited or experience-building opportunities can contribute, under supervision, to home safety efforts.
- Partnerships between community-based organizations offering physical activity programming for seniors or clinically based fall prevention programs and home safety programs appear to be underutilized. The National Fall Prevention Action Plan is based on the premise that community-based organizations must work collaboratively to affect change. Most communities have senior wellness programs that could become excellent partners for home safety programs.
- Academic partnerships involving healthcare faculty from diverse backgrounds (e.g., pharmacy, nursing, medicine, human nutrition, occupational therapy, physical therapy, etc.) have tremendous potential to contribute to home safety programming provided in the context of fall prevention.

Target Populations

Most of the reviewed programs targeted frail older adults at high risk for falls. Many of the individuals who were served through the home safety programs selected as *Creative Practices* fit the profile of individuals in greatest need of home safety services (as described in the AdvantAgeSM Initiative Survey, Apr/May, 2003).

<http://www.vnsny.org/advantage/survey.html>. Those characteristics include:

- Self-reported activity limitations;
- Fair or poor health;
- Subsisting at or below the poverty line; and
- Belonging to an ethnic or racial minority.

Opportunities for Improvement: Target Population/Reach

- Developing collaborative relationships with *Meals on Wheels* programs, community-based service providers in regular contact with seniors (e.g., home delivery services), and local support groups (e.g., multiple sclerosis support groups, cancer support groups) could expand the reach to homebound or high-risk seniors.
- Few programs serve diverse communities of older adults. Reaching culturally diverse program participants is an important goal for many home safety programs.
- The Workgroup suggests greater use of the evidence to identify communities and populations most in need of home safety and modification programming. Populations at highest risk can be identified by using population-based

surveillance data. Partnering with the local and state public health departments can be useful in gathering fall data for the state/community. In a growing number of states, statewide fall prevention coalitions are developing. These should be made aware of local programming and asked to provide collaborative assistance.

Referral Sources and Marketing Strategies

Among programs selected as *Creative Practices*, the most frequently reported referral sources were primary care providers, discharge nurses, and home health agencies. Self-referrals were a source of clients for a number of programs. Accordingly, marketing efforts targeted key referral sources. A variety of marketing strategies was used, including in-service trainings to potential referral sources and strategically placed flyers.

Other creative dissemination efforts are reflected in the practices of our *Creative Programs*. For example, *Open Hands* staff members participate in the annual Home and Garden Show in Santa Fe and in many area health fairs. *Project Able* distributes program information through the local para-transit and social service agencies. The *HIP* program has found that some of the best referral channels are through *Meals on Wheels* and home delivery service pharmacies and groceries. They even go a step further and train delivery personnel to identify home safety concerns for referral back to *HIP*.

Opportunities for Improvement: Marketing and Dissemination

- More work needs to be done to understand barriers to accessing and utilizing fall prevention services in specific communities. Focus groups or other qualitative research (e.g., one-on-one interviews) may provide insights regarding effective, community-specific recruitment strategies.
- We need to know more about what motivates people to participate in home-safety initiatives provided in the context of fall prevention programs. Recent research suggests that recruitment messages focusing on the multiple benefits of programming (e.g., maintaining health, mobility, and independence) may be more successful than messages emphasizing concerns about falling and the consequences of falling (Yardley et al., 2007). Local agencies have the opportunities to explore different types of marketing messages and report on their experiences through professional publications and conferences.

Program Content and Development

Many of the programs selected as *Creative Practices* featured older adult evaluations conducted by healthcare providers (e.g., nurses, occupational therapists, and physical therapists). These evaluations often included assessment of blood pressure; balance; leg strength; and number, dose, and type of medications used regularly. Workgroup members were pleased to see that many of the programs selected as *Creative Practices* involved experienced therapists and provided training to teach evaluators how to use a specific assessment tool. Assessments that featured observation of older adults engaging in day-

to-day activities in their homes (e.g., transferring to and from the toilet or shower chair) were recognized for their potential to provide insights about home safety.

Generally, the home assessment tools submitted by the ten programs cited in this report were an amalgamation of “home grown” (self-created) tools and other assessment instruments found on the Web. The evaluation criteria used to identify *Creative Practices* rewarded programs that involved older adult service recipients as active participants in the home assessment process. Most of the selected programs did report a client-centered approach to home assessment. However, levels of involvement on the part of older adult service recipients varied, as did the length of the interventions. After making modifications, all the programs reported a supervisory process that included follow-up to assess modifications.

Opportunities for Improvement: Program Development

- To become more evidence-based, programs can:
 - Use findings and practice guidelines developed by reputable sources (e.g., Cochrane Reviews/McClure R. et al., 2005; American Geriatrics Society/British Geriatrics Society, 2001) to inform program development.
 - Use materials developed by recognized experts in fall prevention (e.g., the National Center on Injury Prevention and Control, CDC, Center for Excellence in Fall Prevention)
 - Use valid and reliable assessments to document fall history as well as functional abilities, balance, cognitive abilities, fear of falling, or other known fall risk factors. Use these assessments to measure improvements over time.
 - Characteristics of a strong home assessment tool and process include:
 - Taking into account the interaction of older adults with their environments through observing their engagement in activities and by allowing them to talk about their experiences of falls or near-falls
 - Providing suggestions as to how older adults can address areas of concerns and involve them in setting home modification priorities
 - Assessing environments both inside as well as outside the home (e.g., entrance, garden)
 - Using home assessment tools that are comprehensive, have been tested for reliability and validity, include clear guidelines on how to use them, and have (specific) definitions of environmental features
- To become more client-centered, programs can:
 - Have a conversation with the older adult participant to find out his or her home safety priorities.
 - Ask participants about the circumstances surrounding recent falls. What he or she was doing at the time of the fall? How was help

accessed? How long did it take to get help? Did an injury result? Was medical attention sought?

- Consider the individual's medical history and carefully assess fall risk factors associated with chronic illnesses (e.g., Parkinson's Disease, stroke, multiple sclerosis, rheumatoid arthritis). Refer individuals back to primary healthcare providers for in-depth assessment as needed to manage chronic medical conditions.
- Ask the older adult participant about friends, family, and service providers that he trusts. Involve those individuals in home safety initiatives and create opportunities for those supportive individuals to explain why they think specific home safety activities will be helpful to the participant.
- Involve healthcare providers who are experienced in teaching older adults how to develop and use problem solving skills relevant to home safety and use adaptive equipment/mobility aids.
- Develop realistic home safety goals that lead to successful outcomes. Participants will be more highly motivated to continue with home safety efforts if they experience success.
- Provide regular, specific feedback to participants to help them recognize that progress in home safety has been made. In addition to fewer falls, many other benefits of enhanced home safety can be recognized (e.g., increased enjoyment of activities in the home, increased activity levels, higher levels of independence with daily activities, and reduced fear of falling).

Funding

As the NCOA staff and Workgroup members anticipated, most administrators working in programs selected as *Creative Practices* reported that resources for home modifications were hard to locate, limited in scope, and increasingly threatened. Funding to provide assistance to low-income households, which have a disproportionately high need for modifications, was especially limited. Each of the *Creative Practice* programs highlighted in the *Home Safety Study* were creative in locating and securing funding, but across the programs, long-term sustainability of those funding sources was tenuous. In several programs, volunteer contributions were a significant resource. Examples of other funding sources include the United Way, local foundations, state assembly earmarks, and monetary donations. A general review of national, state, and local funding sources applicable to home safety initiatives is provided in Appendix I.

Many *Creative Practice* programs survive with limited funding by involving volunteers and increasing the availability of donated supplies. For example, the *SPICE* program capitalizes on donated services and equipment, as well as volunteer labor contributions, including student volunteers from East Carolina University and the Chamber of Commerce Leadership Institute. The program also makes use of recycled equipment. Clients are asked to return equipment for recycling if it is no longer needed. The *HIP* program receives donations from the local Home Builders Association, which is also a source of volunteer labor. This program also recycles its aluminum ramps. The program

works closely with medical durable suppliers who offer discounts and often provide repairs at little or no cost, even on equipment not purchased through them.

Opportunities for Improvement: Funding

- Programs built on evidence and that use valid and reliable measures to document outcomes will be able to objectively demonstrate value to funding organizations.
- Programs that make use of media coverage and promote the personal side of keeping older adults safe in their homes have been shown to garner greater community interest and support, which can translate into a variety of funding options.

Evaluation

The evaluation of program outcomes was the least developed component of the programs assessed by the Home Safety Workgroup. Often evaluation was limited to a description of whether or not client-specific short-term and long-term goals were met. While some programs reported objective pre- and post-measures of balance or activity levels, the more common measures included client satisfaction and the ability to use assistive devices safely. Many of the programs reported that evaluation data were used to inform program development; however, documentation regarding the outcomes reviewed and how data were used to determine program priorities was limited.

Opportunities for Improvement: Process Evaluations/Continuous Quality Improvement (CQI) Evaluations

- Institutional expectations for process evaluations/CQI measures vary dramatically. Programs can spend time with individuals who are monitoring their progress to find out their expectations and criteria for programmatic success.
- Programs should keep records about what worked and what did not work in order to build on their experiences.
- Whenever possible, programs should determine process evaluation/CQI strategies before implementation.
- Programs should identify other local initiatives that have strong process evaluation/CQI programs in place and ask the associated personnel to serve as mentors.
- Whenever possible, build upon process evaluation/CQI programs that are currently in place.

Opportunities for Improvement: Outcome Evaluations

- Consider partnering with local university faculty to develop and implement an outcome evaluation plan.
- Without a comparison group, it is very difficult to attribute positive changes observed in participants to a particular intervention. When reporting findings,

programs should acknowledge the limitations of their study design and explain known and potential factors that could have influenced their findings.

Limitations of this Study

The Workgroup members were in agreement regarding the importance of linking home assessments with modification outcomes, believing that home assessment without follow-up and appropriate intervention negates the effectiveness of the assessment. The Workgroup recognized such a linking requirement could limit the number of programs eligible to participate. Stand-alone assessment processes or home modification efforts were not captured in this study; several individual contacts by interested program managers felt this was unfair.

The evidence is clear: Home assessment and modification coupled as an intervention are only effective when functionally linked to multi-factorial fall prevention interventions; therefore, eligible programs were required to demonstrate that link. This requirement may have limited the pool of potential program applicants.

Although the NCOA marketing plan for this effort, coupled with Workgroup member networks, was thought to reach broadly into the field of home safety, fall prevention, and home modification, it is possible the study failed to reach all potential applicants. It is important to note that the interviewees were queried on how they learned about this opportunity. The majority reported receiving the information electronically from colleagues, friends, board members, or supervisors, which gave the Workgroup assurance that the announcement was well distributed beyond the targeted venues.

Finally, many potential applicants began filling out the self-nomination instrument, but never completed it for submission. NCOA kept a record of those contacts and notified each by e-mail at least twice in the last week of the survey process that time was running out to complete the application. NCOA remained available for questions by phone or email. The reasons for not completing are unknown, but the length of the instrument, the depth of information requested, or the requirement for a follow-on interview might have reduced the completion rate. However, those who did complete the survey reported that requesting more information in the survey would not have been off-putting. Only one applicant elected not to participate in the process. Most seemed to enjoy the lengthy interviews and often provided additional contextual information and anecdotes that provided an enjoyable session for both the interviewer and interviewee.

Disseminating Creative Practices

This report is designed to provide the reader with innovative strategies and ideas that are working in like-minded communities and organizations, providing effective home assessment and modification services to promote safe homes and to reduce falls and fall-related injuries. It is the hope of the Home Safety Workgroup that the information provided in this report will increase the capacity of local communities to address falls, enhance or expand service delivery, and ultimately provide safe homes that promote healthy aging and reduce or delay the need for more costly long-term care services.

Section Two

Ten Creative Practices in Home Safety for Fall Prevention

In the following section, the reader will find a description of each home safety program, as well as program elements that reflect the essence of the program. Programs are listed in alphabetical order, by parent organization. The review includes one special-mention program currently undergoing evaluation at Thomas Jefferson University, in Philadelphia, PA:

Holy Redeemer Home Care

LifeAssess

12265 Townsend Rd
Philadelphia, PA 19154

Neighborhood Health Agencies, Inc.

Senior HealthLink

795 E. Marshall St., Suite 204
West Chester, PA 19380

Neighborhood Senior Services

Home Injury Prevention Program

5361 McAuley Dr.,
P.O. Box 995
Ann Arbor, MI 48106

Community Outreach Services Home
Safety Unit

Open Hands

2976 Rodeo Park Drive East
Santa Fe, NM 87505

Pitt County Council on Aging, Inc.

Spice for Life

PO Box 7272/ 1717 W. 5th Street
Greenville, NC 27835

Saint Elizabeth Home Care Services

Fall Risk Reduction Project

245 So. 84th Street
Lincoln, NE 68510

Stanford University Medical Center
Trauma and Emergency Services

Farewell to Falls

300 Pasteur, MC 5101
Stanford, CA 94305

Touchmark's Senior Retirement
Community Health and Fitness Clubs

***Fall Reduction and Awareness
Program***

5150 SW Griffith Drive
Beaverton, OR 97005

TriHealth Senior Link

Home Safety Check

4710 Wesley Avenue, Suite I
Cincinnati, Ohio 45212

VNA of Care New England

Steady Strides

51 Health Lane
Warwick, RI 02886

Special Mention

Center for Applied Research on Aging
and Health

Project Able

Thomas Jefferson University
130 S. 9th Street, Suite 513
Philadelphia, PA 19107

Holy Redeemer Home Care: LifeAssess

What Is Creative About this Program?

LifeAssess is designed to address the needs of the homebound, frail elderly to enable them to enjoy a high quality of life in the comfort of their own homes. In 2003, Holy Redeemer's *LifeAssess* program for older adults age 85+ became the first in the nation to receive the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) distinction of being certified in caring for the specific needs of the frail elderly at home. The success of the *LifeAssess* program is facilitated by its partnership with the Senior Care Collaborative. The program features a home assessment procedure that is intensely person-centered. Minor environmental modifications addressing slip and trip hazards, task efficiency, and clutter are facilitated by the staff with the cooperation of the client. Structural modifications and improvements are referred to contractors or on occasion to experienced volunteers from the Retired and Senior Volunteer Program (RSVP). The scope of the program is growing, based on recognized needs in the community.

Lead Organization

The Holy Redeemer Health System is a Catholic, community-based integrated health and social service delivery and financing system sponsored by the Sisters of the Holy Redeemer. The Holy Redeemer Health System strives to create innovative programs and services that enable people to live their lives to the fullest. Partnering and using resources efficiently are acknowledged as important strategies for accomplishing the mission of Holy Redeemer. Holy Redeemer recently expanded its ability to provide quality home healthcare through the integration of the Visiting Nurse Service System (VNSS), which serves a number of counties in southern New Jersey. For additional information, go to <http://www.holyredeemer.com/>.

Holy Redeemer Home Care is a Medicare-certified home health agency that provides skilled nursing, physical therapy, occupational therapy, and speech language pathology services in addition to social services, mental health nursing, wound/ostomy continence nursing, and home health aides. Holy Redeemer also provides hospice services. The patients served reside in New Jersey and southeastern Pennsylvania in a variety of urban, suburban, and rural locations. Holy Redeemer has an average daily census of approximately 4000 patients.

In 2003 Holy Redeemer's *LifeAssess* program for older adults age 85+ became the first in the nation to receive the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) distinction of being certified in caring for the specific needs of the frail elderly at home. With older adults living longer than ever before, Holy Redeemer's compassionate and experienced home care teams recognized the need for a program that would identify and treat four major complex geriatric syndromes: depression, dementia, fall risk, and urinary incontinence.

For adults age 85+, these common syndromes may threaten the ability to live safely at home and lead to premature placement in a nursing or long-term care facility. Through

the *LifeAssess* program, Holy Redeemer's goal is to identify and treat those at risk early in the care process, thus prolonging the ability to remain independent at home and forestalling the need for skilled-care placement.

Individuals age 85+ years who are patients of Holy Redeemer's home care program, and younger individuals at high risk automatically receive a comprehensive fall prevention screening and evaluation, complete with recommendations and action plan. Although focused on the "elder elderly," this innovative screening and assessment program is open to any patient regardless of age. The program reports that many younger patients have benefited from the comprehensive screening and evaluation.

LifeAssess

LifeAssess is designed to address the needs of the homebound frail elderly and enable them enjoy a high quality of life in the comfort of their own home. During the first visit to a patient's home, the nurse or therapist screens the patient for fall risk, depression, dementia, and/or urinary incontinence. The interventions are based on the specifically identified deficits. For additional information, refer to www.lifeassess.org.

Partnering Makes the Program Strong

LifeAssess reported the use of a variety of partnerships that serve to extend its service to the elderly. The program's partners include caregiver organizations, area healthcare providers, community volunteer organizations, aging service providers, and organizations serving people with special conditions.

A creative partnership supporting the efforts of *LifeAssess* and its home safety intervention is the *Senior Care Collaborative*. The *Collaborative* began three years ago through a Wachovia grant to Holy Redeemer. The three-year grant focused on an assessment of needs of nearly 10,000 elderly in Northeast Philadelphia. From this beginning, the *Senior Care Collaborative* has developed into an organization (501C-3) of agencies that serve the elderly. It is led by one paid director. All of these agencies have memorandums of understanding between each other and refer clients appropriately. If needs are identified in a client's home that *LifeAssess* cannot address, the client can be referred to a member of the *Senior Care Collaborative*.

Referral Sources Provide Smooth Access to Services

Most of the referrals to *LifeAssess* come from acute care hospitals, rehabilitation facilities, skilled nursing facilities, and other organizations serving the frail, older adult residents of southeastern Pennsylvania. The Area Agency on Aging and the *Senior Care Collaborative* are also referral sources for *LifeAssess* interventions. *LifeAssess* staff members begin the assessment and services on all clients within 24 hours of discharge. This assurance of timely quality interventions has served to reinforce the referral sources.

Some clients are family and/or self-referred, since Holy Redeemer Hospital (and its Home Care and *LifeAssess* programs) are well known in the community through senior education programs and support groups.

Funding Sources Keep the Program Growing

Insurance reimbursement covers services for home visits. A nurse, physical therapist, occupational therapist, or speech therapist conducts the initial home visit, depending upon the anticipated need. In addition to the *LifeAssess* screen, an OASIS evaluation is conducted to identify common geriatric syndromes such as depression, dementia, falls (in part, by use of a home assessment tool), and urinary incontinence.

The vast majority of clients require equipment items, assistive devices, and/or home modification. Financially able patients are expected to self-fund both structural modifications and recommended durable medical equipment. If they are unable to pay for improvements, Holy Redeemer social workers will help the client identify available resources to cover labor and material costs. *LifeAssess* staff will provide patients with the education and practice opportunities required to safely use the equipment items and home modifications.

Many equipment items and home modification referrals are funded by the Philadelphia Corporation for Aging, the local Area Agency on Aging, or through county and state funds. The *Senior Care Collaborative* can also provide resources on a limited basis.

Assessing the Home and Its Occupant

Assessors are trained, home-visiting staff—nurses and physical, occupational, and speech therapists. All have been trained in the assessment tools and are under clinical supervision. *LifeAccess* is intensely person-centered, thus assessments are comprehensive. Recommendations are discussed with the client.

To conduct the assessment, *LifeAccess* developed the tool that accompanies the OASIS screen. They developed this in a multidisciplinary team as part of the JCAHO Disease Specific Certification in Frailty. Every one who administers the tool is a staff member of *LifeAccess*. All assessment tools are reviewed annually.

How Does this Tie to a More Comprehensive Fall Risk Assessment?

At the first visit to the patient's home, the nurse or therapist conducts the OASIS assessment along with the specialized screenings for fall risk, depression, dementia, and urinary incontinence. The interventions are based on the deficits identified, but typically these four issues are inseparable, with each problem compounding the effects of the others. For instance, if a patient takes longer than thirty seconds to perform the Timed Up and Go fall screen, they are referred to physical therapy. If they have macular degeneration, they are referred to occupational therapy for low vision rehabilitation. Medications are thoroughly reviewed, and a successful regime is coordinated with the patient's physician. A mental health nurse or social worker may be referred if depression is suspected, which could lead to reduced mobility and heightened fall risk. Many more resources and examples are available. See www.lifeassess.org, a Web site created for patients and caregivers who want to seek more information.

The comprehensive assessment of a patient includes his or her physical home, family involvement, finances, medical and mental condition, and pertinent cultural or religious factors. Using a fall risk assessment that is modified from the New Jersey HCA guideline and the National Action Plan to prevent falls in older adults, the assessor identifies the patient's risk factors and makes the appropriate agency or community referrals. The home-based intervention is designed to address needs outlined in the assessment.

How does the assessment tie to appropriate and high quality modifications? Minor environmental modifications addressing slip and trip hazards, task efficiency, and clutter are facilitated by the staff with the client's cooperation. Structural modifications and improvements are referred to contractors and/or on occasion, experienced volunteers from Retired and Senior Volunteer Program (RSVP). RSVP can sometimes offer labor. Very few contractors will install equipment for free. Members of the *Senior Care Collaborative* can, on occasion, obtain services for reduced costs. *LifeAssess* staff conducts follow-up home visits to see if the modifications have been done.

Education to Supplement the Home Assessment and Modification Program

The assessors are trained to teach and problem solve with the older adult and family/caregivers. They are also trained to work with the older adult and family members to identify, prioritize, and address potential safety issues that may arise in the future. They give out educational materials, including a modified CDC brochure. All materials are available in other languages.

Examples of Home Modification Activities

The vast majority of home modifications involve the installation of grab bars, which are generally covered under private pay. Other examples include the installation of stair glides, wheelchair lifts, second railings, and entry ramps. When warranted, these can be funded by the Area Agencies on Aging, but most are paid for privately.

Evaluation Processes and Quality Improvement Mechanisms

As an agency with JCAHO certification in frailty, there is an ongoing requirement to assess patient outcomes. *LifeAssess* evaluation strategies include measures of client behavior change including a reduction in risk-taking behaviors and the demonstrated ability to use assistive devices and home modifications appropriately. Client satisfaction is also routinely collected and analyzed.

Holy Redeemer monitors transfers to inpatient facilities or the emergency department due to falls on current as well as new clients. Outcomes have shown a significant reduction in falls frequency and average improvement in ambulation status higher than the national reference.

Incorporating Evidence and Best Practices

As an agency with JCAHO certification in frailty, there is an ongoing requirement to incorporate clinical practice guidelines. *LifeAccess* has a group that meets frequently to talk about those guidelines and how to incorporate them into practice.

Where Do We Go from Here?

The scope of the program is growing based on recognized needs in the community. Holy Redeemer has acquired more agencies and now has over 200 therapists on staff, which will extend the reach of the program to more frail older adults in need of interventions to prevent falls.

Is this a Replicable Model?

Strengths of the program limit its utilization to home care agencies taking a similar focus on geriatric syndromes affecting older adults 85+.

What Print or Online Program Materials Are Available?

- Client satisfaction surveys
- Educational materials for older adults
- Educational materials for other audiences
- Marketing materials
- Evaluation processes and tools
- News/media articles

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Neighborhood Health Agencies: Senior HealthLink

What Is Creative About this Program?

The *Senior HealthLink* program partners with four area schools of nursing. The program penetrates deep into a low-income community and reaches a broad audience of older adults that includes frail individuals, while simultaneously providing valuable hands-on experiences for senior nursing students. Initial visits are made during a critical time for seniors: following the return home from the hospital or emergency room. The home visits are continuous and ongoing, allowing for follow-up over time and the building of a trusting relationship between the older adult and the nursing student. *The Senior HealthLink* program offers a true multi-factorial assessment in which personnel costs are low and follow-up is assured. Tying the assessment to the case manager process ensures that referrals and minor modifications are completed. The strategic partnership of *Senior HealthLink* with widely different organizations, including the Chester County Department of Health, Random Acts of Kindness Everywhere (Project RAKE), Good Works, and others, has greatly expanded the service capability of this program.

Lead Organization

Neighborhood Health Agencies, Inc. (NHA), a member of The Chester County Hospital Network, provides home care, hospice, and private duty services to the people in Chester County and the surrounding area of Pennsylvania.

The mission of NHA is to provide cost-effective, quality home healthcare services. These services include health maintenance, health education, and anticipatory guidance to individuals, families, and groups within the community. Services are provided regardless of race, age, color, creed, physical disability, or ability to pay. NHA provides services to seniors living in their own homes, aggregate senior housing, and assisted living facilities. Most of the seniors served are 65+ years of age, underinsured or uninsured, and have a chronic illness. The ethnic makeup of the population served is 40 percent White, 32 percent African American, and 26 percent Hispanic.

Now celebrating its 95th anniversary, NHA has been providing home health, hospice, personal care, and outreach services to communities in Chester County and surrounding areas since 1912. For additional information, see their Web site at www.nvnacc.com/.

Senior HealthLink: Home Safety Program

NHA's *Senior HealthLink*, which includes their home safety program, is a free outreach program that benefits people age 65+ who have multiple medical issues and whose family are caring for them. Clients are older, mostly in their 80's and 90's, and are moderate to low-income. They are primarily Medicare eligible, underinsured, or uninsured.

The goal of *Senior HealthLink* is to allow these seniors to age in place while maintaining optimum health for as long as possible. *Senior HealthLink's* services are totally free (with

the possible exception of materials for structural home modifications). For additional information, go to the HealthLink Web page at www.nvnacc.com/senior.html. Assessments of home safety and fall risk are a high priority for the *Senior HealthLink* program, since falls are a major contributor to seniors losing their ability to live independently at home. To that end, the *Senior HealthLink* program, in collaboration with the Chester County Health Department, developed a Home Safety Survey that student nurses from four area nursing schools administer during visits to senior citizens' homes. In addition, NHA has developed a Fall Risk Assessment Form that is currently being implemented in fall risk screening events throughout Chester County. The fall risk factors addressed include medication side effects, home safety and environmental factors, existing medical conditions, inactivity and mobility, nutrition, and hydration.

Partnering Makes the Program Strong

Senior HealthLink's services are based in a large part on the partnerships it has developed within the community. The home visits are conducted entirely by senior nursing students and their instructors from four different area nursing schools: the Brandywine Hospital's School of Nursing, West Chester University, Delaware County Community College, and the Center for Arts and Technology. This partnering effort was established at the beginning of *Senior HealthLink's* existence. The partnership benefits both sides. The nursing students gain valuable and necessary experience in community health nursing and credit toward graduation and licensure, and *Senior HealthLink* is able to provide program services with limited financial resources. *Senior HealthLink* does not pay the nursing schools or students during the school year. Thus, the staffing for home visits (during the academic school year) is entirely subsidized. During the summer months, junior nursing students are paid from *Senior HealthLink* to continue services.

Senior HealthLink has formed another creative partnership with the Chester County Health Department. The Health Department pays *Senior HealthLink* \$7.00 for every completed home assessment survey. The Health Department created the initial assessment tool, utilizing funds from the state of Pennsylvania. The Health Educator from the Chester County Health Department assists *Senior HealthLink's* program manager in training student nurses in use of this tool. In addition, the Health Educator and the Program Manager facilitate general falls screenings out in the community (thus generating additional clients for *Senior HealthLink* as well as referrals for additional services).

Referral Sources Provide Smooth Access to Services

The majority (60 percent) of *Senior HealthLink* clients are referred by the local hospital's discharge nurses, the emergency department of that same hospital (Chester County Hospital in West Chester, PA), and the skilled nursing group from Neighborhood Health Agencies, Inc. Thus, many clients are seen for the first time after a hospitalization and/or emergency department visit.

The Program Manager provides community outreach clinical services (blood pressure screenings, falls screenings, etc.) and health education programs at approximately 20 sites per month. The *Senior HealthLink* program is marketed through this community-based

work. *HealthLink's* parent organization, Neighborhood Health Agencies, Inc., is well known in the community. This recognition facilitates referrals to the home safety program, as well.

Funding Sources Keep the Program Growing

The Board of Directors of Neighborhood Health Agencies, Inc. believes strongly in the mission of *Senior HealthLink* and the need to address falls. Costs associated with the administration of the fall prevention program, community screens, equipment items, and education materials are covered by Neighborhood Health Agencies, Inc., United Way, Chester County Health Department, other small community grants, and donations. Neighborhood Health Agencies, Inc. is actively seeking additional grant funds to support this and other programs. Home visits are entirely free of charge and not reimbursable through insurance.

In-kind contributions from area schools of nursing are important sources of funding. The nursing students and their supervisors conduct the home assessments at no cost. Minor home modifications are contributed by volunteer organizations including Good Works and Project RAKE. Equipment acquisition is paid for out of the operating budget, donations, and other funds. Extended family members may be approached when more costly modifications and equipment items are warranted.

Assessing the Home and Its Occupant

In the beginning of their senior year, nursing students are introduced to the *Senior HealthLink* mission and programs and the fall risk assessment tool, which is used as part of the overall home visit assessment. This assessment tool was developed by the Chester County Health Department. The nursing students administer it after being trained by *Senior HealthLink's* program manager, the health educator of the Chester County Department of Health, and their nursing supervisors/teachers. The tool assesses home safety as well as individual health needs by looking at the client's exercise frequency, medication management, nutrition, hydration, elimination, pain, skin integrity, gait, and vital signs.

The *Senior HealthLink* home assessment focuses on the client. Caregivers are included in the visits if appropriate, but the older adults must agree to the initial visit and assessment and to subsequent visits and referrals. The results of the assessment are shared with the client and are followed up during subsequent visits. Because nursing students do the home visits, there is no time restriction, and often clients and students develop a strong bond. The nurses also have safety survey bags, which contain items needed for quick home modifications such as night lights, flashlights, bathmats, batteries, etc. The bag also contains a daily pillbox and safety assist devices. These bags are provided courtesy of the Chester County Health Department.

If a client needs to be referred to other agencies for additional home modifications (such as installation of a grab bar), those referrals are made. If a client needs to be referred for additional screening for balance and gait or medication adjustments, the primary care provider is called and asked to make a referral to the appropriate provider. Students and

their supervisors have access to the *Senior HealthLink* office at all times in case questions need to be answered immediately.

Nursing students are monitored closely. They may assess an older adult with their supervisor, another student, or alone, but every time a client is seen, they're required to confer about the case with their teaching supervisor and program manager. Further assessment needs and referrals are discussed and arranged with the case manager. Clients are then scheduled for follow-up services and nursing visits, depending upon their needs as determined by discussions between the client, supervisor, and nursing student.

During subsequent visits, nursing students follow up on recommended health promotion and fall prevention strategies. These strategies include but are not limited to use of schedules and medicine organizers to promote medication compliance, activities designed to increase participation in physical activity, and completion of simple home modifications. It is interesting to note that approximately 40 percent of visits do not result in recommendations for any home modifications, structural or minor. During follow-up visits, the nursing students and their supervisors also monitor any home modifications provided by contractors and the acquisition of equipment items. They check to confirm that the primary care provider has followed up on referral recommendations.

Less frail clients are referred to various exercise classes as appropriate. The local YMCA, which provides stretch and flex programs, senior aquatics, and body recall programs, is an important community resource. Seniors are helped with public transportation if needed. The *Senior HealthLink* program manager facilitates referrals to falls screening that occur in approximately twenty community sites per month

How Does this Tie to a More Comprehensive Fall Risk Assessment?

In addition to assessing eyesight, hearing, and footwear, the nursing students address each of the following at the initial assessment and in subsequent home visits:

- **Medication use.** If any medication adjustments are recommended, a call and follow up is made with the primary healthcare provider.
- **Basic gait.** The primary healthcare provider is asked to refer the client to physical therapy for further screening and intervention as needed. The nursing student supports follow-through with recommendations during subsequent home visits.
- **Blood pressure.** The primary healthcare provider assesses the client's need for further screening and intervention.
- **Home safety.** Minor adjustments are made by nursing students. If more structural adjustments are needed, the client is referred to the appropriate organization. Follow-up is provided during subsequent home visits.

How Does the Assessment Tie to Appropriate and High-quality Modifications?

Given the low income status of most clients served by the *Senior HealthLink*-program, volunteer organizations play an important role in providing home modifications. *Senior HealthLink* staff work closely with two volunteer organizations in particular: the Random Acts of Kindness Everywhere (Project RAKE) and Good Works. Paid administrators run both of these organizations, but services are provided by volunteer remodelers. Each of these organizations has their own training programs and most of the volunteers involved in the programs are retired carpenters or contractors. Volunteers are trained to work with seniors and to provide functionally appropriate modifications.

The Project RAKE and Good Works programs depend upon grants and donations to cover programmatic expenses. Labor is free; however, clients who can afford to pay for materials are asked to do so. If the client cannot afford materials, then additional resources, such as the Housing Partnership of Chester County, is called to help. Donated durable medical equipment is housed by the *Senior HealthLink* program and provided to low income seniors as needed.

Education to Supplement the Home Assessment and Modification Program

Given the involvement of student nurses in service delivery, there are no time constraints associated with the home visit. The nursing students provide comprehensive fall prevention education to older adult service recipients and support them in efforts to reduce their risk of falling and maintain their independence.

Educational materials are distributed during home visits and all screenings conducted by the program manager. Materials are being developed in Spanish for the growing Latino population in the county.

Examples of Home Modification Activities

Nursing students, with the permission of the client, can address modifications to the home. They can also work with the client in removing hazards from the home, including clutter. *Senior HealthLink* donates durable medical equipment and provides the equipment to seniors in need, as appropriate.

Evaluation Processes and Quality Improvement Mechanisms

Senior HealthLink uses client indicators to measure successful implementation. These indicators include:

- Ability to use home modifications appropriately;
- Ability to use assistive devices appropriately; and
- Satisfaction with services.

The program also gathers feedback from the nursing students and home remodelers to evaluate and restructure its services. A complete re-evaluation of the entire program is

conducted annually. Additionally, the Health Department re-evaluates its home fall risk assessment tool every year and modifies it, if necessary.

Incorporating Evidence and Best Practices

The program manager keeps abreast of the latest research and best practices in fall risk reduction. *Senior HealthLink*, as a multi-factorial fall risk reduction program, is dependent upon the cooperation of several different organizations to run successfully and to maintain its evidence base. One of those cooperating organizations is the Chester County Department of Health, which provides professional training in geriatrics to individuals working with the home fall risk assessment tool.

Where Do We Go from Here?

The *Senior HealthLink* program is developing its ability to provide services to Spanish-speaking seniors and their families through the use of Spanish-speaking volunteer interpreters. While the program has the vision and capability to expand programming to meet demand, several barriers to expansion exist. Most importantly, funding from organizations such as the United Way has been decreasing. In addition, the number of nursing students associated with local schools has declined. *Senior HealthLink* administrators plan to market to additional nursing schools as needed in the future.

Is this a Replicable Model?

Given the number of nursing and nursing assistant programs nationwide, the model of partnering with schools of nursing can be replicated. Schools of nursing need sites for clinical experience and thus may be motivated to participate in fall prevention programs.

What Print or Online Program Materials Are Available?

- Educational materials for older adults
- Evaluation tools

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Neighborhood Senior Services: Home Injury Prevention

What Is Creative About this Program?

The Neighborhood Senior Services, Home Injury Prevention (HIP) program targets socially isolated, frail, low-income older adults living in the underserved areas of Washtenaw County, MI. The program provides a comprehensive initial assessment to assess fall risk factors and other risk factors that can compromise safety in the home. The program director helped to establish the program 20 years ago and has demonstrated a commitment to building the program and improving its effectiveness. The program employs a creative and ambitious use of volunteers and garners financial support from the local association of builders.

The *HIP* home assessment tool was developed by a committee of local experts, including healthcare and aging service providers. A social worker is central in the initial assessment process and instrumental in linking vulnerable older adults to local agencies and services for funding (as needed, for home modifications) and an array of services. *HIP* program staff members work closely with medical-durable suppliers, who offer discounts and often provide repairs at little or no cost. Basic home modifications are often completed within one week after problems have been identified.

Lead Organization

Neighborhood Senior Services (NSS) began out of the home of a visionary in the early 1970s, and today serves all individuals aged 60+ in Washtenaw County, MI. The geographic region served by NSS is approximately 710 square miles. Approximately ten percent of Washtenaw County's population is over the age of 60, and nine percent is over the age of 85 according to the US 2000 Census. Most service recipients are White (71 percent); 26 percent of service recipients are African American. NSS maintains a strong relationship with two major medical facilities in the County: University of Michigan Hospitals and Saint Joseph Mercy Hospital.

NSS strives to help seniors age in place by providing environmental, physical, and emotional support. The NSS mission is to provide, secure, and coordinate practical and emotional assistance to older adults in Washtenaw County, promoting their independence and integration within their communities. This role is carried out efficiently, effectively, and compassionately with the highest priority going to those with the fewest resources. In this capacity, NSS serves approximately 1,000 unduplicated consumers each year. Services include: resource advocacy/social work; education about and prevention of substance abuse and elder abuse; home maintenance and repair services; medical access and accompanied transportation to medical appointments; volunteer services (e.g., companions, grocery shoppers, medical access drivers, heavy duty chores); and home injury prevention. For more information, go to: <http://www.nssweb.org/>.

Home Injury Prevention (HIP)

This outreach program serves to keep potentially vulnerable people safe at home. The average age of the older adults served in home injury prevention program is 78, with a higher population of African Americans (35 percent) served than in NSS's general programs. The population targeted in this prevention initiative is composed of the socially isolated, frail, low-income older adult living in the underserved areas of Washtenaw County. Most (75 percent) have household incomes under \$14,000. Over 33 percent are identified as disabled, and 85 percent are identified as frail.

The vast majority of the requests for *Home Injury Prevention* services (HIP) are self-referrals from women over the age of 70. Most of the consumers are in need of assistance with activities of daily living. Many are struggling to maintain their homes and need help with medication management and transportation. Sixty percent are recovering from an illness or surgery. Through creative partnerships and volunteer services, *HIP* provides home safety assessments and installation of safety devices such as grab bars, safety railings, smoke detectors, safety lighting, fire extinguishers, and wheelchair ramps. For additional information, see: <http://www.nssweb.org/seniors/index.htm>.

Partnering Makes the Program Strong

While the *HIP* program collaborates with a wide variety of partners, a key supporting partner is the Washtenaw County Home Builders' Association. Their Foundation has provided funding, consulting, and a cadre of volunteers in support of the *HIP* program. The Foundation provided some initial capacity building funds, with its continuing support serving to facilitate the expansion of HIP services into the rural parts of the county.

HIP initially recognized the value of membership in the Home Builders Association; however, since membership was expensive, it located a sponsor willing to support the dues. Since joining, *HIP* representatives have presented at Association meetings and have attended workshops where they have been able to recruit volunteers to the program. In a *quid pro quo* relationship, *HIP* will refer older adults with the ability to pay for modifications to the Association. In turn, *HIP* receives referrals from contractors for clients who need assessment services.

Other partnerships that serve to promote the program and serve as referral mechanisms include St. Joseph and Mercy Hospitals. NSS shares a building with these organizations and other community services, including Geriatric Health Services. Through these close relationships, these groups have established a cross-referral mechanism to better serve older adult clients. In addition, the *HIP* program staff works closely with medical-durable suppliers, who not only give 20 percent discounts, but often provide repairs at little or no cost. This working partnership provides a much needed service to *HIP* recipients. Smaller hardware stores also offer *HIP* clients significant discounts. Finally, the agency also works with a Detroit-based company that provides significant discounts on grab bars. The owner was invited to sit on the home safety task force and takes that responsibility seriously.

Referral Sources Provide Smooth Access to Services

HIP obtains referrals from a variety of home healthcare agencies, neighborhood clinics, hospital discharge planners, and the Area Agency on Aging Care Management Program. Given the target population, the *HIP* program has found that some of the best referral channels are through Meals on Wheels and home delivery service pharmacies and groceries. These home delivery service providers distribute brochures that explain *HIP* program services. The delivery service staff members are educated by *HIP* staff members to recognize potentially unsafe home environments and older adults in need. Thus, they are important referral sources. In addition, the visiting physician program serves to promote awareness of *HIP* services to in-home and homebound older adults and their families.

Funding Sources Keep the Program Growing

HIP has sought to diversify its funding sources and has cobbled together an array of support mechanisms to provide essentially free assessments and modifications. This program does operate a cost-sharing activity with older adults who can pay for modifications. However, it is described in the broadest terms of financial assessment, taking into account not only income but also circumstances of medical conditions (e.g., medication costs/month) and current liabilities. In actuality, very few older adults are contributing financially to the *HIP* effort.

In addition to the start up and ongoing funding provided by the Home Builders Association, *HIP* receives some funds from the Older Americans Act and the Medicaid Waiver Program. *HIP* administrators have also have been successful in accessing limited state and local community funds and foundation grants. Community development grants are earmarked for ramp building. *HIP* created a Ramp Task Force of contractors and inspectors who make ramp recommendations and protocols for ramps. They are currently using aluminum ramps that can be recycled and are easy to assemble. *HIP* sets up a work area in a warehouse where the volunteers put the aluminum ramps together. Although ramp recycling is an important component of the *HIP* program, most ramps are in use for the long-term.

Volunteer contributions are essential to program operation. Volunteers come from the Home Builders Association, Rebuilding Together, Real Estate One, and a variety of other community volunteer organizations, including Eastern Michigan University and Concordia College. *HIP* often joins with other agencies in combined recruitment activities. NSS also maintains a list of medical suppliers who offer reduced cost items as well as other resources, such as loan closets managed by local charities and churches.

Assessing the Home and Its Occupant

The home assessment tool used by *HIP* staff members was developed by a committee of local experts including healthcare and aging service providers. The assessment was designed to be user friendly and comprehensive. New assessors are trained through a process that includes shadowing experienced assessors.

A social worker performs initial assessments, but all the volunteers interacting with program participants (e.g., Meals on Wheels volunteers) are taught to be observant and to report concerns. The assessment tool includes a survey of the outside of the house, a smoke detector inspection, and review of the participant's fire escape and emergency plans. The agency staff members give careful consideration to client preferences when solutions to home safety concerns are being developed. They work with the older adults and caregivers to achieve practical, safe solutions. The older adult is included in the assessment and walk-through to ensure personal needs and desires are reflected in the assessment. As part of the training, assessors are taught to incorporate opportunities for education and problem solving into interactions with the older adults.

An Emergency Evacuation/Preparedness Toolkit is provided with the full packet of information given to each HIP program participant. Funding for the toolkit was provided by the Gold Foundation (a GE nonprofit foundation).

The social worker's assessment, which includes a basic functional assessment and a home assessment, is described as a triage or "single point of entry" process. Based on assessment findings, a plan of action is created. Assessment findings often lead to referrals to contractors or other service providers. Basic home modifications are completed by staff technicians and contractors and are often provided to *HIP* program participants within one week of referral to the contractor.

How Does this Tie to a More Comprehensive Fall Risk Assessment?

The *HIP* program can serve as the referral source or service in a fall prevention intervention. Referrals from the geriatric clinic or the home health program are common and *HIP* program services often complement services provided by these referral sources. Likewise, the social worker links program participants to appropriate healthcare and community services via referrals (e.g., Lifeline, geriatric clinics).

The initial *HIP* screening is comprehensive and includes an assessment of potential substance abuse, elder abuse, use of medications, healthcare history, and past medical history (including history of chronic diseases and medical conditions that can influence fall risk). In addition, the social worker also assesses for history of falls, fear of falling, dizziness, and vision difficulties. The home assessment provided through the *HIP* program features a room-by-room evaluation that is conducted with the older adult participant.

How Does the Assessment Tie to Appropriate and High- Quality Modifications?

Following the home assessment, a plan of action is created, and home modification work is scheduled. Any modification thought to be an immediate concern is prioritized in the work schedule of the agency. Most of the home repair/modification work is completed by on-staff technicians and contractors. Two general "contractors" on staff can address simple modifications needed (e.g., railings and grab bars). However, if the job is complex

or large, it can be referred to other contractors in the community. The *HIP* administrator estimates that 90 percent of homes assessed are in need of some modification to enhance resident safety.

When more expensive home modifications are needed, the social worker assesses whether or not program participants qualify for community development funds, VA funds, or rehabilitation coverage. The social worker also identifies program participants in need of volunteer services because they do not qualify for existing programs.

Background checks, periodic reviews, and annual evaluations are conducted on volunteers. NSS has a full-time volunteer coordinator who arranges for background checks, appropriate training, and evaluations. Those volunteers, who are unlicensed, may be assigned to work with licensed staff. Many volunteers offer up to ten hours of service a week. The contribution made by program volunteers has greatly enhanced the ability of the agency to service clients in rural areas.

The home modification work provided through the *HIP* program is primarily provided to low-income seniors who receive free home services. For individuals who can self-fund home modifications, the program administrators maintain a list of recommended contractors. Upon completion of home modification work, the social worker conducts a follow-up call to assess client satisfaction.

Education to Supplement the Home Assessment and Modification Program

The assessors are trained to educate older adults and their families about home safety. They are also trained to work with the older adult and his or her family members to identify, prioritize, and address potential safety issues that may arise in the future. A large packet of community- and safety-related information is routinely distributed to all older adults and volunteers. A social worker assesses participants' follow-through on recommendations, use of equipment provided, and level of satisfaction with any home modifications made via a follow up phone call. Other education activities associated with the *HIP* program include:

- Dissemination of the Emergency Preparedness Toolkits, which feature descriptions of actions to take in emergency situations (e.g., fire);
- Involvement in the annual smoke battery replacement program (sponsored by the Home Builders' Association, who underwrites the batteries); and
- Involvement in a campaign to reduce West Nile Virus vectors and breeding areas.

During both the battery replacement program and the West Nile Virus prevention campaign, older adults' homes are assessed for safety.

Examples of Home Modification Activities

Home modification activities frequently undertaken by *HIP* program staff include: installation of grab bars, stairway railings, and ramps. Program participants may be

referred to a lending closet for recycled equipment, or equipment may be obtained or bought and brought to the older adult through local vendors.

Evaluation Processes and Quality Improvement Mechanisms

Feedback from program participants is sought primarily via telephone through calls made after thirty days, sixty days, and one year. Postcards are also used to obtain feedback, but to a lesser degree. Consumer feedback is sought to assess the quality of the volunteer service, the impact of program participation on safety, and prevention awareness. Annual surveys and focus groups yield further feedback on the *HIP* program and have led to organizational change.

Staff members routinely monitor new volunteers and conduct periodic checks on known volunteers. Work costing over \$600 requires a permit and therefore results in a county inspection.

Incorporating the Evidence and Best Practices

The program administrator believes that routinely attending the Home Builders Association meetings and working with suppliers allows program staff to keep up with the latest technology. Staff members also attend conferences to learn about innovations in home safety. An expert panel was involved in the development of the assessment tool. The assessment tool now in use is based upon the strongest features of tools used locally and best practices.

Is this a Replicable Model?

The strong, mutually supportive relationship with the Home Builders Association serves as an important model that could be explored in other communities.

Where Do We Go from Here?

Program expansion is a consistent goal. To meet increased demand for services, program administrators carefully monitor the inventory of program resources and seek out new volunteer service providers. Unfortunately, closure of the local Pfizer Inc plant may negatively impact the number of HIP volunteers.

HIP is currently working with 60 other organizations serving older adults in the Washtenaw County, MI, on the *Blueprint for Aging* initiative. There is great interest in replicating this program in other counties. The *HIP* program administrator has been working on developing a model for that purpose.

What Print or Online Program Materials Are Available?

- Guidelines/policies regarding implementation
- A line item budget
- Program manuals
- Client satisfaction surveys

- Educational materials for older adults
- Marketing materials
- Evaluation processes and tools

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Community Outreach Services Home Safety Unit: Open Hands

What Is Creative About this Program?

The Open Hands program of Santa Fe, New Mexico, uses a variety of funding strategies to provide customized services to low-income, terminally ill, and homebound older adults. The *Home Safety Unit* is one aspect of comprehensive community outreach services offered through Open Hands. Core staff members are trained to provide home safety modifications. The staff members' expertise and commitment to creating safe living environments for older adults are assets that serve to ensure consistent, high-quality services. *Home Safety Unit* staff members have particular expertise in addressing the home safety needs associated with adobe structures. Because many service recipients reside in such buildings, this expertise contributes to initiatives that promote aging in place in the Santa Fe area.

Lead Organization

Open Hands is a nonprofit service agency operating in Santa Fe, NM. It was founded in 1977 to provide volunteer home visiting, homemaker, and personal care services for the terminally ill. Open Hands has responded to growing community needs by adding new programs and resources. In-home and on-site services are now provided to terminally ill and at-risk older adults. In the late 1990's, Open Hands moved into a new facility that includes a great room, art and horticultural therapy rooms, a landscaped courtyard, a separate *Side-by-Side* room for care of those with Alzheimer's and dementia, and a commercial kitchen.

Home safety assessment and modification services are provided as one aspect of comprehensive community outreach services. Other services offered through ***Open Hands*** include:

- **Adult day services.** *Offered Monday thru Friday.* Provides clients with opportunities to interact socially, engage in creative activities, exercise, enjoy nutritious meals, and receive care provided by healthcare professionals such as nurses and nutritionists.
- **Respite care services.** *Offered on Saturdays.* Provides respite for caregivers of older adults.
- **Financial assistance.** Provides eligible individuals with financial assistance to cover rent, mortgage, or utility costs.
- **Medical equipment loan services.** Provides medical equipment (e.g., wheelchairs, quad canes, walkers, raised toilet seats, and transfer benches) to anyone in the community, free of charge for up to two months.
- **Volunteer services.** Provides care and companionship to 70 elderly community residents.
- **Medication information services.** Provides information regarding cost-effective purchase and safe use of prescription medications.

- **Case management.** Provides needs assessment, liaison, and referral services to older adults and their families.

Open Hands serves 12,000 clients and households per year. Approximately 80 percent of clients served by Open Hands on an annual basis are considered very low income under the city of Santa Fe's guidelines. For additional information, refer to the Open Hands Web site at www.openhands.org/.

Home Safety Unit

Open Hands houses a *Home Safety Unit* that extends services deep into the community. The *Home Safety Unit* is designed to ensure that older adult residents of Santa Fe have safe and accessible living arrangements. The *Home Safety Unit* primarily serves low income, frail older adults and provides both home safety needs assessments and home modifications. These services are offered quickly, safely, and at low cost or no cost. During 2006–2007, the *Home Safety Unit* conducted home safety assessments and performed necessary repair and modifications that benefited 395 limited-mobility or homebound individuals.

Service begins with a home-based client interview to determine specific needs, individual concerns, and home safety goals. The physical assessment of the home is always free of charge. Following the assessment, options for remediation of home hazards are discussed collaboratively with the older adult service recipient. Most are completed by trained *Home Safety Unit* staff members. However, when Open Hands cannot provide the needed modifications or services, referrals are made to other local organizations. Clients are given a booklet that addresses home and personal safety issues.

Partnering Makes the Program Strong

Open Hands has developed strong partnerships with a variety of caregiver organizations, healthcare providers, aging service providers, and organizations serving people with special conditions or disabilities. Open Hands has a particularly strong partnership with the Area Agency on Aging. In support of the *Home Safety Unit* activities, Open Hands staff have developed and nurtured a partnership with occupational therapists and case workers who work in referral organizations.

Referral Sources Provide Smooth Access to Services

Many service recipients access services offered by Open Hands directly through self-referral. The Medicaid Waiver Program and the Area Agency on Aging are also key referral sources.

Open Hands actively markets program services to older adults, caregivers, and others in the Santa Fe community independently and in collaboration with the Area Agency on Aging. Open Hands staff members participate in the annual Home and Garden Show in Santa Fe and in many area health fairs. The Area Agency on Aging manages a database of residents over age 60 in a four-county area located in the central north area of the state of New Mexico. This database promotes the targeting of services and marketing efforts.

The *Home Safety Unit* lead administrator has developed a strong collaborative relationship with case managers who work with elderly and disabled networks in New Mexico. As a result, the Open Hands' *Home Safety Unit* is often the preferred agency when care providers are seeking services for clients in need of home assessments and interventions. The *Home Safety Unit*'s short response time and high-quality service has been noted by referring agencies as key to helping maintain the safety of clients transitioning back to their home environment after being discharged from the hospital. This growing reputation serves to market the program's services and build a referral base. It is important to note that the *Home Safety Unit* fills a need for low-income older adults of the Santa Fe area. No other organizations in Santa Fe install home safety equipment and provide home modifications for free or at a substantially reduced cost.

Funding Sources Keep the Program Growing

Depending on eligibility, home safety equipment and services are free to low-income older adults. Open Hands receives funding through the Medicaid Waiver Program from the city of Santa Fe to provide adult day and home safety services to seniors. In addition to being a Community Services Block Grant (CSBG) agency, Open Hands distributes Emergency Food and Shelter Program dollars allocated through FEMA. Foundations, corporations, individual clients and their family members, and other community service organizations also contribute to the organization.

No volunteers are used in the *Home Safety Unit* due to liability concerns. However, the Temporary Assistance for Needy Families (TANF) Program and the Job Opportunities and Basic Skills Training (JOBS) program donated administrative support. In addition, donated materials come from a variety of sources to stock the Open Hands equipment loan banks. For example, area Home Depot and Lowe's home improvement stores donate building materials in a limited manner.

Assessing the Home and Its Occupant

Occupational therapists and case workers conduct some assessments when they are providing services directly to the client. They then discuss assessment outcomes and needed modifications with the *Home Safety Unit* Supervisor. The lead *Home Safety Unit* supervisor has an important role in providing home modifications to older adult service recipients. This individual, who has taken a number of fall prevention and continuing education courses and who has been trained by staff occupational and physical therapists, conducts many of the assessments using the home safety checklist developed by the U.S. Consumer Product Safety Commission. The *Home Safety Unit* supervisor also has a role in educating case managers about home safety modifications and equipment. Standards outlined by the Americans with Disabilities Act are emphasized during these trainings. Whether conducted by therapists or the *Home Safety Unit* supervisor, all assessments utilize a client-centered approach that considers the older adult's functional status and his or her ability to benefit from proposed modifications. *Home Safety Unit* staff members have developed a process to determine how home safety problems are prioritized. This process includes client feedback, case manager recommendations, and assessment outcomes. Since many of the clients are cognitively impaired, family members and caregivers are often included in the assessment and modification decisions.

How Does this Tie to a More Comprehensive Fall Risk Assessment?

Open Hands is a full-service organization. As such, clients at high risk for falls are procedurally referred through case managers for additional risk assessments. Older adults who attend the adult day program receive services from a registered nurse and nutritionist. The RN has been trained to provide the *Matter of Balance* program, which was designed to reduce fear of falling and increase activity levels among community-dwelling older adults. A strength trainer is available to high risk clients. Plans are in place for hiring of a part-time physical therapist.

How Does the Assessment Tie to Appropriate and High Quality Modifications?

The *Home Safety Unit* supervisor manages a well trained crew of experienced carpenters who make all home safety modifications. Outside organizations are only utilized for extensive modification work or for specialized services such as weatherization programs. The *Home Safety Unit* supervisor has developed a strong working relationship with outside contractors and is able to monitor their work.

For the most part, the *Home Safety Unit* crew members are trained on the job; however, some have taken falls prevention seminars. The *Home Safety Unit* supervisor trains them further to meet standards of safety, ADA, and appropriate certifying bodies. Carpenters are assessed for technical skills, their focus on safety, and compatibility in working with older adults.

The *Home Safety Unit* staff has tremendous longevity and autonomy. They have the freedom to set their own schedules and to contact clients directly. The *Home Safety Unit* supervisor manages the entire staffing process and oversees their work. Clients routinely report satisfaction with the professionalism and caring nature of the staff members.

Recruitment and staff member recruitment has not been an issue. Crew members like the autonomy and client-centered approach to services, which accounts for the longevity of employment.

It should be noted that the adobe homes proliferating in the Santa Fe area have special modification needs, which have been incorporated into Open Hands' *Home Safety Unit*. Thus, the *Unit* provides highly marketable, specialized services that promote aging in place.

Education to Supplement the Home Assessment and Modification Program

Registered nurses, nutritionists, occupational therapists, and case managers working with older adults and their caregivers/significant others routinely teach clients to recognize potential safety issues and hazards in the home. Clients are also taught how to create and implement action plans to resolve identified hazards.

Once the home modifications are completed, either the service provider or the *Home Safety Unit* supervisor educates clients and case managers about the home safety modifications and equipment provided. A *Packet for Life* is provided to older adult service recipients. The packet includes a form that is completed with assistance from Open Hands staff and helps paramedics identify and treat older adults. The packet also includes a booklet on home safety. Other educational materials are available; many are written in English and Spanish. Some *Home Safety Unit* staff members are bilingual, which helps facilitate service to a large Hispanic population.

Examples of Home Modification Activities

Services provided by *Home Safety Unit* staff at no cost include ramp construction or repair; installation of grab bars, handrails, and smoke detectors; widening doorways; and converting bathtubs to showers. Rugs on tile floors are often tacked down or removed as part of a home modification. The lead for the *Home Safety Unit* may also help older adults rearrange furniture and enhance lighting. TubCuts™ are also coordinated via the Home Safety Unit services.

Evaluation Processes and Quality Improvement Mechanisms

Open Hands routinely monitors the older adults' ability to use home modifications and assistive devices appropriately and safely. They also assess client satisfaction with service delivery. Open Hands staff members assess the satisfaction and usability of the home safety modifications on a regular basis. For example, handrails and grab bars may be moved or reinstalled based on client feedback. In addition, the case managers visit with older adult service recipients on a regular basis and can assess changing and emerging needs. The Disability and Elderly Waiver (D&E) Program allows for a \$7,000 investment every five years for environmental modifications, which can serve to accommodate the changing needs of the aging population.

Although the data and feedback collected are used on an individual level, Open Hands believes its *Home Safety Unit* is making a significant community impact. Staff members often receive written testimonials, prayer cards, and anecdotal information from older adults and their families that describe how the interventions provided have “saved their lives.”

Where Do We Go from Here?

Due to the growing retirement community in New Mexico, home safety needs in the community served by Open Hands are growing. Open Hands staff members face many barriers to providing services to individuals in need. These barriers include limited funding, lack of community awareness about fall prevention and home safety, and geographic barriers that make outreach beyond the immediate region costly. However, within its defined scope of services, Open Hands has a commitment and responsiveness to community needs that is serving to grow its referral base.

Is this a Replicable Model?

Open Hands provides focused home safety assessments and modification services that could be reproduced in similar agencies. However, the limited availability of individuals qualified to provide safe home modifications may be a barrier to program replication.

What Print or Online Program Materials Are Available?

- Guidelines and policies regarding implementation
- Client satisfaction surveys
- Educational materials for older adults
- Educational materials for other audiences
- Marketing materials
- Evaluation processes
- News/media articles

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Pitt County Council on Aging: SPICE for Life

What Is Creative About this Program?

The *Senior Safety, Prevention, Intervention and Community Education (SPICE) for Life* program began as a result of collaboration between an occupational therapist with a strong interest in fall prevention and the Pitt County Council on Aging. Strong community-based partnerships support the program's financing, growth, and ability to accomplish its goal of preventing falls among vulnerable, low income older adults in the Greenville, North Carolina, area. The program is effectively marketed to older adults through newspaper stories and flyers placed in healthcare providers' offices and area pharmacies. Brochures describing the program are also included with meals delivered by the local Meals on Wheels service. The comprehensive home assessment process involves a high level of collaboration between service providers and *SPICE* program recipients. *SPICE* staff members have a vast knowledge of local resources. Use of these local resources helps to bridge any gaps between *SPICE* program offerings and seniors' needs. A strong evaluation process is in place and involves one-year follow up of service recipients.

Lead Organization

The Pitt County Council on Aging is a private, nonprofit organization chartered in September 1975 and designated as the *Focal Point on Aging* in 1978 by the Governor and the Pitt County Board of Commissioners. Its mission is to improve the quality of life for older Americans through service, advocacy, education, and volunteer efforts. Through a high quality delivery system and coordination of efforts with public and private entities, the Council enables older adults to secure and maintain maximum independence and dignity.

The Council provides nutrition services, transportation, information and referrals, assessment and case assistance, recreational activities, educational workshops, aging conferences, counseling, friendly visits, and other services for Pitt County, North Carolina, residents of age 60+. The Pitt County Council on Aging operates five senior centers that serve seniors throughout the county. For additional information, go to the Pitt County Council on Aging Web site: <http://www.pittcoa.com>.

SPICE for Life (Senior Safety, Prevention, Intervention and Community Education)

This unique program began in a collaboration between a private occupational therapy service and the Pitt County Council on Aging. The occupational therapists enjoyed working with low-income seniors, and felt it was important to reach out to those individuals before they experienced a fall. While working with the Council, a grant application was developed to fund an in-home assessment process to enhance the safety of older adults living in the community. A key component of the program is volunteers.

The target population for SPICE is older adults age 60+ who are at high risk for loss of independence due to a decreased ability to function within the home. Individuals must also have incomes below 150 percent of the Federal Poverty Level. Fall risk factors typically addressed include home and environmental safety, medications, vision, mobility, and lighting.

Referrals for the program are called into the Pitt County Council on Aging (PCCOA) or are identified by social workers at the PCCOA. If the determination is made that the individual meets the criteria for the fall prevention/home safety program and grant funding is available, a referral is sent to the occupational therapist (OT) leading the program. The OT then further assesses eligibility and sets up an appointment for a home visit to perform a home modification and fall risk assessment. Once the needs are identified, each low-income senior who qualifies for the fall prevention/home safety program is educated on fall prevention strategies and provided with the necessary equipment and home modifications. However, if the equipment is covered under Medicare or Medicaid, a prescription is obtained as needed and grant funds are not used for these items. Although much of the durable medical equipment (DME) is not covered through Medicare, the program still provides it to recipients free of charge. When necessary, referrals for additional services are made to other service providers and agencies. A copy of the assessment, recommendations, and services provided are given to the senior's case manager at PCCOA.

Referral sources are varied (physicians, home health providers, aging network providers, etc.) and continue to increase as the community becomes more aware of the program.

Partnering Makes the Program Strong

SPICE makes use of a variety of rich partnerships that extend its reach deep into the community.

One particularly creative aspect of the program's partnering effort is with DME providers. The DME provider supports the program by providing discounts on grab bars, shower chairs, and other equipment. They also provide storage space for items ordered in bulk, a practice used to lower cost further. In addition, the *SPICE* program recycles used equipment, received through donations, and the DME provider inspects and sanitizes the equipment to ensure safety. The program continues to seek additional DME providers who will provide the same level of quality customer service and discounts on equipment.

To sustain this important partnership, the lead agency keeps an active and open communication channel. In addition, they serve as a distribution strategy for the *SPICE* brochures.

Volunteers are also critically important to the success of the *SPICE* program. *SPICE* volunteers provide many services, including building ramps and railings to specification. *SPICE* administrators are working to expand the volunteer program in order to meet the increased demand for *SPICE* services.

Referral Sources Provide Smooth Access to Services

SPICE makes use of a variety of referral sources and obtains 75 percent of referrals through aging services providers, home health agencies, social services, physicians, hospitals, discharge planners, and others within the aging network (e.g., hospice, independent living). In addition, social workers who work with *Meals on Wheels* and other PCCOA programs serve as key referral sources.

Approximately 25 percent of *SPICE* clients are self-referred. The program is heavily marketed to older adults through newspaper stories, as well as flyers placed in healthcare provider offices and area pharmacies. Brochures are also included with *Meals on Wheels* deliveries and service information is provided at the five area senior centers. In addition, program leaders make numerous presentations to both older adults and service providers in a variety of venues that attract older adults. For ease of self-referral, older adults may access services through the local senior “info line.”

The program’s quality improvement procedures require the lead agency to follow up with the referral sources to ensure satisfaction with the quality of service provided.

Funding Sources Keep the Program Growing

The Council on Aging, as the lead organization, receives funding through a variety of sources. These sources include the Older Americans’ Act, County of Pitt, United Way of Pitt County, Perkins’ Foundation, and the NC General Assembly. In addition, there are significant local contributions from individuals; civic, religious, and philanthropic organizations; and foundations.

The *SPICE* program makes creative use of funding sources cobbled together from grants given by the Pitt Memorial Hospital Foundation and the Safe Communities Coalition of Pitt County. In addition, it capitalizes on donated services and equipment, as well as volunteer labor contributions. When services are allowed under Medicare and Medicaid, program funds are not used.

Although recipients are not charged for services, an opportunity to contribute is offered. These contributions from program participants provide some nominal additional funding for the *SPICE* program. The program makes use of recycled equipment, and clients are asked to return equipment for recycling if it is no longer needed. Such returns and donations provide significant support to the program reach.

Funding is used primarily to cover modifications. Ninety percent of program funding is spent on equipment acquisition and home modifications; only 10 percent is spent on home assessments. The lead agency provides in-kind administrative support.

Assessing the Home and Its Occupant

SPICE makes use of two assessment tools that are standard to the program: a fall interview questionnaire to assess the individual and a home safety modification assessment tool. The occupational therapist on staff conducts the home assessment and orders the intervention. However, if the patient is already receiving services from another

occupational or physical therapist, the referring organization will complete the assessment and refer to the *SPICE* program for equipment when there is no other payor (Medicare, Medicaid or private insurance).

Using the standard assessment form, the occupational therapist works with the older adult to identify unsafe practices or home environments. Together, they determine goals, equipment needs, interventions, and supportive services. If a caregiver is intimately involved in the senior's care, that caregiver is always included in discussions about equipment, modifications, and behavior change strategies. This fosters joint decision-making and ownership.

The lead occupational therapist is board-certified in gerontology, has significant experience in this area of practice, and serves to train other therapists on staff or in the community.

How Does this Tie to a More Comprehensive Fall Risk Assessment?

The *SPICE for Life* program is a multi-dimensional program for fall prevention and home safety. The home safety and modification process is one part of a larger, more comprehensive program. In addition to providing home safety modifications to low-income seniors, the program encompasses a community education component. This provides education for seniors, caregivers, family members, and healthcare professionals on home safety and strategies to prevent falls.

The home assessment process itself is interactive and serves as a rich source of information on the functional status of the older adult within the home environment. Use of CDC resources supports the OT's efforts to assess a variety of risk factors and identify specific needs. While the occupational therapist can address many of the major risk factors, referrals to other service providers are facilitated as appropriate, primarily through the Pitt County Council on Aging's information and referral program. This broad utilization of community resources is a key component of the program. For example, individuals with balance and mobility limitations may be referred to physical therapists. Referrals are also made to monitoring programs, such as *Lifeline*, when requested. The need for smoke alarms is coordinated with the local fire department.

Client and caregiver education is an important part of the *SPICE* program. *SPICE* program participants are taught about behaviors and environmental risk factors contributing to fall risk. Equipment that can be used to increase functional independence is introduced and participants are taught how to use it safely. This equipment includes bathtub seats, grab bars, and elevated toilet seats.

How Does the Assessment Tie to Appropriate and High-Quality Modifications?

SPICE makes significant use of volunteers to complete minor modifications. Volunteers are primarily retired members of churches and other community action groups. In

addition, student volunteers from East Carolina University and the Chamber of Commerce Leadership Institute assist with projects. Experienced volunteers supervise and train other volunteers to follow construction codes and provide minor modifications as recommended by the occupational therapist. In addition, the occupational therapists involved in the SPICE program previously conducted a countywide search for a contractor who enjoyed working with older adults and was qualified to install grab bars and rails. A female contractor was subsequently identified and is now used in much of the work that volunteers are unable to provide. There is ongoing communication between the therapist, the contractor, and the older adults about placement and functional use of grab bars.

Home safety needs are prioritized according to individual risk factors in collaboration with the client. Typically, the senior's functional capacity within the bathroom is addressed first as the source of the greatest risk.

Education to Supplement the Home Assessment and Modification Program

The educational/training component of the assessment and the follow-up activities include teaching older adults and caregivers how to recognize hazards in the home and how to create and implement an action plan to resolve risks before a fall happens. Therapists also work with seniors to provide adequate lighting in the home as needed. Other strategies may include reorganizing cabinets to reduce the need for use of a step stool. In addition, tips to improve and strengthen memory compensation are provided.

Recipients also receive educational materials and fall prevention tip sheets. All materials are available in both English and Spanish.

Examples of Home Modification Activities

Grab bar installation is procured through a preferred general contractor or volunteer service providers in collaboration with the occupational therapists. Hand-held shower nozzles and other equipment are installed by the DME provider. The occupational therapist, in collaboration with the older adult and caregiver(s), manages simple changes in the home. Addressing clutter and tripping hazards, as well as teaching problem-solving techniques, is included in the process.

Evaluation Processes and Quality Improvement Mechanisms

SPICE has embedded an evaluation process to assess quality of services and the enhancement of a safe environment for older adults at risk for falling. This evaluation process extends over one year, with home visits at one month and six months. A re-evaluation is conducted by phone at the end of one year.

Within one month of *SPICE* providing a service, the occupational therapist conducts a home visit to ensure that appropriate equipment items and/or modifications have been completed as required and to ensure proper use by the client. As part of the visit, the

occupational therapist also points out risk-taking behaviors he or she observes and provides suggestions about how to safely engage in day-to-day activities. At the one-year point, the occupational therapist conducts a telephone interview to assess quality of life, activities of daily living, adaptation to equipment and modifications, and client satisfaction. Any reported issues or difficulties result in a follow-up visit.

In collaboration with representatives from the lead agency, the social worker measures client satisfaction within one month of patient discharge. All individuals who serve the patient as part of the *SPICE* program are evaluated. Thus far, results from the evaluations based on the clients' self-report indicate that falls among program participants have decreased.

Incorporating Evidence and Best Practices

The leading contributors to *SPICE* are the Occupational Therapists who stay abreast of home safety research. They have incorporated tools from the CDC in their effort to address all the major risk factors for falls.

Where Do We Go from Here?

This project was initiated with grant funding, which is difficult to renew continuously. Nonetheless, the capacity of the *SPICE* program has doubled. In order to expand the program even more, the volunteer base will need to expand. This might be accomplished by reaching out to the faith-based community.

Is this a Replicable Model?

Experienced occupational therapists are central to the success of the *SPICE* program. The *SPICE* program might be difficult to replicate in areas where it is difficult to access occupational therapists with expertise in fall prevention.

What Print or Online Program Materials Are Available?

- Guidelines/policies regarding implementation
- A line-item budget
- Client satisfaction surveys
- Educational materials for older adults
- Educational materials for other audiences
- Marketing materials
- Evaluation processes
- Evaluation tools
- News/media articles

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Saint Elizabeth Home Care Services: Fall Risk Reduction Project

What Is Creative About this Program?

The *Fall Risk Reduction Project* was initiated by members of the Saint Elizabeth's home care staff. Staff members from diverse healthcare backgrounds have implemented a proactive assessment and intervention approach that is above and beyond what is "required" of a home care agency. The *Project* effectively markets its services and draws referrals from a number of sources, including local retirement communities and assisted living. Creative collaborations with *Lincoln Information for the Elderly* and the *Assistive Technology and Home Modification Partnership* support providing equipment and home modifications to seniors in need. A client-centered approach to assessment and reduction of hazards in the home supports the effectiveness of this program.

In a home care setting, the potential for healthcare providers to work in "silos" exists. Saint Elizabeth's has also built in a structure to facilitate interdisciplinary communication.

Lead Organization

Saint Elizabeth Regional Medical Center's Home Care Services is a nonprofit home care agency located in Lincoln, NE, a Midwestern community of approximately 250,000 people. Most of the older adults residing in Lincoln are native-born retirees but present a diverse group of older adults. These individuals typically have at least one family member in the community. Several retirement homes, assisted living facilities, and skilled nursing facilities are located in Lincoln. Additionally, there are ten home-health agencies and four hospice organizations providing services in the region.

The Saint Elizabeth Home Care Service enables patients to receive a full range of medical care and attention in the comfort of their home environment. Depending upon patients' personal needs, a cadre of medical professionals is available to provide physical therapy, ongoing lab testing, wound management, and other follow-up services. Additionally, family members and caregivers receive hands-on care instructions and support to help cope with a loved one's illness. Saint Elizabeth's Home Care Services can also arrange for medically appropriate equipment in the home. For additional information, go to their home page: <http://www.saintelizabethonline.com>.

Fall Risk Reduction Project

The *Fall Risk Reduction Project* began in 2003 and was again given heightened attention in 2006 as part of Saint Elizabeth's continuous quality improvement program. The need to pay attention to falls was initiated by the Home Care agency's multidisciplinary care team.

As part of the *Project*, all older adults receiving home care services undergo an assessment for risk of falls. Several fall risk factors are assessed and scored including: mental status, history of falls in the past three months, ambulation, incontinence, vision, gait and balance, blood pressure, medications, and predisposing diseases or conditions. The *Fall Risk Reduction Project* involves professional healthcare providers, including registered nurses, physical therapists (PTs), and occupational therapists (OTs) in the home assessment process. A PT on staff has special training in fall risk assessment and has presented educational sessions to the home care team. A pharmacist and social worker are also part of the assessment team.

Patients identified as high risk through the assessment process are considered for physical and/or occupational therapy consultation, if therapy has not already been ordered. Home assessment and modification and assistive equipment may be recommended after therapy consultation.. For more information go to:

http://www.saintelizabethonline.com/index.php?lev=84&page_id=84&pp=68.

Partnering Makes the Program Strong

In addition to community-based partners that serve as referral sources, key community partners and referral agencies are considered essential to the project: Lincoln Information For the Elderly (LIFE) and the Assistive Technology and Home Modification Partnership. LIFE is funded by grants and city-based funds. Seniors are not charged for LIFE services. Through LIFE, seniors can access social services, home assessment and modification services, volunteer services, and handymen services beyond those provided through the Saint Elizabeth's home care program. The relationship between Saint Elizabeth's Home Care Services and the LIFE program is reciprocal, in that they refer clients to each other.

The Assistive Technology and Home Modification Partnership is part of the Nebraska Commission for the Blind and Physically Impaired. It is also funded through grants. Individuals referred to this program complete a financial need form to qualify for funding as needed to complete recommended home improvements. Through this program, low-income seniors can access home modifications and assistive technology. If an older adult does not qualify, the program will provide names of handymen who can provide the home modification services for appropriate cost. The relationship with the LIFE program has been going on for 20 years. The referral relationship with the Assistive Technology and Home Modification Partnership began within the past five years.

Referral Sources Provide Smooth Access to Services

The primary referral sources for Saint Elizabeth's services are area healthcare providers. The Saint Elizabeth's Home Care department has built strong relationships with two area hospitals and is itself part of a larger healthcare system with a well coordinated (internal) referral system. Many older adults are referred for home care services upon discharge from the hospital.

The program receives many referrals for individuals covered by Medicare and Medicaid who present with a history of falling or who are at high risk for falls. A significant

number of outpatient clients are referred to the Saint Elizabeth's home care team from area physicians as part of a comprehensive assessment for fall prevention. The home care nursing/OT/PT staff can assess the home as well as the older adult's functioning in it to augment the medical risk review as part of a comprehensive approach to fall prevention.

Saint Elizabeth's has also developed a relationship with the area rehabilitation facility and several skilled nursing facilities (SNFs). These facilities are important referral sources for the *Fall Risk Reduction Project*. The primary goal for this typically frail population is to give them the skills they need to live safely at home or in SNFs.

Retirement communities and assisted living facilities serve as another source of referral for the *Fall Risk Reduction Project*. Ten assisted living facilities are located in the Saint Elizabeth's service area; one is among the largest in the US. In these retirement and assisted living communities, staff members may initiate a home care referral for any resident observed falling. This is part of the facilities' commitment to keeping their residents safe within their environments. Often, clients referred from a retirement community or an assisted living facility are seen by staff of the project *before* an injury occurs.

Saint Elizabeth's also markets directly to older adults through health fairs and foot clinics, as well as newsletters that go out to some of the assisted living facilities and retirement communities.

It is estimated that hospital-based referrals account for half of the project's home care fall prevention services. Direct healthcare provider referrals account for 15 percent. The remaining referrals are generated by rehabilitation facilities (20 percent) or retirement communities/assisted living facilities (15 percent).

Funding Sources Keep the Program Growing

Saint Elizabeth Regional Medical System includes a hospice, which receives a large number of "in memoriam" donations. Distribution through the hospice foundation includes funds for home care staff training and for small equipment items (e.g., bath benches) for home care recipients. Due to state and Medicare funding restrictions on such safety items, this source of funding is especially helpful.

In order to get the best price possible on items needed to improve home safety, the Home Care Service staff members have negotiated with a local provider to keep the costs low.

Home Assessments conducted as part of the *Project* are primarily covered by Medicare, with approximately 10 percent paid under Medicaid and the remaining 10 percent through private pay. Medicare covers about 50 percent of home safety equipment; the remainder is covered through funding previously described or private pay.

The trained Home Care assessment staff will also advise older adults and family members on grab bar installation or other small modification projects. The actual installation is often handled by the Assistive Technology and Home Modifications

Partnership. Alternatively, clients who are paying out-of-pocket can be referred to the LIFE program for a list of reputable handymen. Individuals in need of larger home modifications (e.g., ramp construction) are referred to the Assistive Technology and Home Modifications Partnership.

Assessing the Home and Its Occupant

The home assessment is individualized and performed collaboratively in the client's home, ideally with the caregiver present. Also, because the assessment occurs in the older adult's home, care recipients are typically very assertive about reporting what is "off limits" (in terms of home modifications). Sometimes the caregivers and older adult client have different opinions about what types of changes in the home are needed. The intake interview helps to identify these situations, and the team (including the client) can work toward a resolution over time. In addition, the home care service staff members also engage the client in what they call an "OASIS walk." This involves asking the senior to show the healthcare professional "around the house." During this walk, the gait and use of mobility devices, as well as functional layout of the house and how the older adult functions within the house, are assessed.

Therapists or nurses working with home care clients must have two or more years of experience. All of the home care therapists or nurses also participate in a comprehensive orientation process, during which they learn how to administer the intake tool and the fall risk assessment program.

How Does this Tie to a More Comprehensive Fall Risk Assessment?

The intake evaluation conducted on all new clients includes a comprehensive fall risk evaluation. This evaluation includes, but is not limited to, assessment of the following risk factors: level of consciousness, mental status, history of falls in the past three months, ambulation status, elimination status, vision, gait and balance activities, blood pressure, medications taken, and the presence of diseases that increase fall risk. In addition, each patient's medication regimen is reviewed by a pharmacist for potential interactions and errors.

The *Fall Risk Reduction Project* uses both internal and external triggers to call attention to fall risk factors. Either a nurse or a physical therapist completes the intake assessment. When a nurse does it, a risk score greater than 10 serves as a trigger to obtain physical or occupational therapy assessments. In addition, upon intake every home care client has *all* medications reviewed by a pharmacist using a computerized medication surveillance system. Healthcare providers are routinely faxed regarding assessment concerns.

When clients are identified as being at high risk for falls, additional measures are taken to ensure home and environmental safety (including the safe use of mobility and transfer aids.) The Home Care Services staff developed a transfer equipment scale to measure need for mobility equipment and assistive devices. A high score on this scale indicates that modifications or equipment items are needed. Sensory perception is also assessed, as is the need for an emergency/fire response plan.

A second trigger for assessment is a patient's falling (either observed or reported) at any time while under the care of the Saint Elizabeth's Home Care Service. Staff members are taught how to ask about falls to solicit productive reporting of unobserved falls. When a fall is reported, a computer-based "fall form" is completed. This form is then sent to the primary care provider. This assessment of the situation and the individual often triggers additional services to address immediate risks and prevent future falls. In addition, the healthcare professionals providing the home care services can assess need for services that goes beyond the scope of what the Saint Elizabeth's Home Care Service can provide (e.g., setting up Lifeline™ or undertaking minor construction projects). Family members and friends can assist or procure modifications as directed by the staff. Patients without family support are referred to the LIFE office or to the Assistive Technology and Home Modification Partnership. The social worker helps facilitate referrals and can assist in locating equipment items, funding, and/or resources needed for modifications.

How Does the Assessment Tie to Appropriate and High-Quality Modifications?

Family members can do simple home modifications (e.g., grab bar installation) with guidance on placement and use from the assessors. Involving staff members of the Assistive Technology and Home Modification Partnership and the LIFE program supports provision of high-quality home modification services. The LIFE program has a list of recommended contractors and maintains close quality control on those services.

The actual monitoring of remodeling activity is beyond the scope of Saint Elizabeth's Healthcare but is carefully supervised by the Assistive Technology and Home Modification Partnership.

Education to Supplement the Home Assessment and Modification Program

The Home Care Service staff believe that their older adult clients are highly motivated to make needed changes. As part of the education program, each home care client and his or her caregivers (if able and appropriate) are asked to conduct a "self-check" of the home environment in collaboration with a Home Care Service staff member. The Service believes it is important for the older adult to participate in this self-assessment to raise the senior's awareness of safety in the home environment. As appropriate, Home Care Service staff work with the client and family to make appropriate safety alterations (e.g., moving potential trip items, clearing clutter) while modeling problem solving skills. Other examples of education include teaching clients how to transfer and use mobility aids safely. A variety of client educational material is available in both English and Spanish. The hospital also has an intranet capability that it uses to promote client education on a variety of consumer health and safety related topics.

Examples of Home Modification Activities

As noted above, the home care staff will refer modification needs to LIFE or the Assistive Technology and Home Modification Partnership. Home care staff members will

help older adults move electrical cords and clear paths as needed. They will also educate family about grab bar installation.

Also as part of their scope of practice, staff OTs and PTs carry model activity-of-daily-life (ADL) equipment or mobility aids to give older adults the opportunity to “try out” the hardware. These exploratory experiences are important for training purposes and give older adults experience with the equipment before making purchase.

Evaluation Processes and Quality Improvement Mechanisms

The *Fall Risk Reduction Project* tracks outcomes quarterly via OASIS emergent care for falls or accidents in the home and graphs outcomes to identify trends. The OASIS-based outcomes compare favorably to state and national data. In addition, the hospital safety team counts the number of falls reported via the “fall forms” and tracks trends.

The following client measures are considered part of the evaluation plan and are reassessed at discharge or on an “as needed” basis:

- Progress toward patient treatment goals;
- Ability to safely and appropriately use home modifications;
- Ability to safely and appropriately use assistive devices; and
- Client satisfaction and feedback on the level of involvement with the plan of care.

These measures also serve as part of the evaluation of long-term patients, who are assessed on an annual basis.

Also under OASIS, staff members collect information on clients’ fall-related “ER encounters” and visits to their physicians’ offices. This allows Saint Elizabeth’s to track falls and resultant injuries, especially major injuries. The information is collected and reviewed quarterly.

Incorporating Evidence and Best Practices

Currently members of the hospice staff are using the Functional Reach Test. This test was adopted after staff members attended a fall prevention conference that motivated them to re-examine assessment tools.

Saint Elizabeth’s is now exploring the contributions that a speech therapist could make to the fall prevention project after learning of new research supporting this effort.

Where Do We Go from Here?

The *Project’s* director believes that the program has many strengths, including its interdisciplinary nature and its individualized, home-based approach to fall prevention. *Project* administrators are invested in growing the program. While services provided through the *Fall Risk Reduction Project* are sustainable because Medicare is the primary funding source, reliance on Medicare funding limits the program from reaching more clients at this time. The *Project’s* administrators would like to develop other sources of

funding and add additional occupational therapists as well as a speech therapist. They are also exploring new program components, such as incontinence management programs.

Is this a Replicable Model?

Key features of the Saint Elizabeth's fall program that have the potential to be utilized in other program include:

- Initiating a specific fall prevention program within a home care agency;
- Utilizing "fall codes" that support reimbursement;
- Using the fall form to maintain consistency of assessment and services;
- Identifying key agencies within the community that are able to provide services beyond the scope of the home care program; and
- Initiating relationships with diverse referral sources to gain access to both well and frail elderly.

What Print or Online Program Materials Are Available?

- Guidelines and policies for implementation
- Client satisfaction surveys
- Educational materials for older adults
- Educational materials for other audiences
- Evaluation processes and tools

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Stanford University Medical Center Trauma and Emergency Services: Farewell to Falls

What Is Creative About this Program?

Farewell to Falls focuses on frail and vulnerable older adults with a history of falls. The program utilizes trained, experienced occupational therapists as the primary assessors and gatekeepers of a multi-factorial intervention. The commitment of a prestigious lead organization, the Stanford University Medical Center Trauma Center, is a considerable strength. The program draws from a strong referral base, which includes the Stanford Emergency Department, the community urgent care center, and area primary care physicians. Program administrators have learned from participants' feedback and adapted the program accordingly. The use of a single home modification provider by a firm with certification through the Aging in Place program has worked well for *Farewell to Falls*.

Lead Organization

Stanford University Medical Center's Trauma and Emergency Services are part of a nonprofit hospital situated in a university setting. The Trauma and Emergency Services provide specialized care annually to more than 2,000 trauma patients from Santa Clara and San Mateo counties. Patients are referred internally (i.e., from within the Stanford system) and also from many outlying counties. Some patients are also transported directly to the facility under the care of paramedics and flight crews from Stanford's Life Flight.

The Stanford University Medical Center became a trauma center in 1986. Since 1998, the medical center has been recognized as a Level I Trauma Center, the highest level awarded by the American College of Surgeons. For additional information, go to: www.stanfordhospital.com/.

The medical center's Department of Geriatric Health Services is responsible for providing an extensive network of care and support to older adults and their families. Several programs are affiliated with the department, including Partners in Caring, Lifeline, and Vial of Life.

Farewell to Falls

Farewell to Falls, a program administered through the Trauma Center at Stanford University Medical Center, is offered to older adults, aged 65+ in Santa Clara and San Mateo Counties, California. A 2001 report showed that there were 160,527 residents of Santa Clara County over age 65 and an additional 44,743 San Mateo County seniors. Statistically, approximately 1/3 of all community-dwelling older adults fall each year, or an estimated 61,500 older adults in these two counties. Ninety-two percent of the population of Santa Clara County resides in an urban setting. Data from 2000 revealed that 26 percent of Santa Clara County residents were White, 26 percent Asian, 24 percent Latino/a, 2.6 percent African-American, and just over 20 percent other. About 5 percent of the population lives below the poverty level.

The ages of individuals served by the *Farewell to Falls* range from 65 to 100 years. The average age of program participants is 81 years. Most program participants have fallen within the last 30 days of their first encounter with program staff. Many are homebound, frail older adults. Participants come from the wealthy communities of Atherton or Palo Alto, as well as from lower income communities of East Palo Alto and South San Francisco. More than 150 older adults have gone through the *Farewell to Falls* program. Additionally, 1,500 to 2,000 older adults have received home safety brochures, which encourage older adults-to perform home safety assessments on their own.

The *Farewell to Falls* program begins with two home visits by an occupational therapist. During the first visit, the occupational therapist assesses the senior's strength and balance, performs a health screening, and interviews him or her about abilities and concerns related to activities of daily living. The occupational therapist gathers information about medications, which is later reviewed by a pharmacist affiliated with the Stanford Medical Center. An exercise video/DVD produced by Stanford Fall Prevention Task Force and Sequoia Hospital is shown and discussed with each participant. The occupational therapist makes referrals to local exercise programs in the community and reports to the team about the possible need for physical therapy, vision testing, and/or home care services.

During the second visit, staff and participant discuss the assessment findings. In addition, a home safety assessment is conducted, and staff carry out simple recommendations to improve home safety with the participant's permission. Following the two home visits, a volunteer makes phone calls to program participants twice a month. The follow-up phone calls have many purposes. In addition to evaluating the effectiveness of modifications to the home, the calls serve to encourage the participant to continue exercises and help him or her problem solve. For more information about *Farewell to Falls*, refer to <http://www.stanfordhospital.com/clinicsmedServices/medicalServices/emergency/fallPrevention>.

Partnering Makes the Program Strong

A primary partner associated with the *Farewell to Falls* program and the Stanford University Medical Center's Trauma Center is the Palo Alto Medical Foundation Urgent Care Center. Local fire departments also partner with the program. The area Centers for Independent Living and the Center for Independence of the Disabled (CID) has worked with the *Farewell to Falls* program. CID occupational therapists conduct assessments for older adults with disabilities and are important collaborators. Collaboration is informal and client centered.

Referral Sources Provide Smooth Access to Services

The primary sources of referrals are from the Stanford Emergency Department (40 percent), the community urgent care center, and area primary care physicians (20 percent). These referral sources are utilized to access the target population for the *Farewell to Falls* program: older adults who have fallen at least once. First responders are also a growing source of referrals. Currently, first responders provide 15 percent of program referrals. The program may expand to include both non-fallers and patients

hospitalized due to fall. If program expansion occurs, the referral base will be broadened accordingly.

The program's administrator markets to referral sources by providing referral agency representatives with basic information about the *Farewell to Falls* program and a referral form they can use to recommend the program to older adults. The program is not marketed directly to older adults. However, some self-referrals have been generated through articles in local newspapers.

Funding Sources Keep the Program Growing

This program was initiated as a two-year pilot in 2005 with \$35,000 in funding provided by one individual donor. This funding is used to cover expenses associated with the home visits made by the occupational therapists and up to two grab bars per client. The Emergency Department was able to provide additional funding to cover ongoing expenses and has invited the lead agency to submit a five-year plan for this program.

Assessing the Home and Its Occupant

The two home visits associated with the *Farewell to Falls* program are conducted by registered and licensed occupational therapists that have an average of 15+ years in practice. (A total of four occupational therapists serve as staff for the program.) The evaluation conducted during the home visit includes:

- A health interview, adapted from the *Fall Proof Program* http://www.titanmag.com/2005/fall_proof/index.htm;
- A review of the participant's medical history, fall history, and exercise history;
- Assessment of activities of daily living skills (through interview and observation, as needed), which includes consideration of the need for and use of adaptive equipment; and
- Basic assessment of hearing and vision.

During the first home visit, the occupational therapist also creates a list of all medications the participant is currently taking. This list is given to a pharmacist on staff at the Stanford Medical Center for review.

During the second home visit, an occupational therapist uses a checklist and conducts a room-by-room home safety assessment to examine clutter, lighting, furniture positioning, need for grab bars, and need for other adaptive equipment. The home assessment is conducted during the second visit in order build upon the rapport established during the first home visit and assessment findings.

Each *Farewell to Falls* participant receives a nightlight and a copy of his/her assessment. If a grab bar, ramp, or other more extensive home modification is needed, staff refer the participant to Home Safety Services, a private company that the *Farewell to Falls* program administrators use as a subcontractor. Home Safety Services bills Stanford Trauma for services rendered.

A trained *Farewell to Falls* volunteer makes the follow-up calls, which are intended to support the senior in following through with recommended home safety modifications and behaviors. One year after the second home visit, the occupational therapists return to each participant's home to provide a comprehensive reassessment.

How Does this Tie to a More Comprehensive Fall Risk Assessment?

The occupational therapist's evaluation covers several important physical, environmental, and behavioral fall risk factors. Pharmacists provide medication reviews, the results of which are discussed with program participants during the second home visit. Because program participants have not consistently told their doctors about the concerns identified through the medication review, the occupational therapists are now sharing findings directly with both the older adults and their physicians. Concerns about leg strength, balance, and need for mobility devices often lead to referral to physical therapists. Staff make referrals to other healthcare providers, including podiatrists, as appropriate. Because primary care providers and emergency room physicians are key referral sources, these individuals are often already part of the medical team working with the program participant.

After receiving clearance from the primary physician, *Farewell to Falls* participants are provided with recommendations for home or community-based exercise programs or referral to physical therapy, as appropriate. The Sit and Be Fit program is highly utilized in the *Farewell to Falls* program. Program participants in need of companions to accompany them to community-based exercise programs are referred to the Partner in Caring program.

A trained, 80-year-old volunteer makes phone calls as a follow-up to home visits. This volunteer calls the program participant two weeks after the second visit and then twice a month thereafter for a year. Generally, the volunteer serves as a coach and cheerleader. The volunteer also monitors concerns and reports back findings from the phone calls to the program administrator as needed.

How Does the Assessment Tie to Appropriate and High Quality Modifications?

A partnering organization, Home Safety Services of Foster City, California, performs the home modifications associated with the *Farewell to Falls* program. Home Safety Services staff members include Licensed General Contractors (LGC) and Certified Aging in Place Specialists (CAPS). The Home Safety Services president is a Professional Fire Protection Engineer (FPE) and Associate in Risk Management (ARM).

Home Safety Services staff members assist program recipients with a full spectrum of home safety, accessibility, and fall prevention services, although the most common task is the installation of grab bars. The occupational therapists who conduct the assessments work closely with the installers. Therapists send detailed, written referrals to Home Safety Services to provide specific information regarding installation requests (e.g.,

placement). If there are issues (e.g., no wall studs), the occupational therapist and Home Safety Services staff members will work together to identify solutions. The therapists have an opportunity to visit a third time to reassess the home *before* the one-year mark if a request is made by the participant.

Education to Supplement the Home Assessment and Modification Program

The first home visit is primarily intended to gather information about the client; most participant education occurs during the second visit. The occupational therapists working with the *Farewell to Falls* program have extensive experience teaching older adults about home safety and health promotion. In addition, they consistently assess the extent to which older adults understand the information provided and are able to act on it.

Professional translators are available through the medical center, most often utilized to assist with the large Russian immigrant population the program serves. Given the large volume of Spanish speaking clients, a family member is usually able to provide translation in that language. Educational materials are available in Spanish and English.

Examples of Home Modification Activities

It is estimated that about one-half of all assessments result in minor modifications. Bathroom accessibility is a priority; at least one bathroom in a participant's home is modified to improve safety as needed. The assessors examine all the rooms in a participant's home but focus on the rooms that the older adult uses most often. One entrance is also evaluated for accessibility.

Grab bars are usually installed in one bathroom; sometimes they are installed by stairs. The program does not provide simple adaptive equipment (e.g., reachers or sock aids) or durable medical equipment (e.g., tub benches), but the occupational therapists make recommendations to the clients and ensure that clients have a way to access needed equipment.

A Lifeline brochure is shared with every client. Vial of Life forms are also completed as part of the home visit.

Evaluation Processes and Quality Improvement Mechanisms

In addition to an assessment of functional disability and use of assistive devices conducted by the occupational therapists, evaluation measures associated with the *Farewell to Falls* program include client satisfaction with program content and resources, adherence to recommendations, number of medications being taken, and the presence of hazards in the home. These outcomes are documented by the trained volunteer providing the follow-up phone calls on a bi-weekly basis for a year. In addition, repeat falls are assessed via self-report and admission data.

Evaluation findings have led to program modification. For example, in response to participant feedback, a new *Sit and Be Fit* video, which demonstrates exercises performed at a slower pace with more repetitions, is now in use.

Incorporating Evidence and Best Practices

The *Farewell to Falls* program is based upon a multi-factorial approach to fall prevention and addresses key risk factors found in the literature. The health interview form used in the program was modeled after the interview guide used in the Fall Proof program (www.titanmag.com/2005/fall_proof/index.htm).

Where Do We Go from Here?

The need for program expansion is evidenced by a growing waiting list for program services. The program administrators have responded to increased demand for the program by hiring a part-time administrative assistant. Plans to expand the pool of volunteer personnel are also in place. The program director is currently investigating Medicare coverage for *Farewell to Falls* services to support long-term sustainability of the program.

Plans for program development are also being explored. For example, program administrators have an interest in developing strategies to improve participants' adherence to recommendations.

Is this a Replicable Model?

This program relies on donated funds, significant volunteer labor, and the expertise of occupational therapists. However, in communities where well trained therapists are readily available, such a program may thrive, especially if emergency room personnel and first responders are invested in generating referrals to the program. Medicare does cover home-based occupational therapy services for qualifying older adults.

What Print or Online Program Materials Are Available?

- Program manuals and/or other printed materials
- Educational materials for older adults
- News/media articles about the program

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Touchmark Senior Retirement Community Health and Fitness Clubs: Fall Reduction and Awareness Program

What Is Creative About this Program?

The *Fall Reduction and Awareness Program* is a proactive fall reduction program embedded in the Touchmark Corporate philosophy of providing a safe environment, both within the home and community, as well as supportive services to reduce the risk of falling for its residents. The program is widely marketed to a diverse audience of individuals who have the potential to benefit from fall prevention education and activities. Staff members are trained to identify emerging fall risks, and their proactive view toward fall prevention supports a community-based approach to wellness. There is a social norm created that promotes residents' active engagement in fall prevention efforts. On-going self assessment is emphasized as a key element of the fall evaluation process. Exercise physiologists, physical therapists, and occupational therapists well trained in comprehensive fall prevention interventions support program participants in their efforts to age in place. Staff is augmented by trained students, interns, and family members.

Lead Organization

Touchmark is a for-profit organization that develops, owns, and operates upscale new lifestyle communities and nursing centers throughout the Midwest and Western regions of the United States and Canada. Touchmark offers a full range of new homes from cottages, independent apartment homes, assisted living homes, memory care, and in some cases, nursing care.

At the heart of Touchmark's commitment to health and wellness are the Waterford Health & Fitness Clubs. These clubs are offered at selected senior retirement communities and serve older adult residents, staff, and members from the community-at-large. Clubs are located where market research shows the community can support the capital outlay. Currently the health and fitness clubs can be found in Vancouver, WA; Bismarck, ND; and Fargo, ND.

Touchmark Communities residency criteria include demonstrating a minimum net worth of \$500,000 or of \$400,000 with a yearly income of \$25,000. Ages of residents range from 57 years to 102. Obviously, the demographics of the Touchmark Communities residents do not reflect the racial and ethnic composition of the communities at large, with the exception of the Canadian facilities where the population seems to be more diverse.

The Touchmark Corporation created a nonprofit 501(c) (3), the Touchmark Foundation, which is very active in many areas of wellness. It was created to fund scholarships for staff and others, providing educational opportunities for them to train in the geriatric, health, and wellness areas. As a result, designated Nursing Faculty Chairs have been funded at nearby universities. The Foundation also sponsors special events that attract professionals. In addition, a large number of physical therapists and other speakers donate

their time to provide instruction to students through these special events. For additional information, go to: <http://touchmark.com/index.htm>.

Touchmark's Fall Reduction and Awareness Program

A robust wellness program is part of the basic service provided to residents, whether or not there is a Health and Fitness Center, provided that the resident is willing to participate. The program is offered in the belief that a comprehensive wellness program is essential to health, both physical and mental. Emphasis is placed upon improved strength, balance, coordination, and cardiovascular fitness. Although the programs at the health and fitness clubs are more comprehensive, they are nonetheless available to staff, families of staff, residents of the facility, and people who do not live at the facility but choose to participate. The *Fall Reduction and Awareness Program* is a component of this overall wellness programming effort.

Partnering Makes the Program Strong

The Touchmark Corporation and its Health and Fitness Center describe a variety of partnerships that extend their services to the community at large. In the *Fall Risk Reduction and Awareness Program*, they partner with area healthcare providers, caregiver organizations, and organizations serving people with special conditions. At three of the Touchmark residential communities, a low-vision project has been developed and is undergoing testing. Three readers for people with low vision have been installed and are available for use, not only by residents, but by people from the community. A significant number of people with macular degeneration, cataracts, or other vision problems come to the center to read documents, do needle work, and even hold group meetings at which the devices are used. This low-vision resource is advertised through the community's elder network, which includes a large number of nonprofit organizations that work with seniors. The pilot has been successful, so more devices will be installed in other Touchmark residential communities.

Partnerships are sustained by remaining in constant contact with the organizations and community groups that work with the program and by offering new and ongoing activities in which people can participate. Partners are also invited to have booths or displays at events, such as fairs, at no charge.

Funding Sources Keep the Program Growing

The *Fall Risk Reduction and Awareness Program* is primarily funded as a line item in the wellness budget. In addition, Touchmark has established working relationships with a large number of vendors, taking advantage of their buying power as a large organization. Through this, they are able to purchase durable medical equipment and other goods and services at a discount, which is then passed on to their residents. Vendors also make contributions to their program in many ways, such as sponsoring a day of healthy snacks.

Referral Sources Provide Smooth Access to Services

Marketing of the health and wellness facility itself is part of the overall marketing strategy of the residential communities, with a special emphasis on programs and services

that are available for residents with arthritis or other age-related conditions. Touchmark has also developed close working relationships with groups such as the Alzheimer's Association, the Arthritis Foundation, and many more to create awareness of the extensive program available to people through the clubs. There is also an annual wellness forum, which is used to promote programs and services.

The *Fall Risk Reduction and Awareness Program* is actively marketed to residents and surrounding communities. The targeted population includes anyone who may become a member of the health and fitness clubs, including some as young as 40, who may both benefit from what they learn and apply it to their parents. It is often adult children who get their parents interested in the services. Local healthcare providers and therapy providers also frequently identify residents at risk and refer them. In addition, the entire staff working at the housing community and at the health and fitness club have been trained to identify people who may be at risk for falls and to refer them to the *Fall Risk Reduction Program*. As a recruitment strategy, Touchmark has learned that peer-to-peer influence works more effectively than staff-to-resident communication in recruiting reluctant, but potential program participants.

Local area residents at risk are also referred to the health and fitness clubs from the community by doctors and healthcare providers, and many come in responding to standard marketing efforts in the communities where they are located. Most of the facilities are not in large metropolitan areas, so they are known by the residents of the town.

Assessing the Home and Its Occupant

Staff use three assessment tools. Exercise physiologists who work at the health and wellness center conduct most of the assessments. In addition, some sites make use of physical therapy and nursing interns who have been trained on the instruments.

An initial assessment of the living space is usually conducted within one month of the resident's moving in. Preferably, it is conducted at the two-week point before people have had a chance to make final decisions about where items will go, but when most of the large items are in place.

Another assessment mechanism is the self-reporting tool that is part of the interview with the resident. A scoring grid is used to establish placement for assisted living. Residents are asked to complete the self-assessment form on a quarterly basis for review through an interview process with staff where they can talk about any issues or concerns. The discussion includes older adult functional capacity and ability to benefit from fall prevention activities.

The third assessment process incorporates the Fullerton Balance Scale. Touchmark is preparing to roll out a new assessment model in 2007 and has been laying the ground work and testing it. Staff members have been trained in conducting the various assessment tools. The exercise physiologist or physical/occupational therapists conduct the actual evaluations.

Because the program is very client-centered, the assessor is very involved with both the older adult and caregiver, especially caregivers of participants in the Memory Care Program. A scoring grid is used to establish placement for assisted living or other monitored environments.

Within the *Fall Reduction and Awareness Program*, the staff members try to develop open communications. They encourage people to be aware of fall risks and report if they are having difficulties with balance, have fallen, or have a fear of falling. In addition, staff members have been trained to notice if a person's behavior is risky or inappropriate, if his or her physical or mental capacity is changing, or if he or she needs ambulation assist devices or other aids.

The communities at large promote fall-free environments, so staff also assesses exterior spaces to ensure that they are and remain safe. In general, Touchmark promotes an atmosphere that is open and encourages people to be aware and report if they are having any safety concerns or any environmental issues that need attention.

How Does This Tie to a More Comprehensive Fall Risk Assessment?

The program is very comprehensive, taking into effect all the many physical, social, and other risk factors that can result in falls. Referrals are made to physicians and other specialists as appropriate.

The program brings in a large number of resources, so that people who are in the program in the health and fitness centers can learn about many different conditions and how to deal with them, compensating for their physical and cognitive changes. The awareness and self-reporting aspects of the program are also keys to its success.

How Does the Assessment Tie to Appropriate and High-Quality Modifications?

Modification work is performed by Touchmark trained staff. Most of the residential units have been built with basic modifications included, which serve the needs of most residents. If many major modifications are needed, it has been the policy of Touchmark to relocate the resident if possible to a vacant unit with those modifications already in place. Touchmark provides equipment items and minor modifications to the residents at cost.

A list of qualified and recommended remodelers is maintained by the facility to offer choice; however, residents are encouraged to use the on-site staff.

Education to Supplement the Home Assessment and Modification Program

Given the nature of the environment, there is a lot of one-on-one work with residents and their families to help them understand and decrease risks. Staff members help the

residents' problem-solve potential risks and promote appropriate physical activity programs in the Center.

Educational materials that describe fall risk factors and how to manage them are distributed on a regular basis through the Health and Wellness Centers and at community events. A peer-based video *Taking Steps to Prevent Falls* prepared by the Senior Injury Prevent Project is frequently used to market awareness. In addition, many scheduled events take place throughout the year to promote awareness and the need to take action such as the annual Fall Awareness and Prevention Day.

Examples of Home Modification Activities

Removing hazards in the home (e.g., throw rugs, phone/lamp cords, and clutter) is viewed as part of the home's assessment.

Call systems and other technology are available for use in the living areas. A monitoring program allows staff to know if a resident is up and about, or alternatively, not going out of their residence.

Evaluation Processes and Quality Improvement Mechanisms

Touchmark reports a reduction in risk taking behaviors on the part of older adult residents. The assessment of risk taking behaviors is evaluated via residents' self-report and through routine, ongoing assessments by staff. In addition, all self-assessments and balance testing activities are repeated quarterly to measure progress. Evaluation processes also include assessing the client's ability to use assistive devices appropriately and home modifications safely and appropriately.

As an integral part of internal quality control, staff continually reevaluate the program through discussions at staff meetings and through the use of working groups. They make changes as appropriate, taking into account program feedback (including client satisfaction surveys).

Touchmark reports that the *Fall Reduction and Awareness Program* is a success, as residents are experiencing fewer falls and fall-related injuries as a result of the efforts of the program.

Incorporating Evidence and Best Practices

The wellness professional (either the director of the club or another qualified staff member) is usually a personal trainer experienced in falls prevention. In addition to using the assessment tool developed by a team of professionals at Touchmark, the professional draws from research, technology, and materials developed by other organizations, such as CDC's National Center for Injury Prevention and Control, to develop a comprehensive fall prevention program tailored to individuals at risk.

Where Do We Go from Here?

The *Fall Reduction and Awareness Program* will continue to grow and expand to other facilities under construction. It is sustainable, as it is part of a large corporation that provides senior housing. The program has a variety of strengths, notably the staff's dedication to working together on behalf of the residents. The programs at the health and fitness clubs are available to staff, families of staff, facility residents, and non-residents who choose to participate. There is a perceived need to lower the staff-to-client ratio. Creative strategies are being used in the meantime. Currently, help from students, interns, and family members often supplements the staff's work.

Is this a Replicable Model?

This program could be reproduced in senior retirement communities and other large provider groups that have comparable staff and training. Any qualified health and wellness professional can be trained on the assessment tool. Given the level of function of the population served, Touchmark has found that there is no requirement for a physical or occupational therapist intervention, but rather for staff that understand the geriatric population and their diverse needs.

What Print or Online Program Materials Are Available?

- Guidelines/policies regarding implementation
- Line item budget
- Program manuals
- Client satisfaction surveys
- Educational materials for older adults
- Marketing materials
- Evaluation processes and tools

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TriHealth SeniorLink: Home Safety Check

What Is Creative About this Program?

The SeniorLink *Home Safety Check* assessment and modification program is part of an interdisciplinary, comprehensive fall reduction and management program. SeniorLink is a Program of All-Inclusive Care for the Elderly (PACE) program that serves a population at high risk for falls: frail elderly participants with chronic care needs. The Senior Link's status as a PACE supports utilization of an interdisciplinary team and its ability to provide comprehensive services. A variety of partners extend the reach and impact of the SeniorLink *Home Safety Check* program, including first responders, caregiver organizations, volunteer programs, and the Cincinnati Metropolitan Housing Authority. The one-on-one attention provided to each of the program facilitates education and behavior change to reduce fall risk.

Lead Organization

TriHealth combines the strengths of Bethesda North and Good Samaritan hospitals, leading providers of healthcare and wellness services to the Greater Cincinnati area. With the support of the TriHealth network of hospitals and more than 50 additional locations, TriHealth Seniors' Health delivers a full range of services to meet the growing needs of area older adults.

TriHealth SeniorLink serves frail elderly participants who live in the Greater Cincinnati area (Hamilton County and selected zip codes of three surrounding counties in Ohio). SeniorLink provides services to adults aged 55+ years with chronic care needs who meet the Ohio nursing home level of care, but who live in the community. Diagnoses of individuals served include diabetes, heart disease, high blood pressure, low vision, and mental illness. Services are intended to assist older adults to stay healthy and independent as long as possible. SeniorLink provides participants with medical and social services delivered in their homes and or in the SeniorLink day health centers.

SeniorLink participants live in a variety of housing units, including private homes, apartments, and handicapped accessible senior buildings. Over half of participants are African American, and over half are female. Although not a requirement, many if not most of participants are dually eligible under Medicare and Medicaid. Those eligible for Medicare and Medicaid may receive all services at no cost. Participants not eligible for Medicaid pay a monthly premium for services.

Through an interdisciplinary team of health and service professionals, services are tailored to meet individual needs. Services include: healthcare, medications, rehabilitation, meals, transportation, household assistance, and hospitalization expenses (when necessary). Additional information may be found on the TriHealth Senior Link Web site: www.trihealthseniorshealth.com/seniorlink/.

TriHealth SeniorLink: Home Safety Check

SeniorLink provides medications, medical transportation, medical specialist services, support meals, homemaking and personal care, nursing services, recreation therapy, physical therapy, occupational therapy, speech therapy, nursing home care, and respite services.

All eligible participants receive a *Home Safety Check* upon enrollment in SeniorLink and thereafter as needed. All members (current enrollment of 460 participants) are assessed for fall risks by an interdisciplinary team at least on a semiannual basis. If any team member has concerns about a service recipient's fall risk, members of the therapy team go to the home for further assessment.

SeniorLink considers fall risk management as a central component of the mission to keep frail elderly persons safe in their homes and as independent as possible. For that reason, every single fall is logged and analyzed as part of the quality assurance activities. Since most service recipients live in the community, SeniorLink is very focused on making home environments as safe as possible.

The home assessment component is conducted by a staff occupational therapist. The program is proactive: a request for reassessment is automatically generated if participants have a documented change in medical condition, mental status, or living arrangement. This reassessment occurs regardless of age, income level, medical condition, home environment, or geographic location.

Partnering Makes the Program Strong

A variety of partners extend the reach and impact of TriHealth SeniorLink and its *Home Safety Check* program. Among key partnering organizations are first responders, caregiver organizations, healthcare providers, and community volunteer organizations. The program's partnering with the Cincinnati Metropolitan Housing Authority is especially creative. An underutilized room was converted into a Program of All-Inclusive Care for the Elderly (PACE) setting, which included a Day Health Center, a medical clinic, and a therapy space. Offering services in a location easily accessed by vulnerable older adults helped to support residents in their efforts to live independently in the community and reduce vacancies for the housing authority.

Referral Sources Provide Smooth Access to Services

The primary referral source is TriHealth itself as the parent organization for SeniorLink and its *Home Safety Check*. There is a close collaboration and referral network in place. This network includes doctors, physicians, pharmacists, and other providers. In addition, many community agencies and independent living facilities for the elderly serve as a robust referral mechanism. Area faith-based organizations and parish nurses also frequently refer members to TriHealth SeniorLink.

SeniorLink is a member of the national PACE Association and is the only such program of its kind in southwest Ohio. Because SeniorLink is a PACE that serves very frail

community-dwelling seniors, SeniorLink can market services to referral sources who serve similar populations.

SeniorLink works on name recognition in a community-wide marketing program. An example of their effective promotion includes the use of 22 vans wrapped with advertising to promote services. The advertising reads, “I’m going to SeniorLink for all the care frail seniors need.”

Funding Sources Keep the Program Growing

Medicare and Medicaid are important funding sources for the Senior Link Program and its *Home Safety Check*. In addition to Medicare/Medicaid funding, the program obtains \$10,000 to \$15,000 in equipment items and \$10,000 in home modification materials annually through donations. Volunteer and donated services are provided by many community volunteer organizations, such as the People Working Cooperatively program.

The *Cincinnati Enquirer* newspaper and the United Way conduct a Wish List call for donations each year using residents with “tug at your heart” stories. Senior Link staff members identify seniors in need and recommend them for inclusion in the Wish List call. Once a wish is fulfilled, any additional donations are divided up among local agencies. Through this opportunity the program realizes approximately \$8,000 annually.

Assessing the Home and Its Occupant

Everyone in the SeniorLink program (460 active members) is assessed by an interdisciplinary team on a semi-annual basis (at a minimum). The assessment tool used as part of the *Home Safety Check* was developed in collaboration with the SeniorLink Fall Assessment Committee, headed up by a knowledgeable nurse practitioner. The home assessment component of the evaluation is conducted by trained staff occupational therapists. All therapists must have a minimum of one year’s experience and participate in a rigorous orientation. Therapists are expected to attend regular in-services with other SeniorLink staff members. These in-services are designed to maintain staff competencies and to expose staff to new technologies (e.g., newly developed ramps) and strategies.

How Does this Tie to a More Comprehensive Fall Risk Assessment?

The SeniorLink *Home Safety Check* assessment and modification program is part of a comprehensive falls prevention and management program. Many services are provided through the fall prevention and management program. These services include: transportation, home care, primary care, pharmacy services, recreation services, social work services, and occupational and physical therapy services. The interdisciplinary team of PACE professionals develops a care plan and generates referrals to other healthcare professionals as needed.

All client falls are reported and discussed in daily conference calls that involve representatives from all disciplines and services on the team. A follow-up care plan is established. Referral for a new home assessment may be generated at this time.

All professional staff and direct-care providers are trained annually and as needed on strategies to reduce falls and prevent serious injury from falls. Training is also provided to caregivers and family members as needed.

SeniorLink contracts out for needed basic modifications and equipment items. The home safety services and equipment are provided free of charge. The therapists provide training and coaching on the use of equipment and modifications.

How Does the Assessment Tie to Appropriate and High Quality Modifications?

The *Home Safety Check* is tailored to the needs, values, and priorities of the client. The client-centered nature of the home safety assessment and modification process is an important feature of the program. Senior Link staff members have developed effective, working relationships with several local contractors. (SeniorLink regularly contracts with a DME vendor, a home remodeling contractor, and a portable ramp company.) When contracting for needed modifications and equipment items (e.g., grab bars, stairs rails, porch rails, exterior ramps), only vendors who are certified for Medicare and Medicaid and have liability insurance are used. Program staff members maintain a “short list” of recommended contractors and monitor the quality of the workmanship.

As a PACE program, SeniorLink is not limited by Medicare or Medicaid guidelines, but they are recognized as minimum standards for service. SeniorLink often exceeds these standards. If the interdisciplinary team approves a modification or service, the recommendation is acted upon and paid for. This is true for all new program participants as well as those with emerging needs.

Senior Link staff members work closely with several key, low income housing organizations to help seniors access safe housing and to obtain needed modifications for residents of low-income subsidized apartments. Additionally, the People Working Cooperatively program provides major renovations or minor modifications for participants who qualify.

Education to Supplement the Home Assessment and Modification Program

As part of the PACE model, the occupational and physical therapists combine therapy and assessment with education and behavior change strategies. Each participant and his/her family becomes part of care planning.

A variety of resource materials are available to support client education. Many of these resources feature pictorial representations of key messages. The staff members provide a great deal of one-on-one education. Written materials alone are often not effective in

conveying important messages to this frail population, which includes many individuals who have experienced strokes or have low-vision problems.

Examples of Home Modification Activities

Examples of low-cost modifications include organizing electrical cords by affixing them to walls and around doorframes and using cord carriers, and working with older adults to remove clutter in the home. A supply of adaptive equipment (e.g., reachers, sock aids) and durable medical equipment (e.g., tub benches) is kept on hand and routinely issued to participants.

Evaluation Processes and Quality Improvement Mechanisms

Falls are tracked by daily conference calls. Overall, a significant reduction in falls among service recipients has been reported; however, data has not yet been fully analyzed. Each client is reassessed every six months at a minimum. Participant level outcomes include (but are not limited to) reductions in risk-taking behaviors and the demonstrated ability to use assistive devices and home modifications appropriately. Participant satisfaction is assessed through a biannual survey.

The Interdisciplinary Falls Committee meets regularly to review fall prevention activities and make improvements to the falls program. The fall assessment tool is reviewed and updated by the Interdisciplinary Falls Committee at least every six months.

Incorporating Evidence and Best Practices

In addition to providing in-service training to staff, the program's medical director is conducting research on hip fractures and oversees related fall prevention policies for the organization.

Where Do We Go from Here?

The PACE status assures long-term funding and the flexibility to expand to meet the growing need for services.

Is this a Replicable Model?

This program is replicable in other PACE settings. In addition, it could be adapted to other settings with similar infrastructures.

What Print or Online Program Materials Are Available?

- Guidelines and policies regarding implementation
- A line item budget
- Program manuals and/or other printed materials
- Client satisfaction surveys
- Educational materials for older adults
- Educational materials for other audiences
- Marketing materials

- Evaluation processes and tools
- News/media articles about the program

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VNA of Care New England: Steady Strides

What Is Creative About this Program?

VNA *Steady Strides* program targets a high risk population of skilled home care recipients and their caregivers. The program offers a comprehensive fall risk assessment. Content and length of *Steady Strides*' intervention services are customized to meet individual needs. The program offers well coordinated services in partnership with other agencies and organizations, including the local centers for independent living, the Multiple Sclerosis Association, the local Meals on Wheels program, and first responders. The long-term partnership between the VNA of New England and Blue Cross and Blue Shield of Rhode Island (BCBSRI) has been central to the success of the *Steady Strides* program. BCBSRI is a primary source of funding for the program and is committed to its success. This momentum has led to new collaborative initiatives between the VNA staff and BCBSRI, which have potential to enhance services to individuals at high risk for falls.

Lead Organization

VNA of Care New England provides home healthcare service to adults and children in 38 of 39 cities and towns throughout Rhode Island. Rhode Island is home to approximately 190,000 persons over the age of 60, representing nearly 18 percent of the population. Rhode Island ranks sixth in the nation for percentage of population over the age of 60. Compared to New England and the US overall, Rhode Island has a larger percentage of elders living at or just above poverty level. Approximately 40 percent of persons 65+ live with one or more disabilities. Rhode Island residents over age 65 also consume the greatest percentage of home healthcare services. (For more information, go to: www.cnehomehealth.org.)

VNA of Care New England has created a partnership with Blue Cross and Blue Shield of Rhode Island (BCBSRI) to offer two fall prevention programs, serving two distinct populations. Both programs incorporate a comprehensive home assessment and modification intervention. *Steady Strides* targets older adults of any income level who meet the criteria for skilled home care and are at high risk of falling. The *Caring Steps* program targets members who do not have a home care, skilled nursing need, but are at high risk of falling. This initiative, currently being piloted, offers proactive screening and interventions that are intended to help an otherwise healthy older adult population avoid serious fall or injury.

Steady Strides

VNA of Care New England's *Steady Strides* fall prevention program is a personalized program designed to reduce the number of falls and fall-related injuries for older adults. A physical therapist completes a comprehensive assessment of the patient's risk factors and develops a plan specially tailored to each individual. The plan may include sending a physical or occupational therapist, nurse, or home health aide into homes to help patients develop the necessary skills to minimize their risk factors. To qualify for this program,

patients must be referred by their physician and meet the criteria for skilled home care. The *Steady Strides* fall prevention program has served 100 patients during the past 12 months.

Partnering Makes the Program Strong

Steady Strides makes use of a variety of partners and volunteer organizations to extend its reach into the community and to identify potential fall risks before an injury occurs. One key partner is Blue Cross & Blue Shield of Rhode Island (BCBSRI). They are not only an insurer, but also a collaborator with the VNA in procuring equipment and services for those at risk of falling. VNA also actively sought collaboration with BCBSRI. For BCBSRI patients, the Blue Cross case manager follows up on every patient's condition after the completion of the fall prevention intervention at three, six, and twelve months. This collaborative approach has expedited service delivery across program areas.

First responder organizations are also key partners: both EMS and firemen called to assist older adults who have fallen are encouraged to call the VNA to report fall risks or frequent assist calls. Similarly, Elderly Affairs or Meals on Wheels providers are empowered to call the VNA program. The VNA also works closely with centers for independent living (assisted living) to identify and intervene in potential high fall-risk clients.

Healthcare providers are valued as referral sources and as key partners in a collaborative activity designed to reduce falls and fall-related injuries among their patients.

Steady Strides partners with a variety of home modification providers, primarily vendors, who will install simple equipment needs such as grab bars and rail. Other partners in this effort include community volunteer organizations, such as the Masons and Boy Scouts of America, who will take on projects to install or make minor modifications.

A unique partnering effort includes those organizations serving people with special conditions, such as the Multiple Sclerosis Association. Consistent outreach efforts are undertaken to educate the local association chapters about fall risks and services provided via the *Steady Strides* program.

When new equipment is required, *Steady Strides* therapists assist the patients in locating resources and funding through partner organizations, including the Fire Department, Elks Club, Lions Clubs, Boy Scouts, and churches. Therapists take extra steps to make sure the patient is able access equipment items and use the new equipment safely.

Referral Sources Provide Smooth Access to Services

Referrals to the *Steady Strides* program come from community hospitals, physicians' offices, nursing homes, and assisted living facilities. Not surprisingly, the program markets its services to those individual physician's offices, skilled nursing facilities, and staff liaisons in assisted living facilities.

Funding Sources Keep the Program Growing

All home care services are covered by insurance or through private pay or co-pay.

How Does this Tie to a More Comprehensive Fall Risk Assessment?

A physical therapist completes a comprehensive assessment of fall risk factors and develops a plan specially tailored to each individual. A team of medical experts is available to review the patient's assessment to provide additional suggestions or referral options to the plan to reduce the risk factors for falling. The plan may include providing physical, occupational therapy, nursing, or home health aide services. All services are provided in the patient's home, from the first visit, when a physical therapist completes a comprehensive assessment of risk factors, through the final visit.

In addition to reviewing a patient's medical history, the following fall risk factors are addressed through the initial fall risk assessment conducted by the therapist in the patient's home: history of falls; balance and gait (assessed via the Tinetti Balance/Gait Assessment); transfer skills; lower extremity sensation, strength, and flexibility; number of medications, endurance, cognitive status; sitting and standing blood pressures/postural hypotension; vision; pain; and environmental hazards found within the home.

The length of the program depends upon the patient's unique risk factors identified at the initial assessment. A healthcare provider from VNA of Care New England will contact the doctor and patient after the initial plan is complete to inform the provider of the content and expectations. Ongoing plans will be discussed with the patient at each visit. Balance and gait are assessed at home initially and at two, four, and six weeks.

For a patient who is not currently receiving home healthcare from VNA of Care New England, a doctor may request an assessment by calling the Intake Department at VNA of Care New England. For a patient who is already receiving home healthcare from VNA of Care New England, a nurse will contact the doctor to request permission to have the initial assessment completed.

Assessing the Home and Its Occupant

After being identified as being at high risk for falls, *Steady Steps* participants receive home visits conducted by trained physical or occupational therapists. During these visits, the therapists make changes and/or recommendations to improve the safety of the client. The therapists employ a home assessment tool that evaluates the safety of the home environment as well as the extent to which the environment supports the program participants' functioning. During home visits, therapists also make recommendations for appropriate assistive devices and adjustments to equipment to make it safer (e.g., walkers).

All *Steady Strides* patients are given a nightlight. VNA of Care New England also offers a Lifeline Personal Emergency Response System, which is recommended and facilitated by the therapists when needed. Patients receive a safety checklist and are educated to

wear sturdy shoes with non-slip soles, avoid going barefoot or wearing slippers, and improve overall lighting throughout the home.

How Does the Assessment Tie to Appropriate and High Quality Modifications?

The assessment and intervention plan is very patient-centered. Older adult service recipients are actively involved in both the decision making process and in coordinating changes to their home.

Minor home modifications are not performed by the home care agency. Recommendations are provided to clients and family members, or referrals are made to private contractors or electricians. Usually patients contact the Masons or some community action programs directly. Individuals from these organizations install equipment (e.g., ramps and grab bars). The VNA maintains a list of recommended providers who have a history of working with the organization.

The therapists provide detailed recommendations for the installation of grab bars or other equipment items that will promote the safety of the patient. The therapists (or other healthcare providers involved) are careful to ensure that modifications are completed in a timely fashion.

Education to Supplement the Home Assessment and Modification Program

Due to the nature of the assessment and treatment plan, the therapists and nurses provide ongoing education and training to help older adults reduce risk taking behaviors and promote problem solving. After equipment is installed, therapists teach patients how to use it correctly. The VNA staff members also routinely recommend Lifeline and will initiate referrals and oversee Lifeline delivery and installation.

The program participants receive a packet of information with fall prevention strategies. The patient also gets a copy of the assessment tool and goals and is awarded a diploma when the program is finished and goals are met.

Examples of Home Modification Activities

During the home assessment and routinely throughout the intervention, the therapist and other staff reinforce recommendations to reduce slip and trip hazards such as clutter and address nonskid rugs. Often recommendations include the addition of easy-to-reach outlets to reduce the need for extension cords.

A key assessment element is lighting, especially over the stairs and entryway. Often, recommendations including changing light bulbs, putting in overhead lights, and/or having an electrician add a light switch at the top and bottom of the stairs. Lighting assessment recommendations also include placing a lamp close to the bed where it is easy to reach and installing a nightlight to light the way from bed to the bathroom in the dark.

General recommendations usually include moving items in cabinets to lower shelves to about waist level and acquiring a non-slip rubber mat or self-stick strips on the tub or shower floor. Recommendations for grab bars and other safety aids are routine.

Evaluation Processes and Quality Improvement Mechanisms

After discharge, BCBSRI case managers administer follow-up assessment measures through three, six, and twelve month follow-up telephone calls. They ascertain if members are maintaining recommended changes, if they have had a fall, or if they report other critical indicators of a need for reassessment and care.

The therapists implementing the *Steady Strides* assess the patient's reduction in risk-taking behaviors, and the ability to use home modifications and assistive devices appropriately. Balance assessment measures are repeated to assess balance improvement over time typically at two, four, and six weeks.

VNA assesses patient satisfaction with the process and intervention and collects data on subsequent falls and fall related injuries.

The nurses and therapists working with this program (VNA has 35 therapists on staff) undergo annual competency testing. Managers conduct these annual therapist assessments in community settings.

Where Do We Go from Here?

As the VNA staff worked with BCBSRI to develop and implement *Steady Strides*, they identified a need to address fall prevention for their members who do not have a need for skilled home care but are at high risk of falling. The *Caring Steps* program was developed to address this need. Through the *Caring Steps* pilot program, BCBSRI will pay for one home assessment visit (conducted by a physical therapist or a registered nurse) for individuals at high risk for falls who would not ordinarily qualify for home care. The BCBSRI case management department will refer appropriate members based on the following risk factors: history of falls, poly-pharmacy, gait and balance disorders, muscular weakness, low activity levels, lower extremity sensory loss, low vision, osteopenia/osteoporosis, and age-related changes (e.g., reduced visual acuity). Individuals living with specific medical conditions that lead to increased fall risk (e.g., Parkinson's disease, stroke, arthritis, seizure disorders, or vertigo) will also be referred to the program.

Is this a Replicable Model?

Steady Strides is an interesting model program targeting frail older adults that could be reproduced in other home care agencies. It represents an important commitment by a national health plan to support fall prevention interventions. However, its single source of funding may limit its applicability in other communities, requiring more creative partnering and collaboration with community resources.

What Print or Online Program Materials Are Available?

- Guidelines/policies regarding implementation
- Program manuals and/or other printed materials
- Client satisfaction surveys
- Educational materials for older adults and other audiences
- Marketing materials
- Evaluation processes and tools
- News/media articles
- Web site

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**Special Mention:
Thomas Jefferson University
Center for Applied Research on Aging and Health
Project ABLE**

The Home Safety Workgroup was pleased to receive a nomination from *Project ABLE* (Advancing Better Living for Elders). Project ABLE is a National Institute on Aging (NIA)-funded, home fall risk reduction research project being conducted by the Center for Applied Research on Aging and Health at Thomas Jefferson University.

Project ABLE is targeting older adult residents of Philadelphia County. The senior population of Philadelphia County is composed primarily of African American and White, low-income older adults. Project participants are age 70+ and report difficulties with activities of daily living and a history of falls.

Primarily fed by self-referrals, this project received thousands of responses from brochure dissemination through the local para-transit and social service agencies, ultimately enrolling 319 participants. The intervention draws heavily upon the expertise of occupational therapists who have participated in 35 hours of specialized training. Five home visits by an occupational therapist are provided through *Project ABLE*. The occupational therapists work with the older adult program participants to identify functional areas of concern, conduct a home environmental assessment, make modification recommendations, and introduce tailored strategies, including energy conservation techniques. Participants also receive a single home visit from a physical therapist, who conducts a balance assessment, instructs the participant in basic balance and muscle strengthening exercises, and teaches the participant how to fall safely and recover from a fall. The therapists work together to reinforce key messages and strategies taught. The intervention occurs over a six-month period. An occupational therapist makes three follow-up phone calls over the next six months to reinforce use of fall prevention strategies taught during the intervention.

Home modifications are managed through a subcontract with the Philadelphia Corporation for Aging's (PCA) Housing Department, whose staff members have extensive experience in ordering and installing equipment. PCA has a strong quality control program. Additionally, the occupational therapist assures appropriateness of modifications and trains participant in the use of the equipment/modification once it is installed.

Services are free to participants under NIA grant funding, but one of the exciting aspects of this project is the potential for reimbursement of OT and PT training in the functional improvement program under Medicaid Waiver and Medicare Part B.

As part of a funded research project, a variety of participant outcomes are monitored. These outcomes include:

- Reduction in risk-taking behaviors;

- Reduction in risk of mortality;
- Ability to use home modifications and assistive devices appropriately;
- Participant satisfaction; and
- Functional abilities, depressive symptoms, fear of failing, and falls self-efficacy.

In addition to examining *Project ABLE* effectiveness, *Project ABLE* researchers are pursuing the development of a reimbursable service based on the ABLE intervention as well as its translation into different types of service settings, such as continuing care communities.

Project ABLE is an exciting project that targets a population in need with a comprehensive, multi-factorial approach to reduction of risk of falls. We are looking forward to a complete report describing the *Project ABLE* evaluation findings.

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Section Three: References and Appendices

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Appendices

Appendix A

National Action Plan to Reduce Falls in Older Adults **Goals and Strategies Targeted by this Study**

The following *National Action Plan* goals and strategies were targeted by the Creative Practices in Home Safety Assessment and Modification Study:

Home Safety Goal A: All older adults will have knowledge of and access to home safety measures (including information, assessments, and home modification) that reduce home hazards, improve independent functioning, and lower the risk of falls.

Strategy 1: Identify funding sources and community-based resources to assist older adults in accessing home assessments and making appropriate modifications.

Results: Through this study, a variety of local funding strategies were identified. In addition an overview of public funding opportunities has been compiled. (Appendix I)

Home Safety Goal B: Healthcare, housing, and other service providers will become more aware of and promote home safety measures (including information, assessments, and adaptive equipment) that reduce home hazards, improve independent functioning, and lower the risk of falls.

Strategy 2: Develop a database of best practices in home modifications and effective home safety measures for reducing fall risks at home.

Results: Through this study, 60 programs were reviewed and entered into a database of programs and practices. The ten selected programs provide the reader with models and practices for improving current or adopting new programming. The collection of programs provided the Workgroup with a rich database of practices from which to draw general conclusions on the needs of the field and remaining research gaps.

Strategy 3: Expand and enhance the delivery system for home modification, home safety, and related safety services.

Results: As intended, this report provides organizations with models and practices, as well as delivery models for improving current or adopting new programming.

Strategy 4: Create, translate, and disseminate knowledge tailored for specific professional groups.

Results: As intended, this report synthesizes what is known about the evidence and how select model programs are attempting to put that evidence into practice.

Appendix B

The Creative Practices in Home Safety Assessment and Modification Study: Processes & Results

NCOA has a rich history of conducting effective national calls for best practices and programs that promote healthy aging in community-based organizations that serve older adults. Such practices and programs provide program directors with creative ideas, lessons learned, and strategies that can be implemented to broaden the offering of programs or enhance the quality and effectiveness of current programming offered to older adults.

During the late 1990s, NCOA conducted popular best practices studies on a variety of program areas including: Healthy Aging (*Healthy Aging: A Good Investment*), Caregiver Support (*Together We Care*), and Partnerships that Promote Healthy Aging and Physical Activity (*Partnering to Promote Healthy Aging*). These studies are available on the Web site www.healthyagingprograms.org. Through that work, NCOA developed and honed a process of self-nomination and nomination review by leading experts in the field, which resulted in the selection of replicable, high-quality practices and programs that served the aging services network.

More recently, NCOA has focused on evidence-based programs and strategies for implementation that are available for local implementation. However, in the case of home assessment and modification provided in the context of fall prevention programs, there are no self-contained, evidence-based programs that can be readily implemented in local communities. In the absence of strong evidence of particularly effective programs, there is value in continuing a search for creative and best practice programs and activities. In this case, NCOA believed a national search for Creative Practices in Home Safety and Modification could identify programs and practices that inform the development of effective home safety interventions in local communities.

Many organizations purport to conduct effective home assessment and/or modification programs, yet many more are seeking to implement or strengthen existing home safety programs. It appears that home safety programs are being implemented through an array of funding mechanisms, partnering activities, and implementation schema designed to serve specific needs within communities across the country. In this study, NCOA was interested in learning how organizations identify and access funding sources and implement strategies to sustain programming while meeting growing needs. NCOA was also interested in identifying partnerships that enabled this work and strategies that were used to identify and nurture those partnerships. Thus, it was the intent of this work to identify and promote some of those creative approaches to achieving safe home environments.

To those ends, NCOA, in collaboration with the Home Safety Council and the Archstone Foundation, proposed to conduct a Web-based, national search for effective programs and practices in home assessment and modification that could be replicated by other

similar organizations. NCOA recognized the infinite variety of community organizations that might provide such services and the need to cast the net broadly. NCOA's past success with employing a self-nomination process in the search for best practices led to the adoption of that recruitment strategy for use in the present study.

To help direct the project, NCOA identified members of the Falls Free™ Coalition who were experts in home safety assessment and modification and invited them to participate in a Home Safety Workgroup. The purpose of the Workgroup was to advise NCOA and to participate in the review and selection of programs for the *Creative Programs and Practices in Home Assessment and Modifications to Affect Older Adults at Risk for Falls* Study. Workgroup members are listed in Appendix C. Two members of the Workgroup (not listed) chose to resign early in the process when it became apparent that programs under their purview were likely to be eligible for review.

In late Spring 2006, the Workgroup began its work through monthly conference calls. Intervening work was conducted by e-mail. In preparation for the study, NCOA staff and Workgroup members reviewed *The Role of the Environment in Fall Prevention at Home and in the Community* (Pynoos, Sabata & Choi, 2004). This excellent review was prepared for the original Falls Free™ Summit. NCOA staff also conducted a literature search for more recent reviews or journal articles on home safety and invited the Workgroup members to submit additional relevant research articles. From this review, the staff developed a lengthy document of potential survey issues and areas for exploration. This document was used during the Workgroup conference calls to spur discussion and identification of selection criteria and survey topics.

Through the monthly calls, the NCOA staff facilitated discussions about the evidence available to inform practice in home safety for fall prevention and markers of excellence in program development and evaluation. Those discussions led to the development of the evaluation criteria used to identify *Creative Practices* in home safety (Appendix F). The evaluation criteria were designed to highlight programs' effectiveness in linking assessment findings to recommendations and outcomes, attention to quality assurance, and consideration of contextual features of the setting in which the program was delivered (e.g., home care vs. area agency on aging).

The Workgroup then drew from the evaluation criteria to create 1) screening questions intended to identify programs meeting eligibility criteria for the study; 2) a self-nomination instrument; 3) a telephonic interview guide intended for use in later phases of the study; and 4) a program evaluation review process and worksheet. The screening questions and self-nomination instrument were designed to be accessed in the initial phases of the study via the online service *Survey Monkey*. Members of the Delegate Council of the National Institute of Senior Centers (NISC) agreed to pretest the screening questions and self-nomination application and record the amount of time required to complete the survey. Findings from this review were used to further refine the screening questions and self-nomination instrument. The self-nomination instrument, including the screening questions, is provided in Appendix D.

The telephone interview guide (Appendix G) was designed to gain detailed information about high quality programs identified through the self-nomination process (e.g., partnerships, funding strategies, reach, and effectiveness), with the understanding that it would be used by a Workgroup member after the field of potential *Creative Programs* had been narrowed. The evaluation worksheets (Appendix F) were used by the Workgroup members to evaluate and rate the competitive programs for final selection.

In December 2006, through a variety of E-news publications, Listservs, and Web sites, NCOA began preannouncement messages to peak interest in a national call for Creative Practices. On January 2, the call for self-nominations was announced via electronic means to individuals and organizations. E-news publications, Listservs, and Web sites targeted a broad array of service providers identified by NCOA staff and Workgroup members. (See Appendix E for a complete listing.) The call read as follows:

NCOA Seeks Creative and Best Practices to Prevent Falls

A safe home environment can help address a growing public health issue—fall-related injuries in older adults. As such, the National Council on Aging (NCOA) in collaboration with the Falls Free™ Coalition is seeking to identify and promote 10 *Creative and Best Practices in Home Safety Assessment and Modification*. NCOA is looking for US-based programs or services that address fall risks, make a difference in the lives of older adults, and are either linked to other programs or part of a comprehensive fall prevention intervention. In addition to national publicity, selected programs will receive a cash award and certificate. The self-nomination process is simple. Use an easy-to-complete form available on the Web at <http://www.surveymonkey.com/s.asp?u=478512814179>. We would love to hear about your program. If you have questions contact us at fallsfree@ncoa.org.

The call for programs was open during the month of January, 2007. Ultimately, a total of 232 applicants accessed the full survey. Of those who chose to complete the self-nomination, the six screening questions served to eliminate 72 potential applicants. Ultimately, 60 completed applications were received by NCOA from diverse organizations providing home assessments and modifications.

Through the self-nomination instrument, applicants were to asked to send supporting materials used in their program to NCOA. These supporting materials were used during the evaluation process and included a variety of support documents that were offered by the program leads as well as their assessment tools. NOTE: Assessment tools were reviewed by the Workgroup, but not assessed or validated as a function of this study. They were, however, submitted to Workgroup member Jon Pynoos, PhD, at the University of Southern California, who is leading a team to research the components and processes of effective home assessment tools.

With guidance from Workgroup members, the NCOA staff reviewed the 60 completed self-nomination instruments and identified 25 that met the criteria weighed heavily by the Workgroup. Those key criteria included:

- Professionals play an important role in promoting older adults' efforts to reduce fall risk in the home.
- Partnerships are established to link seniors to needed services.
- Observation of the older adult performance and function is included in the home assessment.
- Outcomes are evaluated with the feedback serving a continuous quality improvement function.

Those 25 applicants were contacted for a follow-up interview. In spite of repeated calls and emails, one contact never responded, and one elected not to participate in the interview. NCOA staff conducted the first interviews to assess the quality of the telephonic interview guide (Appendix G) and the amount of time required to complete the interview. Next, each Workgroup member was assigned two nominees to interview. The nominees' self-nomination materials were provided to the Workgroup member conducting the telephonic interview. The interviews lasted an average of one hour (range forty minutes to two hours). NCOA believed the interviewing experience shared by Workgroup members provided a strong context for the selection process and was pleased to have members validate the value of this experience. Upon completion of the interview, Workgroup members submitted their written findings to NCOA staff for processing. NCOA staff conducted any remaining interviews.

In February 2007, members of the Home Safety Workgroup met with NCOA staff during a two-day meeting held in Washington, DC, to review the 23 programs that participated in the telephone interviews. On the first day of the meeting, two-person teams carefully examined up to five completed applications and prepared a summary of the programs represented. The entire Workgroup reconvened to review and discuss findings. During this process Workgroup members contributed clarifying information from the telephonic interviews as needed. On day two of the meeting, the merits of all 23 programs were again reviewed and discussed; programs were ranked through an iterative, consensus-building process, and the top ten programs were selected as *Creative Practices*. Throughout this process, the members of the Home Assessment Workgroup remained engaged and enthusiastic, believing in the value of this project and its outcomes. The Creative Practices results were released at the American Society on Aging/NCOA National Aging Conference in Chicago, March 6-10, 2007. See Appendix H for the Media Release.

In addition, the Workgroup unanimously agreed to include in this report a Special Mention Category for a study conducted by the Center for Applied Research on Aging and Health of Thomas Jefferson University. Although it is still the subject of research, this comprehensive program has been providing services for over one year to a low-income, at-risk population. The Workgroup was intrigued by the researchers' pursuit of the development of a reimbursable service based on the ABLE intervention and their work on translating this model into different types of service settings such as continuing care communities. This program bears watching and as such deserves special mention.

Appendix C

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Appendix D

Screening Questions and Self-Nomination Instrument

Self-nomination instrument: The following reflects the exact content of the Survey Monkey posted January 2, 2007, remaining open for the entire month of January.

1. What is the purpose of this study?

The purpose of the Creative and Best Practice Study is to identify home safety programs or services undertaken by communities and/or community-based organizations to promote a safer home environment for older adults at risk for falls. We are seeking programs or services that provide both home assessments (administered by trained and experienced individuals) and access to appropriate home modifications/adaptations.

The final study report will feature ten creative and best practice programs or services that are creative yet reflective of available fall prevention research and that can be replicated by other organizations to reduce their older adult residents' fall risk.

The fall prevention research is clear that home hazard assessment and mitigation should be carried out by a trained and experienced person, and be part of a multi-component intervention for community-dwelling older persons who have fallen or have fall risk factors. Therefore, we are particularly interested in home safety programs that: 1) serve older adults who have fallen or are at risk for falling, 2) involve trained, experienced individuals in the home safety assessment and modification process, and 3) are programs that are either linked to, or part of a more comprehensive fall prevention intervention.

In recognition of the multifactorial nature of falls we also expect the Creative and Best Practice Study to identify high quality programs or services that involve a variety of community-based, partnering organizations and reflect creative resource strategies.

We have provided a simple pre-screen of six questions designed to help you recognize inclusion criteria for this survey. If you can answer "yes" to the six questions and if selected as a best practice, you would be willing to discuss your program or service with organizations interested in replicating your model, we urge you to complete and submit the longer survey that follows. We hope to solicit nominations from a wide variety of US-based organizations serving older adult needs.

The Home Safety Workgroup that is advising this study includes members of the Falls Free Coalition who are working to improve the safety of older adults in their homes and communities. The National Falls Free Coalition is working to promote the strategies contained within the National Action Plan, which includes a section addressing home safety. For more information visit: www.healthyingprograms.org.

2. What's in it for my organization?

Programs and services selected as Creative and Best Practices will be announced at the Joint ASA/NCOA Conference in March, 2007. Those selected will be highly publicized through a widely circulated monograph and a variety of media releases.

In addition, each selected organization will be awarded \$500, an attractive certificate, and ten

print copies of the monograph. Most importantly, selected programs and services will serve as exemplary programs that other communities and/or organizations can implement to reduce fall risks among seniors.

TO BEGIN THE SURVEY NOW, CLICK ON THE "NEXT" BUTTON.

NOTE: You can close out of this survey at any time and resume it at a later time. To close out, simply click on the “x” in the upper right-hand corner of your screen. To re-enter the survey, type in the same URL you are provided with in this email:

<http://www.surveymonkey.com/s.asp?u=478512814179>. This survey system recognizes your computer and will have saved responses that you have already entered.

Screening Questions

If you can answer “Yes” to the following six questions, please complete the survey (self-nomination form) that follows.

(If you have any questions, please write to fallsfree@ncoa.org)

*** 1. Does your home assessment and modification program or service target older adults (i.e. individuals aged >60 years) who are at risk for falls (i.e. have a history of falls or fall risk factors)?¹**

*** 2. Does your home assessment and modification program or service provide older adults with professionally (defined as a trained, experienced person) conducted home assessments and access to appropriate modifications or adaptations to reduce their fall risk in their homes?²**

*** 3. Have you been offering this home assessment and modification program or service for one year or longer?³**

*** 4. Do you collaborate with one or more organizations in your community to conduct this home assessment and modification program or service?⁴**

*** 5. Does your home assessment and modification program or service link the older adult to other fall prevention services (e.g., physical activity/ exercise, medical risk assessment, life alert system, etc...) or provide referrals to other organizations comprehensively addressing fall prevention?⁵**

*** 6. If selected, would you be willing to participate in a telephonic interview to allow us to learn more about your home assessment and modification program or service?⁶**

¹ This question served to target the audience of interest for this study.

² The use of a trained assessor and linkage to modification services reflects the evidence

³ This question served as a marker for sustainability

⁴ This question reflected the Workgroup members’ belief that such a comprehensive undertaking required strategically established partnerships with a variety of community organizations.

⁵ This question reflected the evidence regarding characteristics of successful home safety programs offered in the context of fall prevention.

⁶ This question served as notice of a subsequent telephonic interview.

NOTE: If the applicant answered “no” to any of the above questions, a thank you message was generated and the applicant was denied access to the full survey:

4. Self-nomination Form

Please complete the following self-nomination form to describe elements of your home assessment and modification program or service. We have tailored the questions to reflect what the evidence tells us about effective home assessment and modification programs or services. The resulting 27 questions are primarily multiple choice. We have also included some open-ended questions to allow you to provide additional detail to reflect a true picture of your program or service. The information being requested will be considered confidential unless your program is selected for inclusion in our final report.

(If you have any questions, please write to fallsfree@ncoa.org)

*** 7. What is the name of your home assessment and modification program or service?**

*** 8. What is the primary organization hosting this home assessment and modification program or service?**

*** 9. What type of organization is this?**

- Home care agency
- Healthcare agency (other than home care agency)
- Senior center
- Area agency on aging
- Design/ remodeling
- Nonprofit service agency
- For-profit service agency (please specify)
- Other (please specify)

*** 10. Please provide the following Contact Information for the primary contact for this home assessment and modification program or service.**

(Please note that all field entries are required.)

Self-nomination Form: Overview of Your Program or Activity

Please provide a summary description of your home assessment and modification program or service by addressing the questions that follow.

(If you have any questions, please write to fallsfree@ncoa.org)

*** 11. Generally describe the community your organization serves (geographic location and demographics, including general profile of older adult residents).**

*** 12. Describe the older adult population you serve through your home assessment and modification program or service. (Please include age range, income levels, and general description of fall risk factors addressed.)**

*** 13. How many older adults would you estimate you have provided home assessment and modification services to over the past twelve months?**

*** 14. Briefly describe your home assessment and modification program or service content and outcomes. You may want to describe a typical process of home assessment and modification.**

15. Identify the KEY community organizations with whom you collaborate in this home assessment and modification program or service. (Please check all that apply.)

- First responders (EMS, firemen, etc...)
- Caregiver organizations
- Healthcare providers
- Home modification providers
- Community volunteer organizations
- Aging service providers
- Centers for independent living
- Organizations serving people with special conditions
- Other (please specify)

16. What are your primary referral sources? (i.e. what organizations, agencies, etc. refer clients to you for home assessment and modification?)

List three

17. Identify the KEY funding sources, donated services, and other resources that serve to underwrite your home assessment and modification program or service (Please check all that apply.)

- Community Development Block grant
- Older Americans Act funds
- US Department of Agriculture funds
- Medicaid waiver program
- State sources
- Local community funds
- Foundation grants
- Rebuilding Together
- Community volunteer organizations
- Insurance
- Private Pay
- Other (please specify)

*** 18. If costs are shared by the service recipient (i.e. the older adult), are they:**

- Assessed through a sliding fee scale
- Offered through a menu of purchase options
- No cost: all services are free

*** 19. In the pre-qualifying survey we asked if your home assessment and modification program or service was part of a more comprehensive fall risk program. Please briefly describe that total intervention, and how the home safety/ modification process fits in to that broader intervention.**

*** 20. Describe the member(s) of your home assessment team, including any preferred professional credentials and/or specialized training.**

*** 21. Describe the individual(s) who provide the remodeling/modifications in the home, including their preferred professional credentials (i.e. remodeler certification) and/or specialized training.**

*** 22. Do you have a specific program manager who oversees the process of securing the assessment and recommendations?**

- Yes
- No

*** 23. Is this home assessment and modification program or service a person-centered effort, allowing the older adult to be a major decision maker in the home safety assessments/modifications process?**

- Yes
- No

*** 24. Does your home assessment and modification program or service take steps to help older adults to change their risk behaviors in the home (i.e. reduce clutter, improve lighting, adopt age-appropriate strategies, etc...)?**

- Yes
- No

25. What individual level participant outcomes do you monitor? (Please check all that apply.)

- Reduction in risk-taking behaviors
- Ability to use home modifications appropriately
- Ability to use assistive devices appropriately
- Satisfaction
- None: do not measure participant outcomes
- Other (please specify)

*** 26. We are interested in learning about written guidelines, materials, and/or tools you use to implement this home assessment and modification program or service. Please check those relevant print/on line materials you have available. (Please check all that apply.)**

- Guidelines/policies regarding implementation
- A line item budget for this program or activity
- Program manuals and other printed materials
- Client satisfaction surveys
- Educational materials- for older adults
- Educational materials- for other audiences
- Marketing materials
- Evaluation processes
- Evaluation tools
- News/media articles about your program or activity
- Other (please specify)

*** 27. Do you utilize a specific home safety assessment tool?**

- Yes
- No

Please email a copy of this tool to fallsfree@ncoa.org and title the subject line as “home assessment tool.” If you are unable to email your tool, please fax it to NCOA at 202.479.0735, attention to: Falls Free and be sure to put your organization’s name on it.

Appendix E

Dissemination Venues: Call for Self-Nominations

Venue

National Council on Aging Weekly Electronic News
Falls Free Electronic News
CDC Listserv Electronic News
National Institute for Senior Centers, Electronic News
Home Safety Coalition Electronic News
American Physical Therapy Association Electronic News
American Occupational Therapy Association Electronic News
Posted on www.HomeMods.org Web Site
Posted on www.stopfalls.org
Posted on www.ncoa.org
Posted on www.epa.gov/aging
Posted on www.healthyagingprograms.org
Posted on www.aoa.gov
Posted on www.homesafetycouncil.org
Posted on www.centerforhealthyhousing.org
Falls Free Listserv alert message
Announced in the NCIPC-ANNOUNCEMENTS@LISTSERV.CDC.GOV
Preventive Healthcare for the Aging (PHCA) Program Directors Listserv
Announced through “Interested Parties Listserv” - the CA Osteoporosis Prevention and Education Project
Announced through “Interested Parties Listserv” - the Arthritis Prevention Project
Announced through Active Aging Task Forces
American Society on Aging Network
Healthy Aging Research Network
Active Aging Partnership
Pennsylvania PrimeTime Health Coordinators
The National Association of Area Agencies on Aging
State Coalition Workgroup networks
California Fall Prevention Initiative
Connecticut Collaboration on Falls Prevention
Maine Coalition on Fall Prevention
Michigan Fall Prevention Partnership
Minnesota Fall Prevention Initiative
New Hampshire Fall Risk Reduction Task Force
Wisconsin Statewide Falls Prevention Initiative

In addition, NCOA contacted aging service network leaders, researchers, and safety experts and requested that they share broadly the announcement of NCOA’s search for creative home safety assessment and modification programs.

Appendix F

Evaluation Criteria

Processes and criteria for reviewing and screening applications, and the follow-up interviews were established to ensure selected programs met a variety of organizational criteria.

In the initial NCOA screen of the 60 applicants, self-nominations were reviewed to ensure programs included documentation of the screening criteria; for the six screening criteria see Appendix D. If applicants answered yes to all six questions, they were permitted to access the survey. In several applications it was apparent programs did not meet those inclusion criteria.

In a second review, staff looked for criteria noted by the Workgroup as essential elements. It is necessary that the applicant program:

- Addresses fall prevention programming as a strategic priority;
- Is sustainable and has been operating at least one year;
- Can measure performance and incorporates performance measures in a continuous improvement effort;
- Has established and nurtured strategic partnerships that expand its reach and service delivery and sustainability;
- Has established processes for referring participants to other services;
- Is reaching those older adults in need; and
- Demonstrates a vision and the capability to expand to meet demand.

In addition, the Workgroup felt the evidence supported including the following criteria, which were reflected in the Home Assessment and Modification Telephone Interview Tool (Appendix G):

- Professionals play an important role in promoting older adults' efforts to reduce fall risk in the home.
- Partnerships are established to link seniors to needed services.
- Observation of the older adult performance and function is included in the home assessment.
- Outcomes are evaluated with the feedback serving a continuous quality improvement function.

In February 2007, the Workgroup met for two days in Washington, DC, reviewing and assessing applications. The grading worksheet found on the following pages was used to assess each applicant:

APPENDIX F (continued)

Creative and Best Practice Home Safety Study

Evaluation Form

2007

Given that we have 9 elements and multiple sub-elements, a system of awarding 0-1-2 per criterion with some extra points is proposed. Those criteria of emphasis (e.g. active role of the older adult participant, role of community partners) have been awarded 5 points.

CRITERIA	# POINTS POSSIBLE THIS CRITERIA	# POINTS EARNED THIS CRITERIA	COMMENTS EXPLAINING POINTS EARNED	COMMENTS EXPLAINING DEDUCTIONS
* =applicant was required to report on this feature (i.e. degree to which the feature is a part of their program) **= all programs considered for recognition as “Best and Creative Practice” must have these features.				
1. Program history History grew out of an identified need In the community vs. No “track record” provided	5			
SUBTOTAL : PROGRAM HISTORY xx/5 points				
2. Target population & Access Strategies				
* Target population is clearly identified as a fall risk population	2			
*Target population has a clearly identified need	2			

*Marketing strategies are appropriate given target populations	2			
*Referral sources are appropriate for reaching the targeted population	2			
Referral sources reflect creativity by organization and/or by Use of those referral sources	2			
OTHER (Recommended): Program targets individuals other than older adults in the community (e.g. first responders, caregivers, the health care providers, contractors, others.)	<i>Possible extra credit +1</i>			
SUBTOTAL : TARGET POPULATION xx/10points + 1				
3. Contributors/Community Partners				
*Key community-based partners identified. (Full points for creative use of community partnerships and programs involving diverse representation of committed organizations representing aging, public health, health care and/or other sectors)	2			
Community partners include unique collectives of first responders, caregivers, contractors, others	<i>Possible extra credit +1</i>			
*Roles of key community-based partner are clearly described.	2			

*Community-based partners are well utilized. (Program makes use of strong partnerships).	2			
SUBTOTAL : Contributors/Community Partners xx/6 points + 1 possible				
4. Program Costs, Funding Sources/Donated Services and Resources				
Costs to the older adult service recipient are clearly described.	2			
* Costs to older adult service recipients are reasonable/appropriate and do not serve as a barrier to seniors in need	2			
*Funding organizations are clearly described.	2			
*Program reflects creativity in funding sources and accessing donated services/resources.	2			
Program reflects creativity in accessing donated services to some degree.	<i>Possible extra credit +1</i>			
Sources of funding and donated volunteered services/resources are stable/sustainable	2			
SUBTOTAL : Program Costs, Funding Sources/Donated Services and Resources xx/10 points + 2 possible				

5. Program Content and Activities				
*Program goals are well described.	2			
*Program content is clearly described	2			
<p>Program content reflects creativity, breadth and depth. Full points require programs that address many facets of home safety (pertaining to fall prevention). These factors include, but are not limited to:</p> <ul style="list-style-type: none"> • structural modifications • removing hazards in the home such as throw rugs, phone/lamp cords, etc.) • use of assistive technology <ul style="list-style-type: none"> ○ This includes simple adaptive equipment (e.g. reachers, sock aids) and durable medical equipment (e.g. tub benches). • emergency monitoring (i.e. lifeline) and systems that allow the resident to access help/avoid isolation and a “long lie” after a fall 	2			
*Program content is evidence-based (Full points to applications that support claims of being evidence –based with explanations, citations.) Also receive credit for incorporating best practice concepts	5			
*Program processes are clearly described, which refers to how the actual work is completed.	2			
*Program processes reflect creativity, breadth and depth	2			
Again, full points require programs that address many				

facets of home safety including: <ul style="list-style-type: none"> • Structural modifications • removing hazards in the home • use of AT • emergency monitoring (i.e. lifeline) and systems that allow the resident to access help/avoid isolation and a “long lie” after a fall 				
Processes allow some flexibility.	2			
** (*) Program processes include involvement of a health care professional in the home safety assessment/hazard mitigation process. <i>(Note: Exclusive involvement of health care professionals is not the intent here)</i>	<i>Possible extra credit +1</i>			
*The older adult service recipient is involved the home safety/home modification process and do processes foster safety in the home on a long-term basis. Examples include (but are not limited to): -assessing the older adults functioning in the home (i.e. safety during ADLs/IADLS is assessed via a functional assessment) -teaching about falls risk factors (environmental/other) and fall prevention programs in the community. -involving the older adult in the home mod process -teaching low-cost strategies to improve home safety (i.e. removing throw rugs -teaching how to use low or high tech AT -teaching about emergency monitoring (i.e. personal emergency response systems) and systems that allow the resident to access help/avoid isolation and a “long lie” after	5			

<p>a fall</p> <ul style="list-style-type: none"> -teaching older adults and their caregivers/significant others how to build problem solving abilities/capacities pertaining to home safety problems. -Consideration of the older adult's feedback on how the modification worked. Could include a "trial period" for the older adult resident to use the modification and report back on success/concerns. <p>NOTE: Seek examples of educational materials available to assess format, content. Ask if materials are available in languages other than English.</p>				
<p>*Mechanism or referral network for referring the older adult to other services as individually is well described and appropriate.</p>	5			
<p>*The home assessment /modification initiative is part of a more comprehensive <u>fall prevention</u> program. (Description of total intervention, and how the home safety/modification process fits in to that wider initiative is clear and reflects excellent coordination.)</p>	5			
<p>The home assessment /modification initiative is part of a more comprehensive <u>injury prevention</u> program (i.e. fire prevention, CO poisoning prevention). (Description of total injury prevention program, and how the home safety/modification process fits in to that wider initiative is clear and reflects excellent coordination.)</p>	<i>Possible extra credit +1</i>			
<p>SUBTOTAL : Program Content and Activities xx/30 points + 1</p>				

6. *Implementation Activities				
Written guidelines/policies regarding the implementation of the initiative are available.	2			
Program has a named coordinator to monitor the process of securing the assessment, and in working with installers, volunteers, contractors, etc., in making modifications or repairs.	2			
Program has a process (in writing) to follow the process from start to completion.	2			
*Program has a process for building relationships with local building supply houses, contractors' unions, and others within the business sector.	2			
Program has a process of prioritizing alterations (which may just include removing hazards, adding light, moving furniture) or modifications to the home.	2			
SUBTOTAL : Implementation Activities xx/10 points				
7. Maintenance Activities				
Program has been sustained over time or has potential to be sustained over time/steps taken to support sustainability are clearly described/reflect a thoughtful & creative process				
SUBTOTAL : Maintenance Activities xx/5 points	5			
8. Estimate of Reach and Effectiveness:				
* * (*) The number of older adults served over a given period of time is clearly described.				

Number of older adults served is considerable considering context/funding.	2			
*Program includes strong processes to: <ul style="list-style-type: none"> • provide accountability • continually improve the program, and • address changing needs? (Processes may include, but are not limited to, steps taken to monitor the accountability and trustworthiness of people coming in to the home to do home assessments and modification work.)	2			
*Program involves assessment of <i>individual</i> outcomes (obtained via self report of an older adult service recipient or by other means). (Individual outcomes include but are not limited to changes in knowledge, attitudes, behaviors or prevalence of injuries.) and Measures used to assess individual outcomes are appropriate and comprehensive.	2			
Findings regarding individual outcomes are reported.	2			
Findings reflect accurate interpretation of data provided.	<i>Possible extra credit +1</i>			
*Program involves assessment of <i>community level</i> outcomes and Measures used to assess community-level outcomes are appropriate and comprehensive.	<i>Possible extra credit +1</i>			

Findings regarding community-level outcomes are reported.	<i>Possible extra credit +1</i>			
*Measures of effectiveness to ensure that program reaches individuals in need are reported an appropriate.	2			
*Processes to assure the quality of the home assessment/modification are described and appropriate. (Could include assessment of quality of workmanship, and/or appropriateness of modifications, and/or cost of modifications.	2			
SUBTOTAL :Estimate or Reach and Effectiveness xx/12 points + 3 possible				
9. Adoption Activities				
* Initiative is readily adaptable to other communities. (Full points require availability of well developed program materials to support program replication.	5			
SUBTOTAL : Adoption Activities xx/5 points				

COMMENTS:

Please include comments about:

- program strengths that require more explanation or that exceed criteria/are not reflected in the above evaluation
- program weaknesses that require more explanation or are not reflected in the above evaluation
- Overall evaluation of the program

TOTAL POINTS POSSIBLE: 101

TOTAL POINTS EARNED:

Rank:

COMMENTS:

Appendix G

Home Assessment and Modification Telephonic Interview Tool

Standard Preamble: Thank you for agreeing to participate in this interview process for consideration in the *Creative and Best Practice Home Assessments and Modifications Study*. Although the application & review process is still ongoing, we are initiating the follow-up telephonic interviews on programs that reflect some of the key elements we envision in a best practice program. As noted in the original application this is the second step in the selection process, wherein we collect additional and clarifying information prior to the actual board selection process.

I will be working from a prepared list of questions that are quite comprehensive. We are not expecting programs to address all of these areas and do not want you to feel discouraged if your program does not address some of these areas of interest.

1. Please tell me about the types and roles of referral sources you listed in your self-nomination process.
 - a. Given the target population, how do those referral sources listed help you to reach those in need?
 - b. Do you market to the older adults themselves? To the referral source organizations? How did you develop these specific referral sources?
 - c. Can you estimate the percent of service recipients referred by this source?
2. Tell me about the types and roles of key partners you identified in the self-nomination process.
 - a. Can you describe a creative aspect of your partnering efforts?
 - b. How they were initially recruited to this effort?
 - c. How are you sustaining this partnership?
3. Please tell me about use of funding sources, donated services and other resources you identified in the self-nomination process:
 - a. Please describe a creative aspect of your funding acquisition.
 - b. Please provide an estimate of the funding value of donated services.
 - c. What is the estimated percent of services covered by your listed sources:
 - ii. Home Assessments
 - iii. Home Modifications
 - iv. Equipment acquisition
 - v. Other
4. Please tell me about the training, preparation, and monitoring of Assessors:
 - a. How do you recruit and retain qualified staff /volunteers? (Explore staffing/contracting configuration and any use of volunteers in the process.)

- b. What type of information is included in the home hazard assessment program? (Work from the assessment tool if provided.)
 - c. Is there a process to determine how home safety problems are prioritized?
 - d. What person-level barriers most often prevent individuals from making structural modifications?
 - e. What percent of assessments would you estimate result in recommendations that do not include structural modifications?
5. Tell me about the training, preparation, and monitoring of remodelers (defined as people making structural changes from installing grab bars to widening doors, building ramps, etc.)?
- a. How do you recruit and retain qualified staff /volunteers/contractors or others to make structural changes in the homes? (Explore staffing configuration and any use of volunteers in the process.)
 - b. Does your organization have working relationships with home supply stores, like Home Depot, Lowe's, or a hardware store in your community to discuss home safety options, like grab bars and stairway rails and how to install equipment? How do these relationships work?
 - c. Does your organization have a list of approved contractors that older adults can reference?
 - d. Does your organization have contractors who will install home safety equipment for free or at a reduced cost?
6. Tell me about the role of the Older Adult in the Home Assessment and Modification Program. Are caregivers included where appropriate?
- a. Do you use a specific intake tool (not the physical structure assessment tool) that involves the older adult? If so, can we get it?
 - b. Do you query older adults on their perceived needs?
 - c. Do you consider the older adult functional capacity and ability to benefit from the proposed modifications?
 - d. Is the assessor trained to involve the older adult and/or caregiver?
7. Interviewer to explore the larger program of risk management and how it is integrated into or with the home assessment/modification program:

* your program links the older adult to other fall prevention services → using the information provided in Q19 clarify assessment and referral activities, and assess if this is a comprehensive program approach.

* your program provides home assessments and modifications as a referral service in collaboration with other organizations addressing more comprehensive fall prevention.

Ask questions re: the following components and how they address each risk factor:

- a. Appropriate use of medication
- b. Falls Prevention/Fall risk Screening → do you screen for functional capacity and if so what tool do you use? Can we get a copy?
- c. Blood pressure assessment

- d. Home hazard assessments
 - e. Other risk factors
8. Explore the education program that supplements the home assessment and modification program:
- a. Does the educational/training component include teaching older adults and caregivers/significant others cues that suggest need for preventative action (i.e. health change), how to recognize hazards in the home, and how to create and implement an “action plan” to resolve an identified hazard.
 - b. Are educational materials available? In what format? For whom? How are the materials distributed? Are they bilingual? Can results be validated?
9. Gather additional information about the nature of changes made:
- a. home modifications (structural changes)
 - b. modifications to the home that are not as involved as home modifications (i.e. removing hazards in the home such as throw rugs, phone/lamp cords, etc.)
 - c. use of assistive technology, which includes simple adaptive equipment (e.g., reachers, sock aids) and durable medical equipment (e.g., tub benches).
 - d. emergency monitoring (i.e. lifeline) and systems that allow the resident to access help/avoid isolation and a “long lie” after a fall
10. Did the nominee submit or do they use a specific assessment tool?

If yes: the Interviewer will have that tool for reference

- a. Who developed the tool – level of expertise?
- b. How is it administered?
- c. Are users trained on how to administer the instrument and evaluate the results?
- d. How are the results used?
- e. Does the user know of things that should be changed to make it more efficient?
- f. How are the results shared with the person who has been evaluated?
- g. Does the tool evaluate the person, the home, or both?
- h. Do you have a process for re-evaluating:
 - i. The individual
 - ii. The home modifications
 - iii. Other

If no: what are the key features of your environmental assessment and why are they important?

- a. Do you have a process for re-evaluating:
 - i. The individual
 - ii. The home modifications
 - iii. Other

11. What outcomes do you routinely monitor?
 - a. Assess how the program measures performance (assessor, remodeler, individual, program level, etc.) and incorporates performance measures in continuous improvement.
 - b. Do you have any outcomes data to share?
 - c. What impact do you think you have had on the individual and/or the community?
 - d. Do you have a process of re-evaluation? At what intervals? What do you re-evaluate?

12. What are barriers or challenges to sustaining or expanding services?

13. Is there anything you would like to tell us about the program, population served or outcomes that we did not explore?

14. Do you have plans for the future? Expansion or revision of the program?

15. One last question to help us with our communication plan for maximizing the broadcasting of this opportunity to a variety of appropriate organizations. How did you hear about the survey?

Thank You!

Appendix H

Media Release Announcing Selection of 10 Creative Practices



FOR RELEASE March 7, 2007

Contact: Scott Parkin, 202-479-6975/202-657-2894 (At conference)

Falls Free Coalition Identifies Creative Programs and Practices That Reduce Home Hazards

CHICAGO -- The Falls Free Coalition has identified 10 creative programs and practices in home assessment and modification that can reduce home hazards and will recognize them at the joint conference of the American Society on Aging and National Council on Aging today.

The Coalition is dedicated to preventing falls in older adults. At last year's conference, it introduced the Falls Free National Action Plan. In 2003, falls resulted in 13,700 deaths, 460,000 hospitalizations and over 1.3 million emergency room visits. In addition to the pain and suffering, fall related injuries medical costs were over \$19 Billion in 2000.

"Falls are not a normal part of aging and there are many risks that can be addressed that will reduce the number of falls in older adults," said James Firman, NCOA president and CEO.

Over the past nine months, the Home Safety Workgroup of the Coalition designed and conducted a national search for creative programs and practices. This effort was funded by the national nonprofit Home Safety Council, a coalition and workgroup member. Members of the Workgroup are leading experts in home safety who worked together using the available research evidence to develop a self-nomination survey that resulted in over 60 completed self-nominations.

Bonita Beattie, director of the NCOA's Center for Healthy Aging and chair of the Coalition noted, "The research is clear that home safety assessment and modification is effective only when it is part of a larger risk factor assessment and intervention program. And, home modification must accompany assessment if warranted."

"Falls are such a serious public health issue and it's exciting to see innovative approaches to helping the public, especially older adults, understand their risks," said Meri-K Appy, president of the Home Safety Council. "We are hopeful that employing creativity in home assessment and modification programs will go a long way toward helping families realize the importance of making changes to help prevent falls."

The Workgroup believes all programs should implement a continuous quality assurance strategy and strive to measure appropriate outcomes; and should analyze and use those outcomes data in a variety of ways that improve the reach, effectiveness, and sustainability of the program.

Some important lessons learned from these programs and practices were that home assessments and subsequent modifications are complex activities that require careful planning, oversight, and follow-up at all stages. Also, creative strategies noted included collaborating with first responders and other key partners, making use of trained volunteers, and integrating a fall risk assessment program into a larger

safety program aimed at keeping older adults in their homes. It was also clear from these examples, that collecting objective feedback and employing that feedback to improve programs and processes was uneven.

The Coalition will publish a report later this year that will provide readers with home assessment and modification programs and practices that can be adapted to local communities to promote the safety and well being of older adults when used in conjunction with a larger fall prevention intervention. The report will also include creative practices from programs reviewed in the selection process that address use of volunteers, community partners, and funding strategies.

The 10 Creative Programs

- Home Injury Prevention Program: Neighborhood Senior Services- Ann Arbor, MI
- Senior HealthLink: Neighborhood Health Agencies- West Chester, PA
- SPICE for Life: Pitt County Council on Aging- Greenville, NC
- Touchmark's Fall Reduction and Awareness Program: Senior Retirement Community Health and Fitness Clubs- Beaverton, OR
- Fall Risk Reduction Project: Saint Elizabeth Home Care Services- Lincoln, NE
- Steady Strides: VNA of Care New England- Warwick, RI
- TriHealth Senior Link Home Safety Check: TriHealth Senior Link (Program of All-inclusive Care for the Elderly/PACE Program)- Cincinnati, OH
- Community Outreach Services Home Safety Unit: Open Hands- Santa Fe, NM
- Farewell to Falls: Stanford University Medical Center Trauma and Emergency Services- Stanford, CA
- LifeAssess: Holy Redeemer Home Care- Philadelphia, PA

About NCOA

The National Council on Aging's mission is to improve the lives of older Americans. NCOA programs help older people remain healthy and independent, find jobs, increase access to benefits programs, and discover meaningful ways to continue contributing to society. A charitable organization with a national network of more than 14,000 organizations and leaders, NCOA was founded in 1950 and is based in Washington, DC. For more information about NCOA, please visit www.ncoa.org.

About Home Safety Council

The Home Safety Council (HSC) is the only national nonprofit organization solely dedicated to preventing home related injuries that result in nearly 20,000 deaths and 21 million medical visits on average each year. Through national programs, partnerships and the support of volunteers, HSC educates people of all ages to be safer in and around their homes. The Home Safety Council is a 501(c)(3) charitable organization located in Washington, DC.

Appendix I

Funding Sources for Home Modification

Compiled by Julie Kosteas, MPH, NCOA

Federal Sources

Funding for home modifications is required by the Medicaid Act, Title I, Title VII, Section 504 of the Rehabilitation Act and the Fair Housing Amendments of 1988. These laws provide a right to funding assistance for home modifications needed by people with disabilities.

- **Plan for Achieving Self-Support (PASS)**
Supplemental Security Income (SSI) allows recipients of this program to set aside income toward an approved plan for achieving self-support without jeopardizing benefits. This plan will cover modifications to a home through an SSI savings plan. Call (800) 772-1213 for information.
- **USDA Rural Development, Section 502, 504**
The Direct Rural Housing Loan Program, Section 502, provides assistance to very low, and low-income, owner-occupied households. The Guaranteed Rural Housing Loan Program provides assistance to households with moderate incomes to buy, build, improve, repair, or rehabilitate rural homes. Call (202) 720-4323 for information. Low-income homeowners over 62 also qualify for grants under Section 504 to build and repair their homes. Contact your local SDA/Rural Developments county office.
- **The U.S. Department of Housing and Urban Development (HUD Homes)** has various programs for low-income families and persons with disabilities. Check government pages in your directory for Contact Information. In addition, HUD provides direct loans to certain neighborhood development and employment agencies. Contact your city government or HUD field office to determine if such a program is available in your area. HUD also distributes funds under the Community Development Block Grant (CDBG) Program to towns and cities for neighborhood improvement. The local government decides how to use this money, but some jurisdictions have elected to use part of their grants to help residents fix their homes. Contact your local government to determine if such a program exists in your area.
- **The Accessible Customized Environments Program (ACE)** locates, purchases, rehabilitates, or modifies homes that have been pre-sold to qualified families with a member who has a physical disability. Contact ACE at Extended Home Services: (847) 215-9490.
- **Federal Medicaid Waiver programs** are available and variable on a state or local level. Medicaid's Home and Community Based Waiver can fund a ramp

and/or home modifications as part of an array of in-home services, which enable people to live at home instead of a nursing facility. However, a person cannot be made eligible for this waiver just to get a ramp. Contact the Department of Disabilities and Special Needs for more information about this waiver.

- **Federal Title XXI Social Security** funds are available and variable on a state or local level.
- **The Federal Older Americans Act** is administered through state Boards on Aging and/or state and local agencies. Check for local listings in government pages of directory.
- **The Farmers Home Administration (FMHA)** Provides 502 or 504 loans in rural areas. Low-income homeowners over age 62 also qualify for grants under Section 504 to build and repair their homes. Contact your local FMHA county office.
- **The Veterans Administration (VA)** provides low-interest loans to veterans to modify their homes. Contact the Veterans Administration to help you secure funding. The Department of Veterans Affairs will pay for ramps and home modifications to qualified veterans, described in VA Pamphlet 26-69-1, Questions and Answers on Specially Adapted Housing and Special Housing Adaptations for Veterans. Veterans with disabilities may contact their service officer to determine how much modification the Department of Veterans Affairs (DVA) will pay. Also ask about the Veteran's Administration Home Adaptation Grant Program. For literature and details on programs, contact the Paralyzed Veterans of America: (202) 872-1300 (V), (202) 872-1300, ext. 622 (TTY), (202) 785-4452 (FAX).
- **The Internal Revenue Service (IRS)** allows you to deduct equipment, furnishings, and permanent changes for access to your home as medical expenses on your IRS form. Deductions are allowed for certain modifications such as installing ramps; widening doorways; modifying kitchen cabinets and equipment; and moving or modifying electrical outlets and fixtures, fire alarms, and smoke detectors. Accessibility features are considered medical expenses. These deductions must be itemized on schedule A with other medical expenses. If you're audited, you'll need a statement from your realtor or contractor. The IRS Treasury Publication 907 (revised November 1981) can explain this program. Check with your local office or tax attorney for details.

State/Local Sources

- Check with your State for special **low interest loans and grants**. Contact your local or state housing authorities to determine the availability of such programs in your area.

- State finance agencies, departments of public welfare, community development departments, and building inspection departments are other possible sources of information.
- Your **State's Vocational Rehabilitation program** may pay for ramps and some home modifications for people who qualify for their services, if these modifications enable the person to become or stay employed.
- Check for **State sales tax exemptions and deductions**, State and local property tax credits, or abatements.
- **Local Government**
Inquire of your city, town, or county for special housing programs. Try your alderman or local congressman's office for information on housing repair programs. Programs are granted to low-income families and may include kitchen or bathroom modifications or ramp installation.

Nonprofit Sources

- **Access Home Modification Program** provides mortgage loans (up to \$10,000) to assist persons with disabilities or who have a family member(s) living in the household with disabilities who are purchasing homes and need to make accessibility modifications. This program provides a deferred payment loan, with no interest or fees, and no repayment until the house is sold, transferred, or the first mortgage is paid off or refinanced. www.phfa.org/programs/singlefamily/ahm.htm
- **Center for Accessible Housing (CAH)**
CAH publishes fact sheets—such as Financing Home Accessibility Modifications; Home Financing for Older People; Benefits of Accessory Unit Housing for Elderly Persons with Disabilities; The Housemate Agreement—and technical packages for using grab bars, universal design, etc. Contact: Center for Accessible Housing at North Carolina State University, (919) 515-3082.
- **Christmas in April**
This is a volunteer project around the country that takes place on the first Saturday in April. Volunteers organize painting parties or make repairs for low-income, elderly, and disabled homeowners. Contact Christmas in April USA (try the Internet) for a group near you or to start your own.
- **Community Projects**
Many organizations organize repair projects for elderly persons or persons with disabilities. Organizations may include your neighborhood association or community groups, churches, synagogues, Lutheran Social Services, Catholic Charities, Little Brothers of the Poor, Jaycees, Agency on Aging, senior centers, building trade unions, Boy Scouts of America, Girl Scouts of America, Kiwanis Clubs, sororities, fraternities, high school volunteer groups, YMCA, Knights of

Columbus, Rotary Clubs, Lion's Clubs, B'nai B'rith, Masons, or 4H Clubs. Inquire about interest in a community project or see if you can propose one.

- **The Easter Seals Society** has independent living funds for purposes such as bathroom modifications and auto adaptations, as well as ramps for people who qualify, based on available funding in a particular county.
- The **Disability Action Center** also helps with ramps and some home modifications to people who qualify for their services.
- **Independent Living Centers**
These centers provide information and referrals on how to get funding in your area. There are approximately 400 independent living centers around the country. For the name of the one nearest you, contact the National Council on Independent Living Centers at (703) 525-3406 (V); (703) 524-3407 (TDD). Most states have a state independent living council (SILC) that can give you a referral. See the Directory of Centers for Independent Living, <http://www.virtualcil.net/cils> (Click on your state for the Center for Independent Living nearest you.)
- **Local building supply stores** sometimes donate lumber for ramps to people who qualify through an agency like Easter Seals.
- The **Telephone Pioneers** may help build a ramp if someone else supplies materials.
- **Foundations and Donor's Forums**
Foundations are nonprofit organizations that support charitable activities to serve the common good. Individuals, families, or corporations create them with endowments (donated money). They make grants with the income they earn from investing the endowments and are exempt from federal income tax. Ask the librarian of the main library (not a branch) to show you where to find lists of private foundations.

Private Sources

- **Private Organizations**
Certain private organizations will be able to assist with part of the money, so pursuing several sources may cover the bulk of your expenses, usually available for those who meet an organization's particular need-based criteria. Possible sources: The American Cancer Society, National Multiple Sclerosis Society, National Muscular Dystrophy Association, and the National United Cerebral Palsy Association. (Local branch offices will not have the resources the national offices do.)
- **Landlords**
The Fair Housing Act of 1988 Section 6(a) makes it illegal for landlords to refuse to let tenants make **reasonable modifications** to a house or apartment if the tenant is

willing to pay for the changes. The tenant must also restore the apartment or house when they leave, if the landlord wants it restored. Often times the added accessibility features makes the unit marketable to more populations and a landlord may be willing to split the costs. **New construction** of dwellings of four or more units must include wheelchair accessibility through entry ways and bathrooms, reinforced walls for grab bars in the bathroom, and accessible electrical outlets and thermostats.

- **Private Mortgage and Home Loans**

Low interest Home Equity loans or lines of credit are available from most banks for amounts up to 80 per cent of the equity a person owns in their home. Any accessibility features, such as a ramp or lift, should be added to the price of a home when applying for a mortgage. Federal Home Bank/Affordable Housing Programs are connected with the savings and loan industry. Check with a larger bank or savings and loan institution.

- **Worker's Compensation**

Home modification can be included as part of a Workers Compensation claim and rehabilitation program.

- **Private insurance**

An insurance policy can include home modification as part of a rehabilitation program. Certain modifications, such as purification systems or air conditioners, may be covered as a medical necessity if prescribed by a doctor. Make sure to get a letter from your doctor describing your injury and what is needed. (Expect an automatic denial and then keep appealing before being accepted. Remember to provide the specific information requested by your insurance company such as obtaining several price quotes for an item.)

Sources

Infinitec, Inc. is a joint effort of the United Cerebral Palsy Association of Greater Chicago and United Cerebral Palsy Associations, Inc., Washington DC. On their Web site is a list of possible avenues of financial assistance to pursue, collected from many sources. <http://www.infinitec.org/live/homemodifications/homefunding.htm>.

The Do-Able Renewable Home lists funding resources at <http://www.homemods.org/library/drhome/funding.html>.

The South Carolina Assistive Technology Program (SCATP) is a federally funded project concerned with getting technology into the hands of people with disabilities so that they might live, work, learn, and be a more independent part of the community. <http://www.sc.edu/scatp/home.htm>.

Appendix J

Resources and Web sites for Additional Information

Center for Home Care Policy and Research

Visiting Nurse Service of New York. AdvantAge Initiative: 2003 National Survey of Adults Aged 65 and Older. *A Tale of Two Older Americas: Community Opportunities and Challenges*. April, 2004. www.vnsny.org/advantage/AI_NationalSurveyReport.pdf.

The ***Fall Prevention Center of Excellence*** is the home of a California Fall Prevention Initiative. The Center provides information to both consumers and professionals on various topics relating to falls and fall prevention. www.stopfalls.org.

Home Modifications in Pennsylvania is dedicated to information about Home Modifications for Pennsylvania residents who are elderly, disabled, or both. Their primary purpose is to help you find sources of funding in Pennsylvania that may be able to help you or your client pay for home modifications.

<http://homemods.jevs.org/default.asp>.

Home Safety Council Resources

The Home Safety Council is dedicated to helping prevent the nearly 21 million medical visits that occur on average each year from unintentional injuries in the home. Through national programs and partners across America, the Home Safety Council works to educate and empower families to take actions that help keep them safer in and around their homes. www.homesafetycouncil.org.

Home Safety Council Expert Network

A regularly updated resource for fire, life safety, and public health experts that includes home safety education materials designed for use with older adult audiences – focusing on fall prevention and the other leading causes of preventable home injury is available at:

www.homesafetycouncil.org/expertnetwork.

Housing Research Foundation

This inclusive site features information for housing professionals and consumers on major housing issues, the Hope VI program, and the continuum of supportive housing options. <http://housingresearchorg.blogspot.com>.

IDEA Center for Inclusive Design Environmental Access

This site provides links to the Center's various research, development, and design programs, publications, special interests on home modifications, and offers innovative ideas on products that promote accessibility, as well as software to educate professionals about providing accessibility. <http://www.ap.buffalo.edu/idea/Home/index.asp>.

Minnesota Safety Council

For nearly 80 years, the Minnesota Safety Council, a private, not-for-profit organization, has been dedicated to keeping Minnesotans safe from unintentional injuries (“accidents”).

A section on fall prevention includes home safety recommendations and assessments. www.minnesotasafetycouncil.org/SeniorSafe.

The National Action Plan was developed through consensus in a national summit of 58 national organizations, professional associations, and federal agencies working in the area of fall prevention. The plan contains 36 strategies and action steps that are based on the available research and the combined experience of attending organizations, which are proposed to affect falls and fall related injuries through collaboration. A PDF of the Plan is available on the Center for Healthy Aging Web site under “Resources by Health Topic: Fall Prevention” at: www.healthyagingprograms.org.

The ***National Center for Injury Prevention and Control*** published a toolkit for preventing falls. It focuses on hazards found in each room of the house and includes strategies for addressing safety issues that arise. It also includes tip sheets and other relevant information. <http://www.cdc.gov/ncipc/pub-res/toolkit/CheckListForSafety.htm>.

National Home Modifications Action Coalition

A Blueprint for Action: A Resource for Promoting Home Modifications: This 60-page report provides information about universal design principles by guiding readers through a discussion of the importance of home modifications and the key issues that impede their adoption. It provides strategies for planning and constructing home modifications, presents an action plan for systemic change developed by the National Home Modifications Action Coalition, and lists sources of available information. <http://www.huduser.org/publications/destech/blueprin.html>.

National Resource Center on Supportive Housing and Home Modification

This is a university-based, nonprofit organization dedicated to promoting aging in place and independent living for persons of all ages and abilities. www.homemods.org.

National Association of Home Builders

This is a Washington, DC-based trade association whose mission is to enhance the climate for housing and the building industry. Chief among NAHB’s goals is providing and expanding opportunities for all consumers to have safe, decent, and affordable housing. As “the voice of America’s housing industry,” NAHB helps promote policies that will keep housing a national priority. NAHB publishes the *The Directory of Accessible Building Products*, which provides the building industry with needed product information for aging in place and universal design needs, allowing homebuyers and homeowners to live comfortably, safely, and independently in their own homes for as long as possible, regardless of income or ability level. It contains useful information about building products, with a focus on kitchens and bathrooms, including appliances, fixtures, cabinets, and faucets. <http://www.nahb.org/form.aspx?formID=2587>.

Rebuilding Together

This is a national nonprofit organization that rehabilitates the homes of low-income homeowners free of charge through volunteer efforts. <http://www.rebuildingtogether.org>.

Universal Home: This Web site features various links to different areas of the home (e.g., windows and doors, kitchen and bath, storage, electrical, lighting, steps, and walkways) with questions that examine the safety and accessibility of the home and universal design products. There are also resources for home modifications.

http://www.aarp.org/families/home_design.

Visitability PA

With a focus on people who have disabilities, this Web site features good design, with minimal expense and maximum potential return, that makes your home visitable for older adults and disabled people. <http://visitabilitypa.com>.

CENTER FOR HEALTHY AGING

www.healthyagingprograms.org

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