

Aging in Place: Do Older Americans Act Title III Services Reach Those Most Likely to Enter Nursing Homes?

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Since the Older Americans Act (OAA) was passed in 1965, the Administration on Aging (AoA) has provided services to elderly Americans, helping them maintain independence and remain in their own homes. Through its “Aging Services Network,” including State Units on Aging (SUAs), Area Agencies on Aging (AAAs), and tribal partners, AoA works to provide services designed to mitigate the effects of declining physical health and functioning experienced by frail older adults. This brief, the first in a series that presents findings from AoA’s National Survey of OAA Program Participants, assesses whether Title III services are reaching adults at higher risk of nursing home entry than the elderly population overall. The observed differences between Title III participants and other older adults point to the effective targeting of services by the Aging Services Network.

Background

Increasing emphasis is being placed on helping older individuals in declining health or with disabilities to maintain their independence and remain living in the community. Nonetheless, nursing home stays among the elderly are common. In 2008, 2.8 million adults over the age of 65, or 7.2 percent of the over-65 population, had at least one stay in a nursing home (Centers for Medicare & Medicaid Services 2009).

AoA services help the elderly “age in place”—or remain in their homes and communities even as their health and functioning decline—by targeting the most vulnerable older adults. OAA Title III services such as case management, home-delivered meals, and homemaker services serve some of the frailest elderly, many of whom are homebound. The National Family Caregiver Support Program (NFCSP), also part of Title III, provides support including information and assistance and respite services to those who care for frail elderly.¹ Title III also covers transportation, congregate meals, preventative health, and other community-based services, which provide important avenues for community and social involvement.

¹Caregivers of adults age 60 and over are eligible for support under the NFCSP, even if they are under 60. Because of differences in the age profile of caregivers and other Title III participants, we focus on NFCSP care recipients.

What Is The Aging Services Network?

The Aging Services Network provides a range of community-based services—home-delivered and congregate meals, case management, transportation, and homemaker and caregiver support. Such services enhance both the quality of life and social interaction, and reduce the effects of disability for homebound and more active seniors. Funded under Title III of the OAA, services are available to individuals age 60 and older, though delivery is targeted to the most vulnerable elderly.

Nursing Home Predictors

Many studies have explored key determinants of nursing home entry. Drawing on two recent, comprehensive analyses of research on nursing home predictors (see Methods section), we identified the following factors as leading to increased risk of nursing home entry:

- *Demographic characteristics:* Older individuals and those who are non-Hispanic white
- *Socioeconomic status:* Individuals with low incomes
- *Health status and physical functioning:* Those with certain health conditions (such as cognitive impairment, cancer, high blood pressure, diabetes, and a history of strokes and falls) and those who have difficulty performing activities of daily living

- *Prior health care utilization:* Individuals who have spent time in the hospital or in a nursing home
- *Living arrangements and family structure:* Those who live alone (including widowed and divorced individuals), do not own their home, and have fewer children than their peers not in nursing homes
- *Availability of support:* Individuals who lack caregiver support

Respondents to AoA’s Fifth National Survey of Program Participants, conducted in 2009, provided information about many, though not all, of these predictors. Using this information and nationally representative data about all older adults eligible to receive Title III services by virtue of age, we compared participants receiving Title III services to older Americans across the U.S. ages 60 and older to assess relative risk of nursing home entry. Although we examine each characteristic in isolation, many characteristics of Title III participants are correlated. For example, the oldest are also usually the least healthy and most likely to be widowed or live alone.

Are Title III Participants at Greater Risk?

Title III participants share many of the characteristics that make older Americans more vulnerable to nursing home admissions (Table 1). Title III participants are older than their peers nationally. In each surveyed group, at least 5 out of 10 (and, in most cases, 7 out of 10) are age 75 or older, compared with only 35 percent of the national elderly population. Title III participants are also more likely to live in poverty and not be married. However, the racial and ethnic profile of Title III participants is similar to that of older adults nationally.

People who live by themselves are at higher risk of nursing home entry because they may be isolated or lack supports to assist with activities of daily living (ADLs). In part because of this risk, AoA targets services to those who live alone, and participants in many Title III programs are more likely to live by themselves than older Americans nationally (Figure 1). Between 48 and 69 percent of participants receiving case management; congregate or home-delivered meals; or homemaker

Table 1: Demographic and Socioeconomic Characteristics, by Title III Program and Nationally (Percentages)

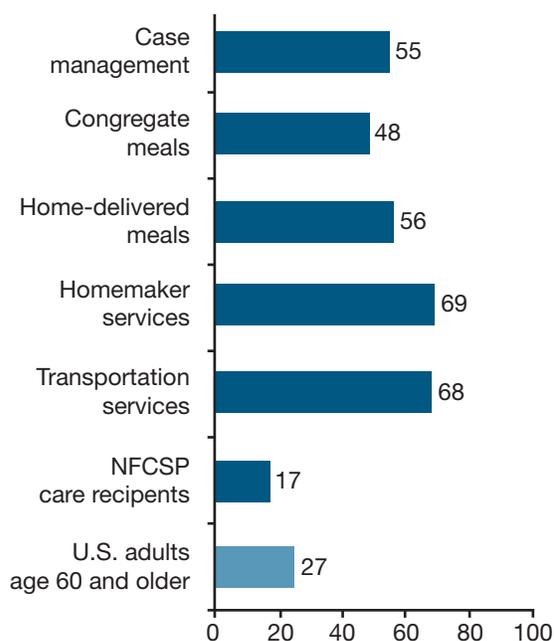
	National population age 60 and older	Case management	Congregate meals	Home-delivered meals	Homemaker services	Transportation services	NFCSP care recipients
Age							
60–64	29	8	10	9	2	10	3
65–74	38	29	33	22	24	28	17
75–84	24	40	39	40	37	36	39
85 or older	8	22	18	30	36	26	39
Race and ethnicity							
Non-Hispanic white	79	74	80	76	78	77	N/A
Other	21	26	18	23	19	22	N/A
Marital status							
Married	60	28	38	25	13	13	N/A
Not married	40	71	61	74	87	86	N/A
Income relative to poverty							
Below	7	29	14	24	25	28	N/A
At or near	8	31	19	28	46	24	N/A
Above	85	26	51	35	21	35	N/A
Unknown	N/A	13	16	13	8	13	N/A

Source: Fifth National Survey of OAA Program Participants (2009); Current Population Survey (2009).

Notes: Data not available for care recipients because caregivers are the direct AoA participants. Caregivers have different age eligibility criteria than other participants and are therefore much younger and not directly comparable to other service categories. Not married includes those who have never been married, as well as those who are widowed, divorced, or separated. See Methods section for detail on construction of the poverty measure.

or transportation services live alone, compared with a national average of 27 percent of adults age 60 and older. Title III participants are also less likely to live with a spouse; between 13 and 38 percent of participants live with a spouse, compared with 60 percent of all Americans age 60 and older (not shown). Only 17 percent of Title III care recipients live alone, in part because about 7 in 10 live with the person who is caring for them and receiving NFCSP caregiver support services.

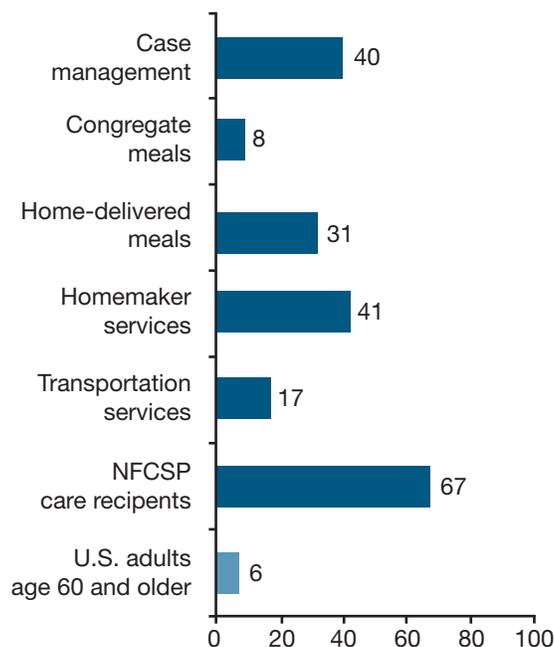
Figure 1: Percentage Living Alone, Title III Participants and Those Age 60 and Older Nationally



Source: Fifth National Survey of OAA Program Participants (2009); Current Population Survey (2009).

People who have difficulty performing three or more ADLs are at increased risk of nursing home placement, and Title III participants—especially those receiving home-delivered meals, case management, homemaker services, and NFCSP care recipients—are much worse off than the national population in this regard (Figure 2). For example, compared with less than six percent of the national population age 60 and older with three or more ADLs, participants in these three services are six to eight times more likely to have this level of functional limitations. In general, Title III participants also have a higher average number of difficulties with ADLs, and more have been diagnosed with health conditions like stroke and diabetes, which also make nursing home entry more likely (not shown).

Figure 2: Percentage Reporting Difficulty with Three or More ADLs, Title III Participants and Those Age 60 and Older Nationally



Source: Health and Retirement Study (2008); Fifth National Survey of OAA Program Participants (2009).

Note: Difficulty with three or more ADLs based on six ADLs contained in both data sources; eating, bathing, dressing, using the toilet, getting in and out of bed, and walking across a room.

Title III participants share patterns of prior health care use with other older adults that may put them at increased risk of a nursing home stay. Nationwide, 17 percent of adults over 60 spent at least one night in the hospital in the past year, compared to between 20 and 42 percent of Title III participants (not shown). In addition, many Title III participants had nursing home stays in the past year; ranging from 5 percent of congregate meals participants to 16 percent of case management participants (not shown). Unfortunately, there is no directly comparable national statistic for the population over age 60. However, as mentioned previously, 7 percent of the over-65 population had at least one nursing home stay in 2008.

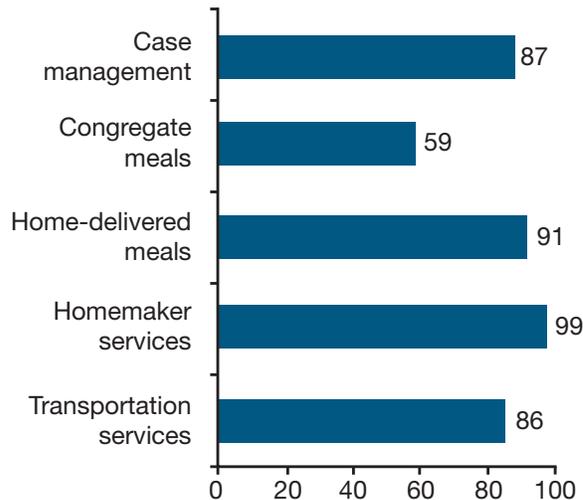
Do Services Support Aging in Place?

Title III participants report that AoA services are important in allowing them to remain in their homes (Figure 3). More than 85 percent of those receiving homemaker services, case management, transportation, and home-delivered meals said this assistance helped them remain at home. Congregate meal participants were less likely to report this effect of services, though a majority still reported services helped them to remain in their homes.

The difference between congregate meals and other participants possibly exists because the former tend to be younger, in overall better health, and less reliant on this help to maintain independence.

Caregiver support services also help care recipients avoid institutionalization. Most care recipients benefiting from the NFCSP live with a caregiver or their family, and 41 percent of caregivers said that without the NFCSP, the care recipient would not live in the same residence. Further, 32 percent said that the care recipient would be in a nursing home or assisted living facility without caregiver services (not shown).

Figure 3: Percentage Reporting That Services Allow Them to Remain in Their Homes, Title III Participants



Source: Fifth National Survey of OAA Program Participants (2009).

Conclusions and Implications

Title III participants are at higher risk of nursing home placement than others in their age group nationally, based on common predictors of nursing home entry. Those who receive homemaker services, home-delivered meals, and case management appear especially vulnerable; this likely reflects AAAs' targeting of services to those most in need. Even though they receive extensive supports from friends and family, care recipients are also vulnerable to future nursing home placement, although we do not have as much information about them on key predictors. The design of the National Survey of Program Participants does not allow us to conclude that Title III programs help keep participants out of nursing homes, but does show that most participants believe that the services help.

With the number of elderly individuals in the United States increasing, the number wanting to remain independent in their homes will continue to grow. Our analysis confirms that AoA is effectively reaching those most at risk of institutionalization, and that Title III services play an important role in helping elderly adults remain living independently in the community.

Data Sources

The Fifth National Survey of OAA Program Participants was conducted in 2009 by Westat, Inc. via telephone and administered to more than 5,000 individuals who reported receiving Title III services. The survey used a two-stage sample design, first selecting a sample of AAAs, then randomly sampling participants from each selected AAA by service type. The number of participants selected from each AAA was proportional to the number of participants served in that particular program by the sampled AAA. All analyses use sample weights to account for this design. Additional data from and more detailed documentation are available on the AGing Interactive Database (AGID) at <http://data.aoa.gov>.

This brief looks at participation in six service types: NFCSP caregiver support (1,793 respondents), home-delivered meals (1,030 respondents), homemaker services (459 respondents), transportation services (824 respondents), congregate meals (903 respondents), and case management (486 respondents). Respondents are categorized as program participants based on the program for which they were surveyed, but in many cases, individuals receive services from multiple OAA programs.

Demographic characteristics for the national population of older adults were drawn from the U.S. Census Bureau's 2009 Annual Social and Economic Supplement to the Current Population Survey. Data and documentation for this survey are available at <http://www.census.gov/cps/>. Health and physical functioning characteristics of the national population of older adults were drawn from the Health and Retirement Study (HRS), a nationally representative panel survey of the noninstitutionalized United States population over the age of 50, funded by the National Institute on Aging and the Social Security Administration. The HRS data used in this brief are based on respondents to the 2008 survey wave who were age 60 and older and residing in the community at the time of the interview. These data were extracted from RAND's analytic file from the HRS, available at <http://hrsonline.isr.umich.edu>.

Methods

We identified predictors of nursing home entry using two comprehensive analyses of predictors of nursing home entry (Gaugler et al. 2007; Miller and Weissert 2000). Gaugler et al. used meta-analysis, a more rigorous methodology than Miller and Weissert's synthesis of longitudinal data. Consequently, in the few instances in which these articles differed in identifying predictors of nursing home entry, we deferred to the Gaugler et al. study. We report on factors that the Gaugler et al. study found to be statistically important using the odds ratios reported in Table 2. Gaugler et al. also conducted a meta-analysis using the time to nursing home entry (hazard ratio); in general, these results confirmed the odds ratios results, except for health impairments such as cancer, stroke, high blood pressure, diabetes, and falls, which were only reported in the hazard ratio analysis.

Table 2: Odds Ratios on Selected Predictors of Nursing Home Entry

Predictor	Odds Ratio (95% Confidence Interval)
Prior nursing home use	3.47 (1.88, 6.37)
Three or more ADLs	3.25 (2.59, 4.09)
Cognitive impairment	2.54 (1.43, 4.51)
Lives alone	1.90 (1.54, 2.35)
Non-Hispanic white	1.61 (1.22, 2.11)
Annual income < \$5,000 (vs. \$5,000 - 10,000)	1.45 (1.15, 1.82)
Available informal caregiver	1.23 (1.04, 1.46)
Formal help	1.23 (0.93, 1.62)
Prior hospitalization	1.19 (1.07, 1.33)
Age	1.11 (1.08, 1.14)
ADLs	1.11 (1.07, 1.16)
Number of children	0.88 (0.80, 0.97)
Homeowner	0.82 (0.71, 0.95)
Married	0.63 (0.41, 0.95)

Source: Gaugler et al. (2008).

Note: Only significant predictors reported.

Gaugler et al. found that income below \$5,000 in 1982 dollars predicts nursing home entry. In today's dollars, this amount is roughly equivalent to \$10,830, the 2009 U.S. Department of Health and Human Services (DHHS) poverty threshold for a one-person household in the mainland United States. Unfortunately, the article does not specify whether this threshold applies to individuals or to households. Because of this ambiguity, we used the federal poverty threshold to compare

Title III participants to other Americans over 60. Using respondents' reported income category, household size, and the 2009 DHHS poverty guidelines, respondents were classified as definitely in poverty (reported income category below 100 percent of the federal poverty level [FPL]), definitely not in poverty (reported income category above 100 percent of the FPL), or possibly in poverty (reported income category included values below and above the FPL). A comparable value was created for 2009 Current Population Survey respondents using reported income (adjusted for inflation between the survey years) and household size.

In some cases, data in the categories reported in this brief were not collected for AoA participants. For all of the variables reported, missing data comprised 5 percent or less of total responses. Percentages reported in this brief are based on the full sample of participants and use survey weights to construct population estimates.

References

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About This Series

This series is funded by AoA, and presents analyses conducted by Mathematica Policy Research using data from AoA's National Surveys of Program Participants. These surveys collect information from Title III participants about their demographics, socioeconomic status, health, and functioning, as well as their service use and client-reported service impact and quality.

For more information about this study, please contact Jody Schimmel, senior researcher at Mathematica, jschimmel@mathematica-mpr.com.