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Program Entrance and Retention in the Older Americans Act Title III-C Nutrition Services Program

BACKGROUND

Each year, millions of older Americans receive meals as part of the Title III-C Nutrition Services Program (NSP), funded by the Administration on Aging (AoA). These programs, including both the congregate meal program and the home-delivered meal program, are administered locally through grants to states. The programs aim to reduce hunger and food insecurity, promote healthy eating, increase socialization, and, in turn, improve participant health (Administration for Community Living 2019a). Together, the congregate meal and home-delivered meal programs serve over 900,000 meals a day (Administration for Community Living 2019a).

The congregate meal program offers healthy meals in a group setting. Although all adults older than 60 and their spouses are eligible,¹ the program primarily seeks to engage those in social and financial need. Meals are offered in community settings designed to be convenient for older adults including senior centers, churches, and schools (Administration for Community Living 2019b). In addition to providing meals, the congregate meal program also provides participants with social interaction, information on healthy aging, and meaningful volunteer roles. Participation in the congregate meal program has been shown to be associated with decreases in food insecurity (Mabli et al. 2017), improved health outcomes (Mabli et al. 2018), and increased socialization (Mabli and Shenk 2019a).

The home-delivered meal program provides meals to frail, homebound, or isolated adults older than 60.² In addition to meals, the program offers participants an opportunity for social interactions. Home-delivered meal participants overwhelmingly report that the program helps them eat healthier foods and live independently in their own homes (Mabli et al. 2017).

Despite the importance of these programs, little is known about the factors that influence participation, including both program entrance and retention (Mabli and Shenk 2019b). Some research has estimated factors associated with participation in the home-delivered meal program. However, existing studies have limited generalizability due to only focusing on a specific service area or state (Hoerr et al. 2016; Weddle et al. 2012; Walker et al. 2004) or using outdated data (Choi 1999; Frongillo et al. 1987). Other research has examined factors associated with participation in the congregate meal program. Mabli and Shenk (2019b) analyzed the share of participants who continue to participate over time (retention rates) for the congregate meal program and found that retention rates were higher among participants with less local access to food. The associations between retention rates and other participant characteristics were limited.

This issue brief assesses program entrance and retention rates in both the congregate meal and home-delivered meal programs using almost 10 years of data from the National Survey of Older Americans Act Participants (NSOAAP), a nationally representative survey of program participants, and the American Community Survey (ACS). It also assesses how program entrance and retention vary with participant characteristics and evaluates how retention and program entrance have changed over time. These findings are important for understanding how to best target and retain participants who can benefit from services.

Methods

The analysis draws on data on program use between 2011 and 2018 from the NSOAAP, which AoA collects annually. The NSOAAP is a nationally representative survey of recipients of selected services, including congregate meals and home-delivered meals. This information was combined with counts of the number of older adults eligible for the program from the American Community Survey (ACS). The ACS is a nationally representative survey of the U.S. population that the Census Bureau conducts annually.

To estimate the share of the eligible population entering a program, we used a simple ratio of participants to the eligible population. Total

¹ In some cases, individuals younger than 60 with disabilities are also eligible.

² In some cases, spouses, caregivers, and individuals younger than 60 with disabilities are also eligible.

Methods (continued)

participants and total population are estimated using total survey responses weighted by the survey-provided population weights. Population estimates treat anyone who is age 60 or older as part of the population. This is because although the congregate meal and home-delivered meal programs primarily seek to engage socially and economically vulnerable individuals, the programs are open to the full population. Further, there is no comprehensive indicator in the data for social or economic vulnerability. To estimate the size of the population eligible to enter the program, the number of participants from the previous year are subtracted from the total number of adults in the population age 60 or older.

The program retention rate in a given year, t , was estimated as the share of program participants from year $t-1$ who are still participating in year t . Because the NSOAAP data are cross-sectional, and therefore each year of data contains a new set of participants, individual participants cannot be tracked across years. Therefore, the retention rate is estimated using measures of how long participants in each year have been in the program. The mathematical calculation of this retention rate is $r_t = P_{(t, \text{stayers})} / P_{(t-1)}$ where r_t is the retention rate in year t , $P_{(t, \text{stayers})}$ is the number of participants in year t who have been in the program for more than one year, and P_{t-1} is the number of participants in year $t-1$.

FINDINGS

Participation in congregate and home-delivered meal programs

From 2011 to 2018, approximately 1.6 million older adults participated in the congregate meal program each year, on average, and approximately 840,000 received home-delivered meals (Figure 1). For congregate meals, there was a slight decline in participation between 2011 and 2014—from approximately 1.72 million to 1.56 million—but participation was stable between 2014 and 2018. For home-delivered meals, participation remained largely constant over this period, fluctuating by less than 50,000 between the years with the highest and lowest levels of participation.

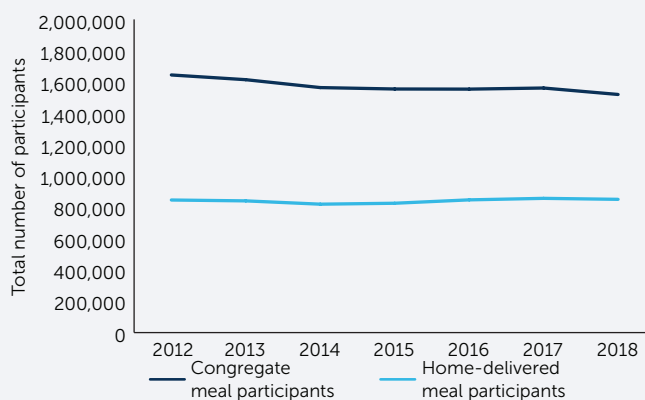
The demographic characteristics of program participants for congregate meals and home-delivered meals differed from the general population age 60 and older. Overall, even among adults 60 and over, participants in both programs tended to be older than the general population (Table 1). About 54 percent of congregate meal participants and 66 percent of home-delivered

meal participants were age 75 or older, relative to only 30 percent of the general population. Women were also overrepresented in both programs, making up more than two-thirds of the participants, compared to 55 percent of the general population. Consistent with the program's goal of seeking to engage older adults in greatest need, participants in both programs had lower levels of income and education than the general population. There were only small differences in the regional and racial composition of participants relative to the general population.

Program entrance

Program entrance measures the rate at which eligible individuals join the program each year. From 2012 to 2017, approximately 5 out of every 1,000 eligible individuals joined the congregate meal and home-delivered meal programs. Participant entrance rates for congregate meal participants declined over this period by approximately 37 percent (from 0.63 to 0.40 percent) but remained relatively steady for home-delivered meal participants

FIGURE 1: Program participation, by year



Source: NSOAAP, 2011–2018, weighted data.

Note: Program participants estimated as the weighted total number of survey respondents.

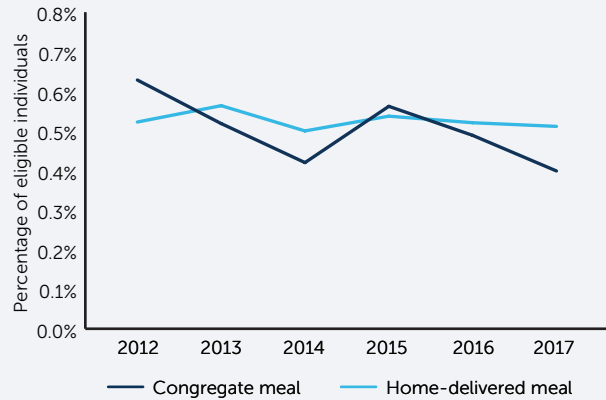
TABLE 1: Percentage of home-delivered meal participants experiencing chronic conditions

Characteristic	Congregate meal participants	Home-delivered meal participants	U.S. population age 60 and older
Age			
60-64	8%	7%	29%
65-74	38%	26%	40%
75-84	37%	34%	21%
85+	17%	32%	9%
Gender			
Male	33%	33%	45%
Female	67%	67%	55%
Race			
White	80%	75%	83%
Black	11%	16%	9%
Native American	1%	1%	1%
Other / multiple races	8%	7%	7%
Hispanic	9%	7%	8%
Housing			
Live with spouse	39%	23%	55%
Live with others (non-spouse)	14%	19%	21%
Live alone	47%	57%	24%
Education			
High school or less	49%	63%	47%
At least some college	51%	37%	53%
Income			
Less than \$20,000	45%	70%	16%
Over \$20,000	55%	30%	84%
Region			
Northeast	22%	23%	19%
Midwest	30%	28%	22%
South	22%	31%	37%
West	26%	18%	22%
Sample size	7,205	7,629	5,485,041

Sources: NSOAAP, 2011–2018, and ACS, 2011–2017, weighted data.

Note: All estimates represent the percent of total survey respondents with a given characteristics over the full study period (from 2011 to 2018 for congregate meal participants and home-delivered meal participants and 2011–2017 for US population age 60 and older).

FIGURE 2: Participant entrance rates over time



Sources: NSOAAP, 2011–2017, and ACS, 2011–2017, weighted data.

Note: Total entrants are calculated as the total number of respondents reporting to have been in the program for under one year. The total eligible population is estimated as the total number of individuals in the US ages 60 and older minus the total number of participants in the previous year.

(from 0.52 to 0.51 percent) (Figure 2). The decline in participant entrance for congregate meal participants does not primarily represent a decreasing number of entering participants, but instead reflects a fairly constant number of entrants and a population of eligible individuals that was growing over time.

Program entrance rates vary according to the characteristics of older adults. The shares of eligible individuals entering the congregate and home-delivered meal programs were more than three times higher for individuals ages 75 to 84 than for individuals ages 60 to 64 (Figures 3a and 3b). Although 6 out of every 1,000 eligible women entered each program, only 4 out of every 1,000 eligible men entered.

Native Americans were approximately three times more likely to enter a program than eligible individuals of any other race. However, entrance rates for eligible individuals of each of the other races (black, white, and “other/multiple”) are comparable. Eligible individuals with lower incomes entered both programs at substantially higher rates. In contrast, there is no meaningful variation in entrance rates by education level. Eligible individuals who lived alone were more than twice as likely to enter a program relative to those who are living with their spouse or with others. There is also some variation in entrance rates by region, with the South reporting lower entrance rates than other regions.

FIGURE 3a: Entrance rates for congregate meal participants, by participant characteristics

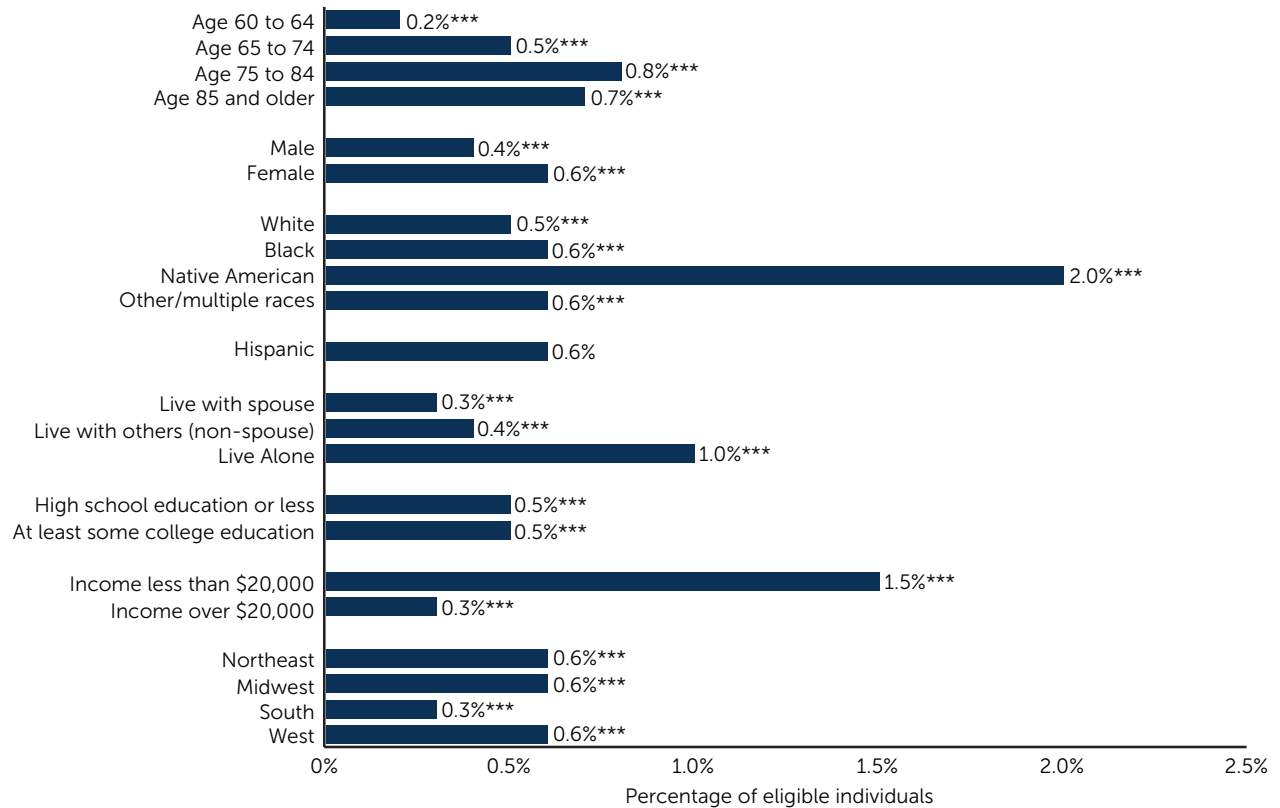
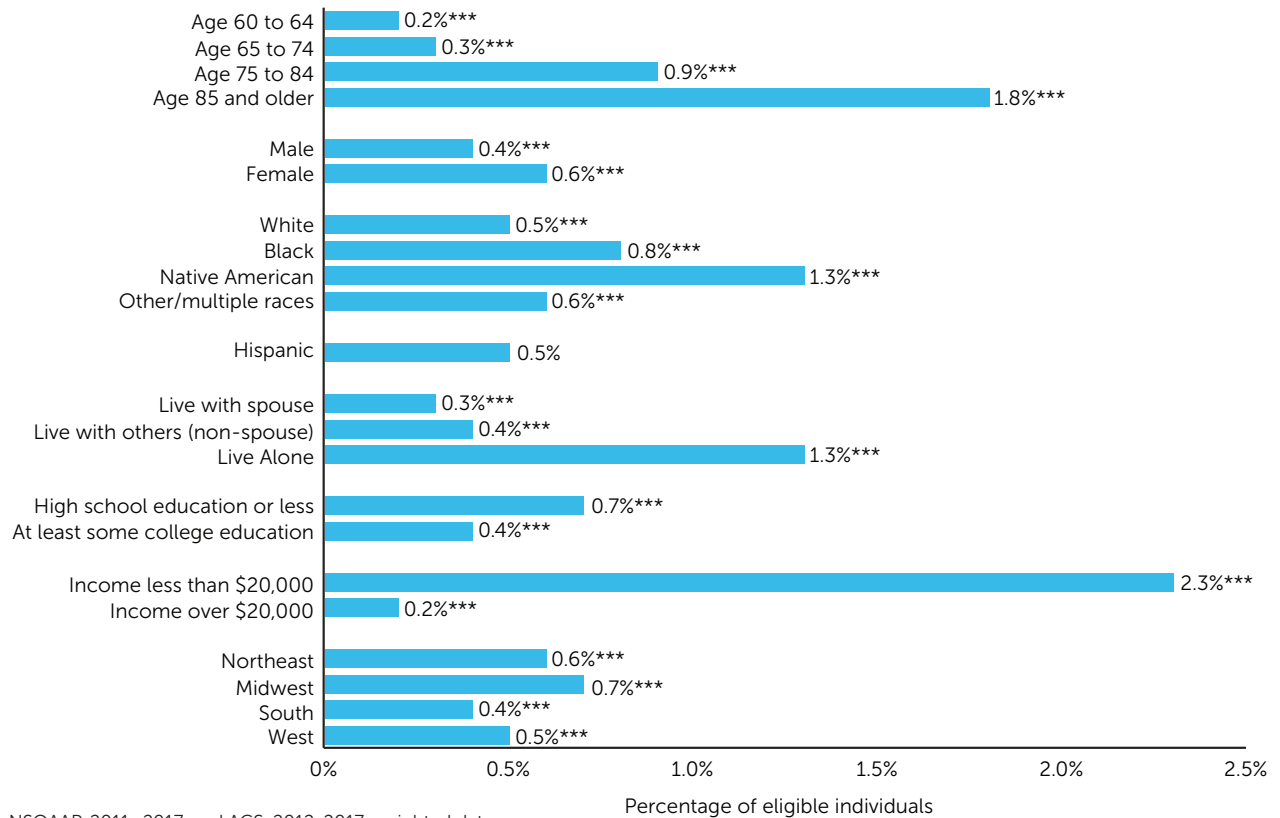


FIGURE 3b: Entrance rates for home-delivered meal participants, by participant characteristics



Sources: NSOAAP, 2011–2017, and ACS, 2012–2017, weighted data.

Note: Total program entrants with a given participant characteristics are estimated as the total number of respondents reporting to have been in the program for less than one year multiplied by the share of new respondents with that characteristic. The total eligible population with a given characteristic is estimated as the total number of individuals in the United States ages 60 and older multiplied by the share of the population with that characteristic minus the number of participants with that characteristic in the previous year. Statistical significance indicators represent the results of a Wald test on each group to analyze whether within-group differences are statistically significant.

* Statistically significant at the $p < .1$ level; ** statistically significant at the $p < .05$ level; *** statistically significant at the $p < .01$ level.

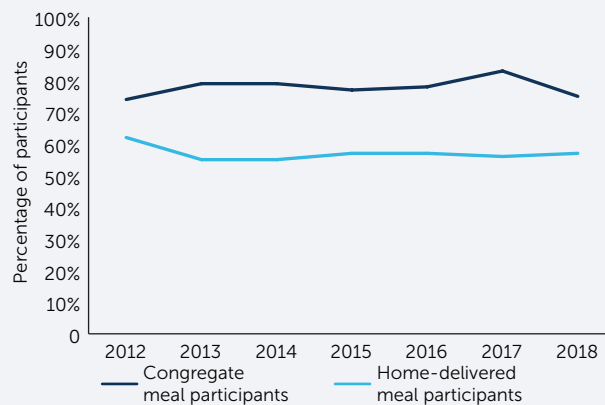
Program retention

The second key component of program participation is retention, or the share of participants who continue to participate in the program after one year. From 2012 to 2018, the average annual retention rate was 78 percent for congregate meal participants and 57 percent for home-delivered meal participants (Figure 4). Retention rates remained consistent over this period. The home-delivered meal program has substantially lower participant retention than the congregate meal program in all years.

Although there is some variation, program retention is relatively consistent across

demographic groups (Figures 5a and 5b). For both congregate and home-delivered meal participants, retention increases with age. The retention rates for participants older than age 85 were more than twice as high as the retention rates for participants age 60 to 64. For congregate meals, evidence indicates that new participants are 9 percentage points more likely to stay than individuals who have participated for longer. For home-delivered meals, there is some difference in retention rates by living arrangement, with those living with spouses being the least likely to continue participation. However, retention rates were similar, and differences were not statistically significant across other participant characteristics.

FIGURE 4: Program retention rates over time



Source: NSOAAP, 2011–2018, weighted data.

Note: Annual program retention in a given year is estimated as the total number of respondents in that year reporting to have been in the program for more than one year divided by the total number of individuals in the previous year who responded to the question on length of time participating in the program. All estimates are weighted using survey-provided population weights.

FIGURE 5a: Retention rates for congregate meal participants, by participant characteristics

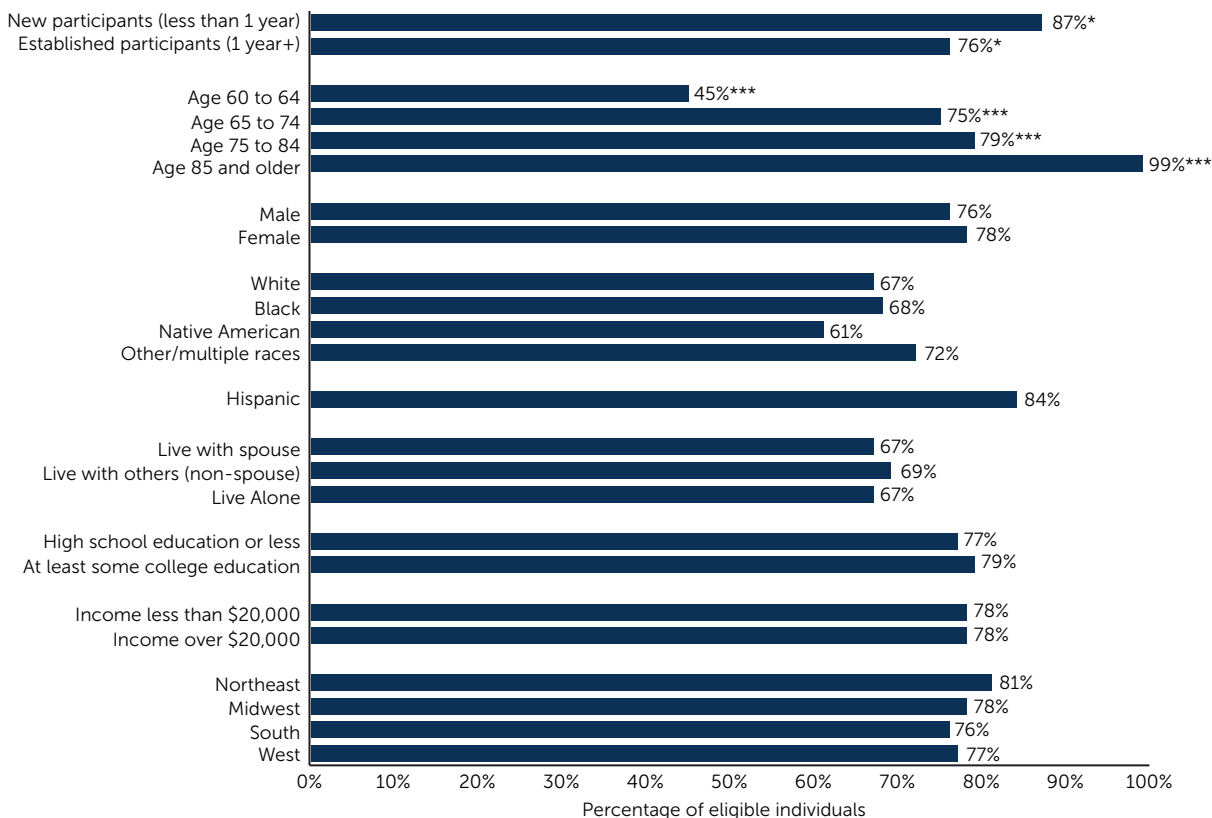
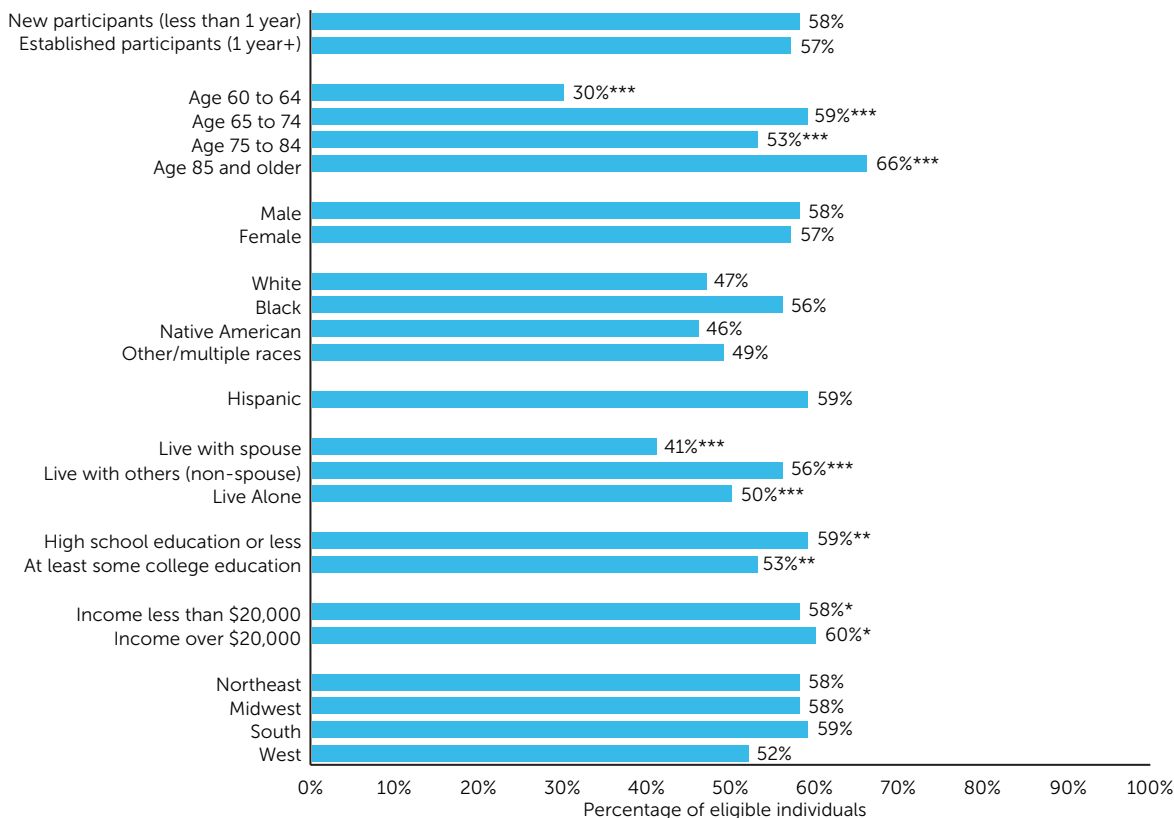


FIGURE 5b: Retention rates for home-delivered meal participants, by participant characteristics



Source: NSOAAP, 2011–2018, weighted data.

Note: Annual program retention in a given year is estimated as the total number of respondents in that year reporting to have been in the program for more than one year divided by the total number of individuals in the previous year who responded to the question on length of time participating in the program. Estimates shown are a weighted average of annual retention rates from 2012–2018. Statistical significance indicators represent the results of a Wald test on each group to analyze whether within-group differences are statistically significant.

* Statistically significant at the $p < .1$ level; ** statistically significant at the $p < .05$ level; *** statistically significant at the $p < .01$ level.

DISCUSSION

Despite the importance of the congregate and home-delivered meal programs, little is known about factors associated with older adults participating in these programs. The findings presented in this brief offer useful information on program entrance and retention rates, which can help practitioners effectively target services to older adults with the greatest need.

Participation in both congregate meals and home-delivered meals was steady from 2011 to 2018. The congregate meal program served almost twice as many individuals as the home-delivered meal program; however, entrance rates for the two programs were similar. Thus, the lower levels of participation in home-delivered meals reflected lower retention rates for this program, relative to the congregate meal program. Although participant satisfaction could play a role, Mabli et al. (2019a) found that 95 percent of participants in both programs reported liking the meals, and more than 80 percent reported being satisfied with the socialization opportunities. This suggests that alternative barriers to continued participation or different reasons for program use might exist between the two programs. Because the survey used in this study does not follow participants over time, it is not possible to identify changing circumstances of participants using this data.

Both the congregate and home-delivered meal programs specifically seek to engage participants in social or financial need. The success of both programs in reaching out to these individuals is evident in the participant entrance rates among individuals with lower income and individuals living alone. Still, there is substantial participation among participants who do not have lower income nor live alone based on observable characteristics. Using this information, providers can gauge whether the current composition of participants is consistent with the program's goals and, if not, how participant recruitment could be adjusted to target individuals with high need.

In contrast to entrance rates, retention rates did not vary over time, despite the fact that the economic climate changed substantially over the study period (the unemployment rate decreased

steadily over this period from 8.9 percent in 2011 to 3.9 percent in 2018 [Bureau of Labor Statistics, 2019]). Although participants receiving meal services were generally out of the labor market, they may have been impacted by market changes through spouses, family and other caregivers. Still, retention rates not varying with economic climate could reflect participants being largely shielded from the effects of market changes. Similarly, retention rates did not vary with participant characteristics other than age, including characteristics likely to be associated with social and financial need. This is surprising given that if older adults in greater need perceive greater benefits of participation, they may stay on the program longer and therefore have higher retention rates. Having similar retention rates across levels of need suggests that participants in social or financial need may face greater barriers to continued participation relative to those with a lower level of need. Alternatively, those with a lower level of need may have a high perceived benefit of participation. Additional research on the factors that cause some participants to stay in the programs and others to leave would provide insight into why retention rates do not vary by most demographic characteristics or over time.

This brief uses a cross-section of nationally representative data to examine program entrance and retention rates. Readers should interpret these findings in the context of two limitations. First, the length of participation, which is used to construct estimates of retention rates, is based on self-reported data, which might be affected by recall bias (that is, differences in the way people remember and report events such as how long ago they entered the program). Second, the data do not contain reasons for program entrance or exit. This brief also emphasizes how understanding factors that influence program participation can assist providers in effectively serving their target populations. Collecting information on why participants entered and exited each program will help providers to better serve participant needs by allowing providers to compare the characteristics of program entrants against the populations to whom they perform outreach and, among current participants, by mitigating barriers to continued participation of the program.

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