Home Safety & Modification Part 1: Creating Better Homes for Aging in Place

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- **Seymour Turner**, USC Executive Certificate in Home Modification Program Instructor, USC Leonard Davis School of Gerontology
About NCOA

Who We Are:
NCOA is the national voice for every American’s right to age well

Our Vision:
A just and caring society in which each of us, as we age, lives with dignity, purpose, and security
Our Mission:
Improve the lives of millions of older adults, especially those who are struggling

Our Social Impact Goal:
Improve the health and economic security of 10 million older adults by 2020
NCOA’s Center for Healthy Aging

- **Goal**: Increase the quality and years of healthy life for older adults and adults with disabilities

- **Two national resource centers funded by the Administration for Community Living**
  - Chronic Disease Self-Management Education (CDSME)
  - Falls Prevention

- **Other key areas**: Behavioral health, physical activity, immunizations, oral health
National Falls Prevention Resource Center

- Increase public awareness about falls prevention
- Serve as the national clearinghouse for tools and resources
- Support and stimulate evidence-based programs and strategies

www.ncoa.org/healthy-aging/falls-prevention/
National Resource Center
Technical Assistance Activities

One-on-one support  Annual meeting  National Falls Prevention Database

Learning collaboratives  Webinars  Online tools and resources

Best practices  Networking  Work groups
Older Adult Falls in the U.S.

Common
• Falls are the leading cause of fatal injury and the most common cause of nonfatal trauma-related hospital admissions among older adults
• One in four Americans aged 65+ falls each year

Impact Quality of Life
• Cause serious injuries—e.g., hip and spinal fractures, brain injuries
• Increase fear of falling and restriction of activities
• Loss of independence

Source: CDC https://www.cdc.gov/homeandrecreationalsafety/falls/adultfalls.html
Older Adult Falls in the U.S.

Costly

• In 2015, the total cost of fall injuries was $50 billion. Medicare and Medicaid shouldered 75% of these costs
• The financial toll for older adult falls is expected to increase as the population ages and may reach $101 billion by 2030

Predictable & Largely Preventable

• Physical, behavioral, and environmental risk factors

Source: CDC https://www.cdc.gov/homeandrecreationalsafty/falls/adultfalls.html
NCOA and USC Collaboration

Increasing Home Modification Activities and Awareness

• Home Safety and Home Modification Resource Inventories—Programs, Tools, and Funding

• National Home Safety and Home Modification Workgroup
  o Advocacy
  o Consumer and Professional Education and Training
  o Service Delivery
  o Research
Home Safety & Modification Part 1: Creating Better Homes for Aging in Place

Emily Nabors, MSG

Seymour Turner
Fall Prevention Center of Excellence

USC Leonard Davis School of Gerontology

• Applied Research
• Information Dissemination
• Professional Education and Training
  – Executive Certificate in Home Modification (ECHM)
Where Do People Fall?

Inside the House: 55%
Outside near House: 23%
Away from Home: 22%

Source: National Health Interview Survey, 1997-8 (Kochera, 2002)
Growth in Aging Population

2017
65+ Pop

• 48 million

2060
65+ Pop

• 98 million

Source: U.S. Census Bureau, Population Estimates and Projections From: A Profile of Older Americans, 2016, Administration on Aging Administration for Community Living U.S. Department of Health and Human Services
Housing Stock Not Meeting Demand

**Disability In Households 65+**

- Without Disability: 62%
- With Disability: 38%

**Disability In Low Income Households 65+**

- Without Disability: 56%
- With Disability: 44%

**UD Features in Housing**

- Without UD: 99%
- With UD: 1%

*Source: Bipartisan Policy Center, Healthy Aging Begins at Home, 2016*
What is Home Modification?

Change the environment

- Make daily activities easier
- Reduce accidents
- Support independent living

Removing Fall Hazards
Adding Supports
Changing Behavior

Support independent living
Role of Home Modification in Fall Prevention

Medical Assessment

Physical Activity

Home Modification

USC Leonard Davis
School of Gerontology

University of Southern California
Common Problems

Solutions
Common Problems
Simple Solutions
Evidence Is Growing…

The Potential to Reduce Falls and Avert Costs by Clinically Managing Fall Risk

Judy A. Stevens, PhD,1 Robin Lee, PhD, MPH2

Because of the high prevalence and large eligible population, addressing home hazards with the assistance of an occupational therapist would prevent the greatest number of medically treated falls (n=45,164) and avert the most in direct medical costs ($442 million).
Home Modification Resources

• Evidence-Based Programs, Best Practices in Home Modification
• Home Assessment Tools
• Home Modification Funding Resources
## Home Modification Program Inventory

### Home Modification Programs and Practices

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Website/Contact</th>
<th>Program Goals &amp; Target Audience</th>
<th>Program Description</th>
<th>Delivered By</th>
<th>Training Requirements</th>
<th>Program Costs</th>
<th>Key Words</th>
<th>Published Articles about Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPABLE: Community Aging in Place, Advancing Better Living for Elders</td>
<td><a href="http://www.johnshopkins.edu/solutions/programs/capable">Website</a></td>
<td>Goals: To reduce the impact of disability among low income older adults by addressing individual capacities and the home environment.</td>
<td>5-month, client-led program. Occupational Therapist provides up to 6 home visits. Registered Nurse (up to 4 home visits), handyman (full day’s work of home mods, assistive devices, and repairs). Directly addresses all risk factors for falls: medications, low vision, decreased leg strength, safe ADL ability, and home safety risks. Addresses participants’ own goals, e.g., to get upstairs, take a shower, or walk out the front door—and more.</td>
<td>Occupation al Therapist, Registered Nurse, and Handyman</td>
<td>CAPABLE has a training curriculum for Occupational Therapists and Nurses, including self-paced electronic modules and an interactive in-person or Skype-type training, plus follow-up support calls once the clinicians start to implement CAPABLE. It includes a training manual for both Occupational Therapists and Nurses.</td>
<td>Most of the costs are staff costs (RN, OT, and Handyman). Interventionist training time. In-home visit duration. Travel time. Supervisory meetings. Visit preparation time. Care coordination time between OT, RN, and handyman. Non-staff time costs include: Supplies and labor for home modifications, repairs, and assistive devices. Program materials. Mileage (for driving to participants’ homes).</td>
<td>Participant directed. Home environment. Physical activity (balance and strength). Medication review.</td>
<td><a href="http://stopfalls.org/wp-content/uploads/2018/08/home_modification_programs_professionals-1_v2.pdf">Articles</a></td>
</tr>
</tbody>
</table>

Available at: [StopFalls](http://stopfalls.org/wp-content/uploads/2018/08/home_modification_programs_professionals-1_v2.pdf)
Community Aging in Place, Advancing Better Living for Elders (CAPABLE) Program

- Client-directed
- Team: RN + OT + Handyperson
- Focus on functioning
CAPABLE Timeline and Costs

Total Cost:
10 visits = $2825

Handyworker budget: $1300
CAPABLE: Outcomes

Functioning:
Among 75% participants, ave. 49% improvement

Depression by 53%,
Home hazards from 3.3 to 1.4, Nursing home admissions, Hospitalizations

• Medicare Savings: $10K per participant per year
CAPABLE Implementation and Funding

**Implemented by:**
- Habitat for Humanity
- Visiting Nurse Association
- Area Agency on Aging
- Home Health Agency
- Veterans Administration
- Accountable Care Organizations
- Hospital
- Housing Authority
- University/health partners

**Funded by:**
- Foundations
- Private/Public Partnerships
- Medicaid Home and Community-based Waiver
- Program of All-Inclusive Care for the Elderly (PACE)
- Veterans Administration
- Accountable Care Orgs
- Universities pay staff time

**States:** CA, CO, HI, IL, MA, MD, ME, MI, MN, NC, NY, PA, TN, VT
Financing Home Modifications

Financing Needs
- How Much?
- How Soon?
- How Long?

<table>
<thead>
<tr>
<th>Project</th>
<th>Price Range to Install*</th>
<th>Avg. Cost to Install*</th>
</tr>
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<tbody>
<tr>
<td>Walk-in Tub or Shower</td>
<td>$3,000 to $15,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Ramp Installation at Entrance</td>
<td>$874 to $1,751</td>
<td>$1,113</td>
</tr>
<tr>
<td>Widen an Entry Door</td>
<td>$200 to $7,000</td>
<td>$800</td>
</tr>
<tr>
<td>Stair lift Installation</td>
<td>$3,000 to $20,000</td>
<td>$8,000</td>
</tr>
<tr>
<td>Install Entry Handrails</td>
<td>$700 to $1,200</td>
<td>$8,000</td>
</tr>
<tr>
<td>Install an Elevator</td>
<td>$33,000 to $100,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Install Lever Taps on Faucets</td>
<td>$154 to $332</td>
<td>$220</td>
</tr>
<tr>
<td>Widen Hallways w/out Structural Changes</td>
<td>$800 to $1,400</td>
<td>$1,100</td>
</tr>
<tr>
<td>Widen Hallways with Structural Changes</td>
<td>$30,000 to $40,000</td>
<td>$35,000</td>
</tr>
<tr>
<td>Replace 10 Windows</td>
<td>$5,500 to $10,500</td>
<td>$8,000</td>
</tr>
<tr>
<td>Remodel Bathroom</td>
<td>$2,500 to $24,800</td>
<td>$14,000</td>
</tr>
<tr>
<td>Kitchen Countertop Height Adjustment</td>
<td>$15,000 to $20,000</td>
<td>$18,000</td>
</tr>
</tbody>
</table>

*Prices vary by location

Financial Situation of Older Adults

**Income**

Half of all Medicare beneficiaries had incomes below $26,200 per person in 2016:
- 1% had incomes above $182,900
- 5% had incomes above $103,450
- 50% had incomes below $26,200
- 25% had incomes below $15,250

**Savings**

Half of all Medicare beneficiaries had savings below $74,450 per person in 2016:
- 1% had savings above $4,008,150
- 5% had savings above $1,367,000
- 50% had savings below $74,450
- 25% had savings below $14,550
- 8% had $0 in savings or were in debt

**Equity**

Half of all Medicare beneficiaries had home equity below $70,950 per person in 2016:
- 1% had home equity above $873,150
- 5% had home equity above $466,600
- 50% had home equity below $70,950
- 25% had home equity below $7,350
- 24% had $0 in home equity

Income and Assets of Medicare Beneficiaries, 2016-2035; Gretchen Jacobson, Shannon Griffin, Tricia Neuman, and Karen Smith; April 21, 2017 - Henry J Kaiser Family Foundation
PERSONAL CHARACTERISTICS
• Owner vs Renter
• Income & Assets
• Age & Employment Status
• Military Service History
• Government Program Eligibility
• Private or Public Housing
• Type and Severity of Disability
• Medical or Vocational Necessity
• Lives Independently or Caregiver Assisted
• Expected Length of Occupancy
• Timeline for Installation & Use

FINANCING CHARACTERISTICS
• Direct
  o Grant
  o Loan
  o Deferred Loan
• Indirect
  o Tax Deductions or Credits
  o Property Tax Reductions
Home Mod Financing Framework – External

**SUPPORT CATEGORIES**
- Self-Funding
- Housing & Community Development Agencies
- Banks & Lending Institutions
- Private Financing Sources
- Social Service & Health Care Agencies
- Civic, Advocacy & Trade Groups
- Insurance Providers
- Government Subsidies & Tax Benefits

**AUTHORITY**
- Federal
- State
- Local
- Region
- County
- Municipal

**FUNDING SECTORS**
- Public
  - Government
- Private
  - For-profit businesses
- Non-profit
  - Public charities
  - Private foundations
  - Social advocacy organizations
  - Professional & trade organizations
Interaction of Home Mod Financing Sources

**Support Categories**

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  - Social advocacy organizations
  - Professional & trade organizations

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*Direct $$$ from the U.S. Department of Health and Human Services flow through its Administration on Aging in Washington, D.C. to a State Department on Aging. From there, they go to a Regional Area Agency on Aging (AAA) and then via AAA granting efforts to local provider organizations that set up a senior home repair program.*

*Local department on aging and a local senior housing non-profit
Interaction of Home Mod Financing Sources

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Property Insurance Provider Covers Loss
Homeowner Self-funds Deductible & Additional Improvements
State Income Tax Credit
County Real Estate Tax Offset
Professional Organization Provides Design Services

Direct $$$ are paid by the homeowner’s property insurance for a covered loss after the homeowner self-funds the deductible and the cost of any uncovered improvements.

Indirect $$$ are provided by the State in the form of income tax credits and the County in the form of real tax offset and a local professional organization provided design services at no cost.
Funding Resource Guide

Funding Sources for Home Modification

The National Council on Aging (NCOA) partnered with the University of Southern California (USC) Leonard Davis School of Gerontology on home modification and home safety programs, assessment instruments, and funding sources to provide resources for families and professionals.

For information on NCOA’s National Falls Prevention Resource Center, visit: https://www.ncoa.org/center-for-healthy-aging/falls-resource-center. For the Fall Prevention Center of Excellence and efforts in home modification, visit: www.stopfalls.org and www.homemods.org. If you have any questions, please contact homemods@usc.edu.

### RESOURCE CATEGORIES

- Housing/Community Development Funding Sources
- Lending Funding Resources
- Social & Vocational Supports
- Health Care & Insurance Sources
- Tax Funding Sources
- Select Non-profit Organizations
- Innovative National, State & Local Funding Sources
- Non-profits Offering Loans
- States & Localities Offering Tax Credits

<table>
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<tr>
<th>Resource</th>
<th>Description</th>
<th>Target Populations</th>
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<tr>
<td><strong>HOUSING/COMMUNITY DEVELOPMENT FUNDING SOURCES</strong></td>
<td></td>
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</tr>
<tr>
<td>Community Development Block Grants (CDBG) Department of Housing and Urban Development (HUD)</td>
<td></td>
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</tr>
<tr>
<td><a href="https://www.hudexchange.info/programs/cdbg-entitlement/">https://www.hudexchange.info/programs/cdbg-entitlement/</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use the “Contact a CDBG Grantee” link on the right side of the page to access a Directory of CDBG grantees in your area.</td>
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<tr>
<td>CDBG is a funding stream allocated by the Department of Housing and Urban Development (HUD) to state and local governments to support housing, community, and economic development needs including home repair/improvement.</td>
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</tr>
<tr>
<td>Homeowners, Renters, Landlords, Those with low income, Older adults, People with disabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUD HOME Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOME is a newer block grant that is allocated to states and communities to support only housing activities. It funds many home repair efforts nationwide.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeowners, Renters, Landlords, Those with low income, Older adults, People with disabilities</td>
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Executive Certificate in Home Modification Program

- Five 3-week Courses & Final Exam
- Comprehensive curriculum
- Offered 4-5 times annually
- [www.homemods.org](http://www.homemods.org)
For more information

www.stopfalls.org

- Home Modification Inventory Resources
- Printer-Friendly Fact Sheets
- Articles, Links, Coalition Resources

Emily Nabors: emily.nabors@usc.edu
For more information

www.homemods.org

• Executive Certificate in Home Modification Program
• National Directory of Home Repair and Modification Providers
• Resource Library

Emily Nabors: emily.nabors@usc.edu
Coming Soon

• Home Safety & Modification Webinar Part 2
  ○ December 2018
Questions?

Please type your questions into the chat box.