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Social and Health-Related Factors Associated with Enrollment to Medicare Advantage Plans in Older Adults

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Abstract

Objective: We assessed the characteristics of older Mexican American enrollees in traditional Fee-For-Service (FFS) and Medicare Advantage (MA) plan and the factors associated with disenrollment from FFS and enrollment in MA plans.

Design: Longitudinal study linked with Medicare claims data.

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Setting: Community-dwelling Mexican American older adults (N=1455) participating in the Hispanic Established Populations for the Epidemiologic Study of the Elderly.

Measurements: We examined insurance status using the Medicare Beneficiary Summary File and estimated the association sociodemographic and clinical factors with insurance plan switching.

Results: Among Mexican American older adults, FFS enrollees were more likely to be born in Mexico, speak Spanish, have lower levels of education, and have more disability than MA enrollees. Older adults with a larger number of IADL limitations (OR; 0.50, 95% Confidence Interval [CI]: 0.26 - 0.98) and more social support (OR; 0.70, 95% CI: 0.45-0.98) were less likely to switch from FFS to MA compared to older adult with no limitations and less social support. Additionally, older adults living in counties with a greater number of MA plans were more likely to switch from FFS to MA (OR; 2.1, 95% CI: 1.45-3.16), compared to counties with a lower number of MA plans. In counties with higher number of MA plans, older adults with more social support had lower odds of switching from FFS to MA (OR; 0.48, 95% CI: 0.28-0.82) compared to older adults with less social support.

Conclusion: Compared to those enrolled in MA, older Mexican American adults enrolled in Medicare FFS are more socioeconomically disadvantaged and are more likely to demonstrate poor health status. Stronger social support and increased physical limitations were strongly associated with less frequent switching from FFS and to MA plans. Additionally, increased availability of MA plans at the county level is a significant driver of enrollment in MA plans.

Keywords

Managed Care; Disability; Mexicans; Social Determinants; Medicare Fee-For-Service

INTRODUCTION

The Medicare program is currently in the midst of an unprecedented policy experiment, moving from a traditional Fee-For-Service (FFS) model to capitated payment models such as the Medicare Advantage (MA) program. Since 2004, the number of Medicare beneficiaries enrolled in MA plans has tripled to 19 million, representing 33% of all beneficiaries in 2017 (1). The growth of MA enrollment in the last two decades includes a significant number of underserved and disadvantaged members of minority populations (2). Under managed care, MA plans receive a capitated rate based on risk adjustment score (Hierarchical Condition Category) to cover services. The capitated payment structure and expansion of MA plans has raised concerns of “cherry-picking” healthier people into MA plans and “lemon-dropping” those with higher (anticipated) health needs (3). Although the risk-adjustment score was designed to reduce the incentive for MA plans to cherry-pick the healthiest members, several concerns, including “upcoding” patient diagnoses, have been reported (4, 5). Prior studies have suggested that some MA plans keep costs down by “skimming” their enrollment from the healthier segments of the population and by “skimping” on services even when they are medically indicated (6, 7). This may contribute to significant differences in the MA and FFS population that make accurate comparisons challenging. However, there is limited information on the participation and switching among at-risk groups in MA plans.

Hispanics are the fastest growing segment of the older adult population in MA plans. Almost 15% of MA beneficiaries are Hispanic (4.5 million), compared to 8% in FFS (2 8). MA penetration is high in Southwestern states, which include a large percentage of Mexican Americans (1). Mexican Americans have a higher prevalence of multiple chronic conditions and functional impairment than Non-Hispanic whites (9, 10). Evidence from Medicare Part D shows that choosing a health insurance plan can be challenging among older adults (11, 12), especially among the Mexican population with language barriers, low education and unmet health needs (13). Social support can be a potential factor that may facilitate health care utilization or selection of health insurance by providing direct support. Seniors may have difficulty interpreting the “full cost” of health care, which includes premiums, deductibles, other out-of-pockets costs; relying on help from family or friends to make insurance choices may be helpful (14). Furthermore, in some counties and states, MA plans often offer lower copay options to attract both low- income and healthier individuals. This in turn could influence enrollment and disenrollment from FFS into MA plans. Patients with less complex health care needs, better functional status, and high social support, who need less intensive medical services, may leave FFS for MA (15, 16). No study has compared differences in functional impairment, social support, education, and comorbidities by insurance status and assessed the influence of these characteristics on plan switching to and from FFS and MA plans among community dwelling older Mexican Americans.

The objective of this study is to compare the sociodemographic characteristics and health status of older Mexican Americans enrolled in FFS versus MA plans and further explore the characteristics of those switching from FFS to MA. We hypothesize that social support, health and functional severity may influence health insurance switching. Because MA plan claims are not readily available, there is incomplete administrative data on prior health and functional status in MA beneficiaries. Therefore, this study used a nationally representative cohort of community-dwelling older Mexican Americans participating in the Hispanic Established Populations for the Epidemiologic Study of the Elderly (H-EPESE) linked to Medicare claims files to examine the use of Medicare FFS and MA plans over time (17).

METHODS

Data Sources

We used data from the H-EPESE linked with the Centers for Medicare and Medicaid Services (CMS) Medicare Beneficiary Summary File (MBSF). The H-EPESE is an ongoing population-based longitudinal study of Mexican Americans 65 years and older residing in Texas, New Mexico, Colorado, Arizona, and California (17). The original H-EPESE cohort included 3,050 Mexican Americans aged 65 years and older selected through multistage area probability sampling of selected counties, blocks, and households. In 2004-2005, a second cohort of 902 participants was recruited. Nine waves of data have been collected from 1993 to 2017. The current study included data from wave 5 (2004-2005). Detailed information regarding the H-EPESE is available at the National Archive of Computerized Data on Aging at the University of Michigan (www.icpsr.umich.edu/icpsrweb/NACDA/series/00546). We used a deterministic method to link H-EPESE data with Medicare claims, utilizing unique identifiers of social security numbers, date of birth, and gender. We submitted this

information for 3,291 H-EPESE participants to the CMS. The CMS returned a list of 3,175 beneficiary IDs and 2,650 of them were alive on/before December 31, 1998. There were 70 participants eliminated from the matching population due to inconsistent records of gender, birth date, date of death or county of residence, which resulted in an eligible sample of 2,580 (18). The study was reviewed by the University's Institutional Review Board and a Data Use Agreement was established with the CMS.

Study Cohort

Among 2,580 individuals with Medicare linkage data, 1,515 were interviewed in wave 5 (2004-2005), including FFS and MA enrollees. We excluded 60 individuals enrolled in part A only, leaving 1,455 individuals for the study cohort (Figure 1). Medicare enrollment status in the month of interview was set as the initial type of insurance. There were 1,181 individuals identified as having FFS (both part A and B, no MA), and 274 with MA. After the wave 5 interviews, 2 years of enrollment status were derived from MBSF data to determine if any individuals switched insurance type between FFS and MA. There were 1,306 participants who did not switch (1055 with FFS and 251 with MA) and 149 participants who did switch (126 switches from FFS to MA, and 23 switches from MA to FFS). Within the 2-year study period, 234 (234/1455, 16.1%) participants died: 194 (194/1181, 16.4%) from the initial FFS group and 40 (40/274, 14.6%) from the MA group. There were more decedents in non-switch groups (16.9% vs 8.7%, $p=0.01$). A sensitivity analysis was applied to participants alive at least 2 years after the interview ($n=1,221$).

Outcome Variables

This study includes two outcomes. First, we compared the sociodemographic and clinical characteristics of older Mexican Americans enrolled in MA or FFS who did not switch with those who switched either from FFS to MA or from MA to FFS. Non-switchers were those who stayed in FFS or MA for 2 years or before death after the wave 5 interview. The second outcome variable was switching plans from FFS to MA. We defined switching plans from FFS to MA as a beneficiary who dis-enrolled from FFS and enrolled in MA within 2 years after the wave 5 interview. We examined insurance status using the MBSF. We examined only switching from FFS to MA because 18% of the study cohort enrolled in MA, but less than 1% switched to FFS from MA.

Sociodemographic Variables

Baseline socio-demographic variables included age (continuous), sex (male and female), marital status (married, widowed, other), years of education (continuous), place born (US or Mexico), interview language (English or Spanish), dual eligibility (yes and no within 2 years after interview), household income (categorized into $< \$15,000$ and $\geq \$15,000$), and type of house and living arrangement (single: living alone and other: living in a household with two or more people). Living arrangement was assessed by asking how many people live in the household with the participant. Information on "marital status" and "living arrangement" can be used as a proxy for family support if an individual is married and living in a household with two or more people. Social support was assessed by two questions: 1) "In times of trouble, can you count on at least some of your family or friends most of the time, some of

the time, or hardly ever?” and 2) “Can you talk about your deepest problems with at least some of your family or friends most of the time, some of the time, or hardly ever?”

Market Level Factors

The number of MA plans varies across states and counties. In order to account for this, we defined availability of MA plans as a dichotomous variable based on median number of MA contracts in the beneficiaries’ residential county area. Number of available MA plans was derived from Medicare Advantage County Service Area Data (October-2006). These data were linked to the Medicare Beneficiary Summary File by state and county based on the year of the interview.

Comorbidities and Functional Status

Medical conditions were assessed with questions that asked if participants had ever been told by a doctor that they had arthritis, diabetes, hypertension, heart attack, stroke, Alzheimer’s disease, fracture, cancer, or other health conditions. Depressive symptoms were measured with the Center for Epidemiologic Studies Depression Scale (19). Body mass index (BMI) was calculated by dividing weight in kilograms by height in meters squared. Smoking and drinking status were categorized as never or ever/current. Physical disability was assessed by seven self-reported items from a modified version of the Katz Activities of Daily Living (ADL) scale (20). Instrumental Activities of Daily Living (IADL) status were assessed by counting limitations in ten areas: using the telephone, traveling alone, shopping, preparing meals, doing light housework, taking medication, keeping track of personal finances, heavy housework, walk up and down stairs, and walk half a mile. ADL disability was dichotomized into no help needed versus needing help with or unable to perform one or more of the seven ADL activities. In addition, we operationalized IADL disability into four ordinal level variables: 0 (no functional impairment), limitations in 1 to 3 IADLs, limitations in 4 to 6 IADLs, and limitations in 7 and more IADL activities. This 4-level classification in IADL reflects the clinical progression of functional impairment and the precursor of ADL disability. Performance-Oriented Mobility Assessment (POMA) scores were included to assess the physical capability in the context of time, speed, and strength (21, 22). Cognitive impairment was assessed using the Mini Mental State Examination (MMSE); the English and Spanish versions were used as appropriate (23). Scores have a range of 0 to 30, with scores from 21 to 30 indicating high cognitive function in Hispanic and low education populations (24).

Statistical Analysis

Student t-test and Chi-square test (or Fisher’s exact test for variables with expected count less than 5) were used to compare baseline characteristics between groups. Logistic regression models were applied to estimate the odds ratio (OR) of predictors on odds of plan switching. Two models assessed the effect of sociodemographic and medical complexity on plan switching from FFS to MA. Model 1 included all variables with significant difference in the bivariate analysis. In Model 2, we added availability of MA plans at county level and all variables from Model 1. A sensitivity analysis was performed to account for competing risk due to mortality. This was done to examine if the association between physical function and switching plans was influenced by mortality. The model was re-run after excluding

individuals who died within 2 years after interview. Sensitivity analysis results are reported in Supplemental appendix Table S2. In another sensitivity analysis, an interaction effect was tested between social support and availability of MA plans reported in Supplemental appendix Table S3. All analyses were conducted using SAS statistical software (version 9.4; SAS Institute Inc., Cary, NC). We use $\alpha=0.05$ as the level of type I error.

RESULTS

Table S1 reports significant differences by types of insurance (FFS versus MA) in several sociodemographic variables and clinical characteristics (Supplemental appendix). FFS enrollees were more likely to be born in Mexico, speak Spanish, have dual eligibility status, have fewer years of education, have income less than \$15,000, and were less likely to be married compared with Mexican American older adults enrolled in MA plans. Older Mexican Americans enrolled in the FFS plan were also more likely to report poor self-rated health, a higher prevalence of ADL and IADL disability, and cognitive impairment than MA enrollees.

In the supplemental appendix, Table S1 findings also suggest that older Mexican Americans who switch from FFS to MA or from MA to FFS were younger, poorer, had less social support, and a lower prevalence of functional impairment than non-switchers. We compared the sociodemographic and clinical characteristics of FFS enrollees with those of FFS-to-MA switchers (Table 1). FFS-to-MA switchers were younger, less likely to have social support and less likely to have ADL and IADL disability, and cognitive impairment than FFS enrollees.

Table 2 shows the adjusted OR and 95% confidence interval (95% CI) of those who switched during the 2-year period compared to non-switchers. In Model 1, being younger (aOR 0.95, 95% CI 0.91-0.99), having a higher income (aOR 0.56, 95% CI 0.35-0.89), and having more social support (aOR 0.66, 95% CI 0.44-1.00) were associated with lower odds of switching. After controlling for availability of MA plans, the impact of social support was not significant in Model 2.

Table 2 also shows the adjusted OR and 95% CI of those who switched from FFS-to-MA compared to those enrollees who remained in FFS during the 2-year period. In Model 1, having social support (aOR 0.61, 95% CI 0.40-0.94) was the only variable associated with lower odds of switching. In Model 2, after controlling for availability of MA plans, having limitations in more than 7 IADL (aOR 0.50, 95% CI 0.26-0.98) and higher levels of social support (aOR 0.70, 95% CI 0.45-0.99) were associated with lower odds of switching from FFS-to-MA compared to those enrollees who remained in FFS during the 2-year period. However, relationship between IADL and switching from FFS-to-MA plan is no longer statistically significant in the sensitivity analyses (Supplemental appendix Table S2). In another sensitivity analysis, Table S3 shows a significant interaction effect between social support and availability of MA plans (Supplemental appendix Table S3). In counties with high availability of MA plans, social support was associated with lower odds of switching (OR 0.53 [0.32-0.86] for any switch; OR 0.48 [0.28-0.82] for switch from FFS to MA (Supplemental appendix Table S3).

DISCUSSION

This is the first study using Medicare data linked with longitudinal survey data to identify differences in social risk factors and clinical characteristics in older Mexican Americans who were FFS or MA enrollees. Consistent with previous research, we found that health status was associated with entry into and exit from MA plans (6). Older Mexican Americans enrolled in MA were more likely to have higher socioeconomic status, be healthier, less likely to have a physical or cognitive impairment, and more likely to have social support. Our findings suggest that switching plans was more frequent in younger and high-income older adults. In addition, older Mexican Americans who were enrolled in FFS plans with high social support were less likely to switch to MA plans over the period of the study. Likewise, older adults with higher level of disability (limitations in 7 and more IADLs) were less likely to switch to MA plans compared to those enrollees who remained in FFS over the years.

Our findings demonstrate lower rates of switching from FFS to MA plans among those with higher levels of social support. This may be partially explained by other factors that could limit the ability of Mexican Americans to access and use complex information regarding choice and decision-making. The mechanisms underpinning the relationship between social support and lower rate of switching from FFS to MA plans might be twofold. First, Mexican American older adults often receive support from family for performing self-care or household activities and other health needs. Therefore, these adults with strong family support may use less healthcare services and opt to stay in the same plan. Seniors with low cognitive ability may be less likely to make optimal enrollment choices and to be responsive to MA benefit options (25). We found that 25% of MA enrollees had cognitive impairment compared to 41% of those enrolled in FFS. In addition, about 65% of those enrolled in MA were US-born, which may suggest that they are more familiar and comfortable with the US health insurance system than foreign-born individuals. Second, given the high prevalence of cognitive impairment among FFS beneficiaries and less level of education, family members or friends helping with the decision-making process regarding insurance plans, may be overwhelmed with the choice and selection process or unaware of the possibility of switching that could influence sticking with the same plan (26). Alternatively, MA plans may be strategically trying to attract healthier patients and avoid those with more complex needs. Although steps have been taking to avoid favorable risk selection in MA (27), plans may be structured in ways to discourage those with complex conditions from enrolling into MA plans, or to disenroll from them. MA plans may have narrow networks or require prior authorizations that may not align with people with high-needs (28). In addition, switching may influence continuity of care. Seniors may be attached to their providers, and the provider they prefer may not be included or they may be unable to determine who is part of their network (29, 30). Therefore, they may decide to stay with their current option. Consistent with previous studies, we also found that increased availability of MA plans at the county level is a strong driver of enrollment in MA compared to FFS (31, 32). Counties or states with high availability of MA plans may offer low copay plans and provide additional benefits to enrollees over FFS, which may attract FFS beneficiaries to enroll in MA plans.

Our results have potential policy implications. Every year from October through December, MA beneficiaries can elect to stay with their current plan, switch to a different MA plan, or dis-enroll from MA and shift to Medicare FFS. This period allows beneficiaries the opportunity to assess whether there were any changes in their healthcare needs, as well as changes in their current plans' benefits, copays, deductibles, coinsurance, provider networks, and premiums. Overwhelmed beneficiaries often choose to do nothing and take the default option to avoid difficult or confusing decisions (30). Our results suggest that about 90% of people in our study remained in the same Medicare plan. According to economic models, consumers are expected to consider a variety of factors when selecting a plan, including health needs, finances, and future health problems in combination with different characteristics of the health plans available (out-of-pocket costs, premiums, services covered, network design, care coordination, quality, and others). Consumers then select a plan that maximizes the expected fit with their situation and needs (33). Subsequent changes in the factors that influenced the original choice will cause some consumers to switch plans. Our results suggest that this may be complex task for Mexican American seniors, as reflected in the Medicare Part D literature (34). Emerging evidence suggests that minorities and low-income beneficiaries may have an inadequate understanding of the core features of health insurance design (35). Not understanding the terms of their current plan may influence individuals to remain with their current plan rather than risk switching (36). Given the rapid growth of MA plans, understanding decision-making regarding enrollment and switching plans is an important topic for future research, particularly for minority populations including older Mexican Americans.

Our study has limitations. Based on the data available, we were not able to observe current trends in enrollment or switching among MA beneficiaries (37). We are unable to describe the type of MA plans available or the specific plan into which beneficiaries switched. The current study included two dichotomous questions to capture social support; therefore, we were unable to examine other components of social support, and support network such as caregiver types and whether family members or friend actively help making health care choices. However, we have included information on "living arrangement" and "marital status" which can be used as a proxy for family support if an individual is married and living in a household with two or more people. Third, small sample size in MA plans limits our study in examining factors associated switching patterns from MA to FFS. Our study has several strengths. We focused on a vulnerable minority population about which very little is known regarding Medicare enrollment. To our knowledge, there are no studies describing choice of Medicare plan and switching patterns among older Mexican Americans. Our linkage of two established data sources provides important baseline information about how Mexican American beneficiaries are interacting with the challenges of Medicare enrollment. Our intention was exploratory, describe for the first time potential associations of individual and contextual factors, using Medicare data linked to survey data. Moving forward, it will be interesting and important to test causal relationship between individual and contextual factors, and how they interact with both intermediate outcomes (e.g., choice and switch between MA and FFS plans), and utilization of health services, and health outcomes (e.g., mortality, long-term nursing home placements). Findings from this study highlight the need to conduct future research to understand the selection bias issue with different insurance

plans in other minority, underserved, or high-need populations using recent data from longitudinal aging studies linked with Medicare claims data.

CONCLUSION

This study is a first step in describing how older Mexican Americans are interacting with the options available to Medicare beneficiaries. While the Medicare program is constantly evolving, it is unlikely that coverage-related decisions will become simpler or easier to make, particularly for underserved and disadvantaged beneficiaries. Future research should examine Medicare enrollment and switching patterns among other minority groups to help create consumer support and training programs designed to maximize efficiency and improve health.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Figure 1.
Flowchart of study cohort selection

Table 1.

Comparison of subject characteristics at wave 5 interview between first switch to MA and FFS enrollees (N=1,183).

Characteristics At Wave 5	FFS N=1055	FFS->MA N=126	p-value
Age, years	82.28 (5.26)	80.83 (3.85)	0.003
Gender			0.312
Male	426 (40.38%)	45 (35.71%)	
Female	629 (59.62%)	81 (64.29%)	
Place of Birth			0.188
Mexico Born	446 (42.27%)	61 (48.41%)	
US Born	609 (57.73%)	65 (51.59%)	
Language			0.111
English	185 (17.54%)	15 (11.90%)	
Spanish	870 (82.46%)	111 (88.10%)	
Dual Eligibility			0.260
No	277 (26.26%)	39 (30.95%)	
Yes	778 (73.74%)	87 (69.05%)	
Education, years	4.67 (3.920)	4.69 (3.534)	0.947
Household Income ^I			0.267
< \$15,000	738 (78.26%)	100 (82.64%)	
>= \$15,000	205 (21.74%)	21 (17.36%)	
Marital Status			0.362
Married	440 (41.75%)	60 (47.62%)	
Widowed	505 (47.91%)	52 (41.27%)	
Other	109 (10.34%)	14 (11.11%)	
Have someone to count on about problem ^I			0.024
Most of the time	793 (80.84%)	88 (72.13%)	
Some of the time/Hardly ever	188 (19.16%)	34 (27.87%)	
Have someone to talk to about problem ^I			0.017
Most of the time	713 (73.13%)	78 (62.90%)	
Some of the time/Hardly ever	262 (26.87%)	46 (37.10%)	
Type of House ^I			0.389
Single	859 (81.73%)	99 (78.57%)	
Other	192 (18.27%)	27 (21.43%)	
Smoke ^I			0.524
Never smoked	548 (52.19%)	69 (55.20%)	
Ever/Current smoked	502 (47.81%)	56 (44.80%)	
Drink ^I			0.387
Never drank	488 (46.48%)	53 (42.40%)	
Ever/Current drank	562 (53.52%)	72 (57.60%)	

Characteristics At Wave 5	FFS N=1055	FFS->MA N=126	p-value
BMI			0.085
<24.9	275 (26.07%)	35 (27.78%)	
25-29.9	313 (29.67%)	42 (33.33%)	
>= 30	230 (21.80%)	33 (26.19%)	
Unknown	237 (22.46%)	16 (12.70%)	
Global health rating			0.968
Excellent/Good	308 (29.19%)	37 (29.37%)	
Fair/Poor	747 (70.81%)	89 (70.63%)	
Medical condition			0.729
1 condition	158 (14.98%)	17 (13.49%)	
2 conditions	166 (15.73%)	23 (18.25%)	
3 or more conditions	731 (69.29%)	86 (68.25%)	
ADL			0.003
ADL, No Help Need	600 (56.87%)	89 (70.63%)	
ADL, Help with 1 or more	455 (43.13%)	37 (29.37%)	
IADL			<.001
No limitation in IADL	232 (21.99%)	37 (29.37%)	
Limitation in 1-3 IADLs	298 (28.25%)	50 (39.68%)	
Limitation in 4-6 IADLs	196 (18.58%)	20 (15.87%)	
Limitation in 7 IADLs	329 (31.18%)	19 (15.08%)	
MMSE ¹			0.039
Normal (≥ 21)	572 (58.07%)	84 (67.74%)	
Impairment (<21)	413 (41.93%)	40 (32.26%)	
CES-D ¹			0.070
Normal (<16)	759 (79.39%)	107 (86.29%)	
Depression (≥16)	197 (20.61%)	17 (13.71%)	
POMA ¹			0.104
Score 0-8	755 (73.80%)	83 (66.94%)	
Score 9-12	268 (26.20%)	41 (33.06%)	
Availability of MA Plans			<.001
Low (< median)	666 (63.13%)	55 (43.65%)	
High (≥ median)	389 (36.87%)	71 (56.35%)	

¹There is missing data

²Fisher exact test was applied

Table 2.

Logistic regression models assessing the relationship between physical/mental function at wave 5 and Medicare enrollment.

Characteristics at Wave 5	Switch vs Non-Switch		Switch from FFS to MA vs FFS	
	Model 1 aOR (95%CI)	Model 2 aOR (95%CI)	Model 1 aOR (95%CI)	Model 2 aOR (95%CI)
Sample size (Event/Total)	139/1244	139/1244	122/1066	122/1066
Limitation in 1-3 IADLs vs No Limitation	1.09 (0.70-1.69)	1.11 (0.71-1.73)	1.12 (0.70-1.78)	1.11 (0.69-1.78)
Limitation in 4-6 IADLs vs No Limitation	0.71 (0.40-1.25)	0.71 (0.40-1.26)	0.66 (0.36-1.22)	0.63 (0.34-1.17)
Limitation in 7 IADLs vs No Limitation	0.70 (0.40-1.22)	0.72 (0.41-1.25)	0.54 (0.28-1.04)	0.50 (0.26-0.98)
MMSE, Impairment (<21) vs normal	--	--	0.90 (0.58-1.40)	0.94 (0.60-1.47)
Age at Interview, years	0.95 (0.91-0.99)	0.95 (0.91-0.99)	0.97 (0.92-1.01)	0.97 (0.93-1.01)
Household Income, >= \$15,000 vs < \$15,000	0.56 (0.35-0.89)	0.54 (0.34-0.86)	--	--
Have someone to count on, most vs sometimes/hardly	0.66 (0.44-1.00)	0.72 (0.48-1.09)	0.61 (0.40-0.94)	0.70 (0.45-0.99)
Availability of MA Plans, High vs Low	--	1.68 (1.16-2.42)	--	2.14 (1.45-3.16)

Model 1 included all variables with significant difference in the bivariate analysis

Model 2 added availability of MA plans at county level and all variables from Model 1.

Have someone to count on and talk to are highly correlated, $r_s > 0.60$. (Just keep have someone to count on in the model.)

Household income was not significant difference in Table 1 (FFS > MA), so it was not included in the second analysis

aOR: adjusted odds ratio; CI: confidence interval