

Intervention IP-080: Community Aging in Place— Advancing Better Living for Elders (CAPABLE)

Summary

Community Aging in Place, Advancing Better Living for Elders (CAPABLE) is an intervention focused on improving the health of racial and ethnic minorities and other populations with health disparities who need assistance aging at home. The intervention is a 10-session, home-based interprofessional program that addresses older adults' self-identified functional goals by enhancing individual capacity and home environmental supports. Findings show that CAPABLE reduces the impact of functional impairment and disability, hospitalizations and nursing home days.

Overview

Purpose of Intervention:

Community Aging in Place, Advancing Better Living for Elders (CAPABLE) is an intervention program that has been shown to greatly improve both physical function and mental health outcomes in older adults, while also making homes safer.

Intervention Type:

Research-Tested — *Interventions with strong methodological rigor that have demonstrated short-term or long-term positive effects on one or more targeted health outcomes to improve minority health and/or health disparities through quantitative measures; Studies have a control or comparison group and are published in a peer-review journal; No pilot, demonstration or feasibility studies.*

Intervention Details

Intervention was Primarily Driven, Led, or Managed by:

Both Community and Academic/Clinical Researchers

Citations:

- Szanton SL, Leff B, Li Q, Breyse J, Spoelstra S, Kell J, Purvis J, Xue QL, Wilson J, Gitlin LN. CAPABLE program improves disability in multiple randomized trials. *Journal of the American Geriatrics Society*. 2021 Dec;69(12):3631-3640. Epub 2021 Jul 27.
Relevance: Main Intervention

Adaptation of Another Research-based Intervention:

Yes

Name of Original Intervention:

ABLE

URL to original Intervention:

<https://pubmed.ncbi.nlm.nih.gov/21876812/>

Citations:

- Jutkowitz E, Gitlin LN, Pizzi LT, Lee E, Dennis MP. Cost effectiveness of a home-based intervention that helps functionally vulnerable older adults age in place at home. Journal of aging research. 2012;2012:680265. Epub 2011 Aug 16.

Intervention Primary Outcomes were comparable to the original:

Yes

Contact Information

Primary Contact Affiliation:

Johns Hopkins School of Nursing

Intervention URL:

https://nursing.jhu.edu/faculty_research/research/projects/capable

Results

Intentions

Improve minority health or the health of other populations with health disparities (e.g. rural populations, populations with low SES)

Intervention Primary Outcome:

Functional impairment and disability, hospitalizations and nursing home days

Intervention Secondary Outcome:

Self-care disability and improvement in instrumental Activities of Daily Living (IADLs), strength, balance, and health care utilization, depression, and medication management

Key Findings:

The program resulted in substantial improvements in ADLs and IADLs in all six reviewed trials with other secondary outcomes improvements varying across studies. For every study but one, measurements were asked of study participants both at baseline before the start of CAPABLE and again at the conclusion of the program.

Participants rated their ability to complete essential ADLs including walking, bathing, dressing, eating, toileting, grooming, and transferring in and out bed. Compared with participants' baseline measurements, programs implemented with original number of visits and amount of home modification yielded strong Cohen's D effect sizes for ADLs ranging from moderate to very strong. Three studies reported a decrease in depressive symptoms and four studies showed improved falls efficacy. Taken together, this review shows that CAPABLE can be replicated with rigor and cost-effectiveness.

Statistical Method Used:

To determine changes in ADLs, the research team collected self-report information about whether participant had difficulty in performing one or more of eight essential ADLs. This method has high test-retest reliability and sensitivity and predicts future morbidity. A summary disability score ranges from 0 – 16 and a change in one point was considered clinically meaningful and a change in two points was associated with increased risk of nursing home or death.

Was statistical method used to analyze data from original Intervention comparable to the original:

Yes

Evaluations and Assessments

Were Any of the Following Assessments Conducted (Economic Evaluation, Needs Assessment, Process Evaluation)?:

Yes

- **Economic Evaluation:** Studies reported cost savings of \$22,120 on average per person compared with a cost of \$2882 per person.

Demographic and Implementation Description

Diseases, Disorders, or Conditions:

Frailty

Race/Ethnicity:

African American or Black, Hispanic or Latino, White

Populations with Health Disparities:

People with Lower Socioeconomic Status (SES), Racial and Ethnic Minority Populations, Underserved Rural Communities, People with Disabilities

Age:

Older Adults (65+ years)

Socio-demographics / Population Characteristics

Community Type:

Rural, Suburban, Urban / Inner City

Other Populations with Health Disparities:

People with Low Education

Geographic Location:

All U.S. States

Socio-Economic Status:

Low SES

Minority Health and Health Disparities Research Framework

		Levels of Influence			
		Individual	Interpersonal	Community	Societal
Determinant Types	Biological				
	Behavioral	✓	✓	✓	
	Physical / Built Environment	✓	✓		
	Sociocultural Environment	✓	✓		
	Health Care System		✓		

Community Involvement

The community's role in different areas of the Intervention (Choices are "No Role", "Participation", and "Leadership"):

Design:

No Role

Dissemination:

Participation

Evaluation:

Participation

Implementation:

Leadership

Outreach:

Leadership

Planning :

Leadership

Recruitment:

Leadership

Sustainability:

Leadership

Characteristics and Implementation

Intervention Focus Area:

Behavior Change, Patient-Clinician Communication, Physical Environmental Change

Disease Continuum:

Palliative/Quality of Life Care, Primary Prevention

Delivery Setting:

Home

Mode of Delivery:

In-person

Who delivered the Intervention?:

Healthcare Professional (Physician, Nurse, Technician)

Conceptual Framework

Intervention Theory:

Stages of Change / Trans-theoretical Model, Society to Cells Resilience Theory, Person-Environment Fit Theory, Control Theory

Intervention Framework:

None

Implementation

Intervention Study Design:

Individual Randomized Controlled Trial/Comparative (requires random assignment, a control/comparison group, and pre and post intervention outcome assessments)

Targeted Intervention Sample Size:

5380

Actual Intervention Sample Size:

5380

Start Year:

2009

End Year:

2018

Intervention Exposures

Duration of Intervention/How Long it Lasted:

4-6 months

Frequency of Intervention Delivery:

Delivery of intervention is provided through CAPABLE's interprofessional team, an occupational therapist (OT), registered nurse (RN) and handy worker. The program consists of six OT and four RN visits (ten total home visits) and a home repair visit.

Number of Sessions/Meetings/Visits/Interactions:

9-10 Sessions

Average Length of Each Session/Meeting/Visit/Interaction:

1-2 Hours

Format of Delivery:

Individual

Highest Reading Level of Intervention Materials Provided to Participants:

Unspecified

Adaptations and Modifications

Were modifications made?

Intervention Elements	Modified
Content	Yes
Context	Yes
Implementation	No
Funding	No
Organization	No
Participants	No
Providers	No
Sociopolitical	No
Stages of Occurrence	Yes

Modification Details

	Explanation
Content	
Adding Elements, Lengthening, Tailoring	CAPABLE is an adaptation of the ABLE program designed by Dr. Laura Gitlin., which improves Activities of Daily Living ability and quality of life and reduces mortality through occupational therapy (OT) and home modifications. ABLE is a six-month intervention in which people received four 90-minute visits with an occupational therapist, as well as one 20-minute telephone contact, one 90-minute physical therapy (PT) visit and home modifications. In crafting CAPABLE, researchers replaced the PT component with an expanded nursing (RN) role and enlarged the home modifications from durable goods to include home repairs and everyday items. Juxtaposed to ABLE, CAPABLE is a four-to five-month intervention in which clients receive 10 in-person visits from an OT and RN and expanded home modifications.
Context	
Personnel	CAPABLE replaces the physical therapy component with an expanded nursing role.
Stages of Occurrence	
Planning/Pre-implementation/Pilot	CAPABLE was adapted from the ABLE program during the planning and pilot stages of development.

Impact, Lessons, Components

Produced an impact or change beyond the primary or secondary outcome:

Yes

CAPABLE demonstrated consistent, clinically significant reductions in ADL and IADL disability and some improvements in secondary outcomes. In the three studies that reported depressive symptoms, the mean scores reduced from, on average, mild depressive symptoms to remission. CAPABLE improved falls efficacy (confidence in doing ADLs without falling) in the four studies that reported it. Together with primary outcomes, the secondary outcomes create a positive cycle of change toward more independence that positions older adults to address future challenges.

Essential Aspects for Success:

CAPABLE is participant-driven rather than clinically driven. Clinicians accomplish this via active listening and using motivational interviewing techniques. Thus, goals are NOT types of goals typically chosen in a rehabilitation or treatment plan directed by a clinician. clinician training

Intervention Impact:

CAPABLE demonstrated consistent, clinically significant reductions in ADL and IADL disability and some improvements in secondary outcomes. In the three studies that reported depressive symptoms, the mean scores reduced from, on average, mild depressive symptoms to remission. CAPABLE improved falls efficacy

(confidence in doing ADLs without falling) in the four studies that reported it. Together with primary outcomes, the secondary outcomes create a positive cycle of change toward more independence that positions older adults to address future challenges.

Lessons Learned

Key Lessons Learned and/or Things That Could be Changed or Done Differently:

Research identified key drivers of effective implementation: strong internal champion, senior leadership support, supportive organizational climate, sufficient staff/resource capacity, belief in program value, robust peer networks and technical assistance; supportive external environment.

Insights Gained During Implementation

Insight Category	Insight Description
Cost of Implementing or Sustaining	Two studies reported cost savings. Implemented at full dose, the savings were \$22,120 on average per person compared with a cost of \$2882 per person. Taken together, this review shows that CAPABLE can be replicated with rigor and cost-effectiveness.
Logistics	Improvements were not as consistent in the setting that had less home modification and used usual home care assessment to measure pain and depression outcome among those nursing home eligible. Each one of these (measurement, sample, and less home modification) may have affected the results.
Training / Technical Assistance	CAPABLE has distinctive elements such as an interprofessional team and participant as the driver of setting goals. These unique aspects—coupled with the partnership, funding, and recruitment/outreach strategies require robust training for organizations interested in implementing the program.
Staffing	We found that the one study reporting CAPABLE implementation with fewer RN visits and less funds allocated for home modification or repair had less improvement in main outcomes than in studies implementing CAPABLE fully.
Recruitment	Once an implementing organization has set selection criteria and determined the source(s) of referrals, the process from referral to recruitment to enrollment should be mapped out, including identifying, screening, inviting the potential participant, and securing participant's agreement.

Intervention Components

Intervention Has Multiple Components:

Yes

Assessed Each Unique Contribution:

No

Products, Materials, and Funding

This intervention requires a significant amount of training for RNs and OTs and technical support to an implementing organization. Therefore, there is a cost associated for technical support and a license agreement to implement the intervention. Please contact researcher for guidance and additional materials.

Expertise, Partnerships, and Funding Sources

	Used for Implementation	Needed for Sustainability
Expertise		
Patient Navigation	Yes	Yes
Clinical Care	Yes	Yes
Health communication, health marketing/publicity	Yes	Yes
Policy/Legislation	No	Yes
Partnerships		
Community groups (e.g. faith-based organizations, barbershops, beauty-salons, laundromats, food markets, community centers, cultural associations, tribal groups)	Yes	Yes
Government agencies (city/state/county health department, law enforcement/criminal justice agencies)	No	Yes
Private organizations, foundations	Yes	Yes
Local leaders/families	Yes	Yes
Funding Sources		
Private funding (e.g., foundations, corporations, institutions, facilities)	Yes	Yes
Public funding (e.g., federal, state or local government)	Yes	Yes

Product/Material/Tools

	Tailored For Language	Language(s) if other than English	Material
Outreach/Recruitment Tools			
Publicity Materials (e.g. Posters, Flyers, Press Releases)	No		https://capablenationalcenter.org/
Participant Educational Tools			
Brochures/Factsheets/Pamphlets	No		https://capablenationalcenter.org/
Brochures/Factsheets/Pamphlets	No		https://capablenationalcenter.org/
Measurement Tools			
Standardized Instrument/Measures	No		https://capablenationalcenter.org/

Implementation Materials and Products

Material
Implementation/Delivery Materials
No Implementation/Delivery Materials provided.
Implementation/Output Materials
No Implementation/Output Materials provided.

Articles Related to Submitted Intervention

Article
Reports/Monographs
No Reports/Monographs provided.
Additional Articles
No Additional Articles provided.