

What We Are Reading

Synopses of recent studies in health services research Volume 2, No. 10c

Home-Based Care Program Reduces Disability And Promotes Aging In Place

Take Away Points

- The Community Aging in Place, Advancing Better Living for Elders (CAPABLE) program is associated with improved physical functioning in low-income older adults.
- Results were consistent across all demographic and chronic disease groups.
- The program can be incorporated in various programs, such as Medicaid home and community-based services waiver programs, accountable care organizations, and the self-pay market.

The Issue

The shifting of US towards a value-based approach emphasizes the importance of addressing drivers, or determinants, such as where people live, work and play, which are typically overlooked and unaddressed in traditional medical care. Difficulty with everyday physical functioning – both basic (for example, dressing, bathing, and walking) and instrumental (such as going shopping or managing one's medications) – is a major driver for both quality of life and health care cost. This article reports results from a demonstration project in Baltimore, Community Aging in Place, Advancing Better Living for

Source

Sarah L. Szanton, Bruce Leff, Jennifer L. Wolff, Laken Roberts and Laura N. Gitlin. Home-Based Care Program Reduces Disability And Promotes Aging In Place. *Health Affairs* 35, no.9 (2016):1558-1563

http://content.healthaffairs.org/content/35/9

Elders (CAPABLE), for older adults with physical disabilities that addresses both modifiable individual limitations and the environment.

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Study Methods and Design

Program Participants

The program was made available to eligible residents of all but the wealthiest neighborhoods in Baltimore, Maryland. The eligibility of participants include 1) 65 years and older, 2) dual eligible for Medicare and Medicaid, 3) having difficulty in performing four of eight activities of daily living (ADLs), and 4) living in a house. The program recruitment was in the period 2012-2015. Residents who were cognitively impaired, receiving skilled home health care, or have been hospitalized four or more times in the previous year were not eligible for this study.

Program Overview

CAPABLE was 5-month structured program and person-directed, i.e., targeting functional goals that each participant identified as most important to him or her. The intervention was conducted by an interdisciplinary team including an occupational therapist, who made six visits to each participant; a nurse, who made four visits; and a handyman, who contributed up to a full day's work for making home modifications. The occupational therapist worked with participants to identify up to three functional goals, and the nurse worked with participants to identify and prioritize up to three goals related to pain, depression, strength and balance, medication management, or communication with primary care providers. The barriers that interfered with achieving these goals were also identified. During the

following visits, the occupational therapist and nurse used motivational interviewing, action planning techniques to discuss with participants on how to make incremental changes and achieve goals.

Analyses

The main outcomes were changes in activities of daily living (ADLs), instrumental activities of daily living (IADLs), and depression at baseline and at 5-month follow-up. Their results were categorized as having improved, staying the same, or gotten worse.

Multivariate linear regression models were utilized to account for disparities in race and baseline age and depression scores. Paired t-tests were also used to link results for participants who had been hospitalized in the previous year and those who had not.

Key Findings

Among the 234 participants whose data was analyzed,

- 75% of participants improved their limitations with ADLs, and the average reduction from difficulty in 3.9 (SD: 3.04) activities of the 8 ADLs at baseline to difficulty in 2.0 activities (SD: 2.0), a 49 percent improvement in physical functioning.
- 65% of participants improved their limitations with IALDs, and the average decrease in difficulty went from 4.1 (SD: 2.09) activities to 2.9 (SD: 2.22).
- 53% of participants had improvement with depressive symptoms
- 78% of participants had improved home environment, and home hazards decreased from an average of 3.3 hazards (SD: 1.83) to 1.4 hazards (SD: 1.14).
- The average cost per participant was \$2,825 (including all points of care and home repair costs)

Limitations:

This program was designed as a quality improvement project with no control group. Therefore, the conclusion that participants' improvements were due to the CAPABLE program can't be made.

Final Thoughts

Reduction of difficulty with ADLs can be life changing. CAPABLE demonstrated that an individual focused program has a unique opportunity to help participants reach their goals for physical function and a safe home environment. Although it is unknown whether healthcare expenses will decline for those in the CAPABLE program, the improvement in physical function observed could be cost-saving over time.