

Medicare Advantage Customer Service Is Used Most by Higher-Need Patients

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Customer service (CS) systems play a crucial role in Medicare Advantage (MA) plans because they assist enrollees in accessing the information they need to navigate their health care coverage. Health plans have 2 major forms of CS: call center agents and automated systems. Call center agents inform enrollees about their health insurance coverage and assist in solving issues that arise in care delivery. In contrast, automated customer service through interactive voice recognition technology allows callers to quickly perform routine functions (eg, requesting provider directories or other plan documents, checking the status of claims or authorizations, verifying eligibility). Each of these types of CS interactions provides an opportunity for the health plan to influence the enrollee's perception of the quality of care being provided, increase equity of access to care, and foster patient loyalty.^{1,2} Within commercial health plans, people with Medicare typically represent 75% of all calls.^{3,4}

CS is particularly important for the MA population, who are lower in income, educational attainment, and health literacy, and higher in multimorbidity and age than the overall US population.⁵⁻⁷ Their calls usually require the longest handling time and are typically the most complex because these callers are usually older than 65 years and often have special needs related to their age or other limitations. People with Medicare also are especially likely to prefer call center agents to interactive voice recognition.³ In 2023, 30.8 million people were enrolled in an MA plan, accounting for 51% of the eligible Medicare population.⁸ Furthermore, those with Medicare who have chronic conditions account for a disproportionate share of health care expenditures and may find it difficult to manage their care, increasing the likelihood of CS calls for assistance.⁹

CMS developed the MA Consumer Assessment of Healthcare Providers and Systems (CAHPS) surveys to collect data on health plan member experiences with MA (MA-only) and MA Prescription Drug (MA-PD) plans.¹⁰ MA CAHPS includes a 3-item CS measure for those who self-report CS use on a screener item. This CS measure is strongly predictive of the overall rating of the health plan,¹¹ the measure that most reliably differentiates plans¹² and is associated with voluntary disenrollment.¹³ Therefore, CS defines the subset

ABSTRACT

OBJECTIVES: To examine characteristics of Medicare Advantage (MA) enrollees who use their plan's customer service to help plans understand how to better meet members' needs.

STUDY DESIGN: National sample of 259,533 respondents to MA Consumer Assessment of Healthcare Providers and Systems survey enrolled in any of the 559 MA contracts in 2022.

METHODS: We assessed the association between self-reported customer service use in the prior 6 months and enrollee demographic, coverage, health, and health care utilization characteristics. We used weighted linear regression models to test for bivariate and multivariate associations between customer service use and enrollee characteristics.

RESULTS: Forty-two percent of MA enrollees reported using customer service in the prior 6 months. Use was 20 percentage points (PP) higher for those in poor vs excellent/very good general health, 13 PP higher for those in poor vs excellent/very good mental health, and 14 PP higher for those reporting 3 or more vs no chronic conditions. Those using customer service more often had lower educational attainment, had limited income and assets, preferred another language to English, and had greater health care utilization.

CONCLUSIONS: MA customer service supports a less healthy, higher-need population with greater-than-average barriers to health care, and so should be designed and staffed to effectively serve medically complex, high-need patients. Commercial plan evidence suggests that continuity in customer service support for a member or a given issue may be helpful. Customer service is an important mechanism for improving quality and addressing health equity.

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TAKEAWAY POINTS

Medicare Advantage (MA) enrollees who are in poorer general and mental health and who have greater medical complexity are more likely to use their plan's customer service.

- ▶ Customer service use by MA enrollees was significantly higher for those with poorer general health, those with poorer mental health, and those reporting 3 or more chronic conditions.
- ▶ MA enrollees using customer service more often had lower educational attainment, had limited income and assets, preferred another language to English, and had high health care utilization.
- ▶ MA customer service should be designed and staffed to effectively serve complex, high-need patients.

of enrollees needing and wanting additional information and attention, which highlights that CS is a critical touch point in care delivery for quality and member retention.³

We examine which MA enrollees use their plan's CS to understand how plans can better meet their members' needs. Previous research has examined disparities in CS experience based on race, ethnicity, and sex.^{14,15} By identifying and understanding different customer segments, plans can tailor their products, services, and communication efforts to better meet the specific needs of each segment.¹⁶ However, there have been no studies to date that examine the characteristics of Medicare enrollees who seek assistance from their plan's CS.

METHODS

Data came from the 2022 MA CAHPS survey (response rate, 35.2%). Poststratification analytic weights were used in all analyses, and matched the sample to the MA population on an extensive list of variables, including race and ethnicity, sex, dual eligibility (DE) for Medicare and Medicaid, and zip code–level US Census Bureau data on race and ethnicity, income, and education using iterative proportional fitting.¹⁷

Our outcome measure is self-reported use of CS in response to the CS screener item: "In the last 6 months, did you get information or help from your health plan's customer service?" For this analysis, a "yes" response was recoded as 100 and a "no" response was recoded as 0. Of the 259,533 survey respondents, 17,881 (6.9%) did not respond to this item and were excluded, leaving 241,652.

We assessed the association between the use of CS and enrollee demographic, coverage, health, health care utilization, and geographic characteristics. Demographic characteristics included age, sex, race and ethnicity, survey language, and education. Coverage characteristics included DE, having a low-income subsidy (LIS), and MA coverage type (MA without Part D drug coverage [MA-only], MA with Part D drug coverage [MA-PD] but no Special Needs Plan [SNP]; chronic condition SNP; DE SNP); different forms of coverage could result in different kinds of customer service questions. Health characteristics included self-reported general and mental health and count of prior diagnoses of 6 chronic conditions (angina, cancer, chronic obstructive pulmonary disease, diabetes, high

blood pressure, and heart attack). Health care utilization characteristics included having a personal doctor and use of specific health care services within the past 6 months (urgent care, routine care, care from more than 1 type of provider, specialist care, and hospitalization). Geographic characteristics included rurality and location (4 Census regions and Puerto Rico).

We used linear regression to test for bivariate and multivariate associations between CS use and enrollee characteristics. We used linear rather than logistic regression models for ease

of interpretation because they are almost identical when sample sizes are large and outcomes are predominantly between 20% and 80% (as is the case here).¹⁸ At the sample sizes employed here, the central limit theorem ensures that the assumption that SEs of regression coefficients are normally distributed is satisfied.¹⁹ In bivariate analyses, 1 enrollee characteristic at a time was analyzed in a regression model. In multivariate analyses, all enrollee characteristics were included in a single regression model.

Supplementary analyses examined item nonresponse and the associations among CS use, experiences, and overall plan ratings.

RESULTS

Approximately 42% of all enrollees reported getting CS help in the last 6 months, with this rate varying by enrollee characteristics.

Table 1 presents analytic results for the demographic and coverage characteristics. Bivariate models are summarized in column 5. Enrollees aged 18 to 64 years were more likely to contact CS than other age groups, with rates being 7 percentage points (PP) higher than among those aged 65 to 69 years. Enrollees 80 years or older were least likely to contact customer service, with rates 6 PP lower than in those aged 65 to 69 years. Male enrollees were 0.5PP more likely to contact customer service than female enrollees. There was marked variation by race and ethnicity, with American Indian/Alaska Native (5 PP), Asian American (6 PP), multiracial (12 PP), Black (15 PP), and Hispanic (19 PP) enrollees more likely than White enrollees to seek CS help. Enrollees who completed the survey in Spanish were 23 PP more likely to report CS use than enrollees who responded in English. Rates of CS use were 4 to 10 PP higher for enrollees without a high school degree than those with a high school degree. Enrollees who have DE or LIS coverage were 16 PP more likely to use CS than enrollees who did not have this coverage. Enrollees in SNPs were 12 to 18 PP more likely to use CS than other enrollees in MA-PD plans; enrollees with MA-only coverage were the least likely group to use CS (9 PP less likely than those with non-SNP MA-PD coverage).

Table 2 presents parallel results for health, health care utilization, and geographic characteristics. In bivariate analysis, we found that a higher percentage of enrollees with worse self-reported health report getting CS help (20 PP higher for enrollees indicating poor vs excellent or very good general health; 13 PP for enrollees indicating

TABLE 1. MA Enrollees' Use of Health Plan Customer Service in Past 6 Months, Overall and by Demographic and Coverage Characteristics, With Summary of Bivariate and Multivariate Linear Regression Models, 2022^a

Characteristic	Distribution among enrollees using customer service (n = 108,659)	Weighted % reporting use of customer service	Bivariate model	Multivariate model ^b
Overall		42.3%		
Age in years				
18-64	13.7%	51.3%	6.81 (0.37)***	-2.12 (0.38)***
65-69	21.2%	44.5%	0 (ref)	0 (ref)
70-74	24.9%	41.2%	-3.30 (0.30)***	-2.34 (0.29)***
75-79	18.8%	40.3%	-4.19 (0.32)***	-3.67 (0.31)***
≥80	21.4%	38.9%	-5.66 (0.30)***	-4.96 (0.30)***
Sex, male	44.6%	42.6%	0.50 (0.20)*	1.51 (0.20)***
Race and ethnicity				
AI/AN	0.3%	42.5%	4.68 (1.72)**	2.37 (1.67)
Asian American	4.5%	43.9%	6.09 (0.50)***	6.84 (0.52)***
Black	13.6%	52.4%	14.62 (0.33)***	10.28 (0.34)***
Hispanic	16.3%	56.4%	18.58 (0.31)***	9.00 (0.41)***
Multiracial	2.1%	49.8%	12.07 (0.77)***	8.32 (0.76)***
NHPI	0.3%	41.5%	3.69 (1.90)	2.71 (1.85)
White	62.9%	37.9%	0 (ref)	0 (ref)
Language of survey data collection ^c				
English	90.8%	41.0%	0 (ref)	0 (ref)
Spanish	9.0%	63.5%	22.50 (0.42)***	7.44 (0.63)***
Other	0.3%	34.1%	-6.89 (1.79)***	-15.02 (1.81)***
Highest educational attainment				
Eighth grade or less	6.7%	51.2%	9.80 (0.47)***	-1.24 (0.49)*
Some high school	8.2%	46.0%	4.49 (0.42)***	-1.86 (0.41)***
High school or equivalent	30.5%	41.7%	0 (ref)	0 (ref)
Some college or higher	54.6%	41.0%	-0.73 (0.23)**	0.07 (0.23)
Low income (eligible for Medicaid or a low-income subsidy to purchase prescriptions)	31.4%	54.2%	15.80 (0.23)***	7.42 (0.33)***
Part D coverage/enrollment in an SNP				
MA-PD, no SNP	73.1%	40.9%	0 (ref)	0 (ref)
MA-PD, chronic condition SNP	1.7%	53.3%	12.43 (0.86)***	6.18 (0.84)***
MA-PD, dual eligible SNP	17.0%	58.8%	17.91 (0.31)***	5.94 (0.40)***
MA-only	8.3%	32.0%	-8.86 (0.32)***	-6.02 (0.32)***

AI/AN, American Indian/Alaska Native; MA, Medicare Advantage; MA-PD, MA with Part D coverage; NHPI, Native Hawaiian or other Pacific Islander; ref, reference group for models; SNP, special needs plan.

*P < .05; **P < .01; ***P < .001.

^aPercentages and models are weighted for probabilities of survey sampling and response. Highest educational attainment and race and ethnicity are self-reported and contain missing values; missing values were imputed as the within-contract mean for the regression models. All other characteristics were drawn from Medicare or survey administration data and are complete. All models are linear, with reported use of customer service scored as 100 and no use scored as 0. The sample size was 241,652 for all models. The multivariate model additionally adjusts for the health, health care utilization, and geographic measures presented in Table 2. Cells for bivariate and multivariate models are in the form estimate (SE).

^bThe multivariate model spans Table 1 and Table 2 variables.

^cOther languages of survey data collection were Chinese, Vietnamese, Korean, and Tagalog in 2022.

poor vs excellent or very good mental health). Having 1 of 6 specific chronic conditions was associated with a higher likelihood of using CS, with rates especially high for those with 3 or more conditions (14 PP higher compared with enrollees with no chronic condition). Enrollees who had a personal doctor were 14 PP more likely to seek CS help than enrollees who did not. Health care utilization measures

were also associated with higher rates of getting CS help. Enrollees who required urgent care, made an appointment for routine care, received care from more than 1 type of provider, saw a specialist, or spent 1 or more nights in the hospital in the past 6 months were 11 to 16 PP more likely to report using CS than enrollees who did not have those health care needs. Rates of contacting CS varied by

TRENDS FROM THE FIELD

TABLE 2. MA Enrollees' Use of Health Plan Customer Service in Past 6 Months, Overall and by Health, Health Care, and Geographic Characteristics, With Summary of Bivariate and Multivariate Linear Regression Models, 2022^a

Characteristic	Distribution among enrollees using customer service (n = 108,659)	Weighted % reporting use of customer service	Bivariate model	Multivariate model ^b
Overall		42.3%		
General health				
Very good or excellent	29.8%	36.5%	-5.32 (0.24)***	-0.70 (0.26)**
Good	38.3%	41.8%	0 (ref)	0 (ref)
Fair	26.2%	48.8%	7.07 (0.27)***	0.41 (0.28)
Poor	5.7%	56.7%	15.03 (0.52)***	3.56 (0.56)***
Mental health				
Very good or excellent	50.8%	39.3%	-3.85 (0.23)***	-0.17 (0.25)
Good	30.3%	43.2%	0 (ref)	0 (ref)
Fair	15.8%	50.1%	7.06 (0.33)***	1.31 (0.34)***
Poor	3.1%	52.5%	9.39 (0.66)***	2.59 (0.68)***
Count of chronic conditions ^c				
0	20.8%	36.6%	0 (ref)	0 (ref)
1	33.9%	40.7%	4.13 (0.26)***	1.29 (0.26)***
2	27.0%	45.0%	8.43 (0.28)***	2.26 (0.29)***
≥3	18.4%	50.4%	13.79 (0.33)***	4.73 (0.34)***
Have a personal doctor: yes	96.7%	42.9%	13.62 (0.48)***	9.71 (0.47)***
In the past 6 months:				
Needed care right away in a clinic, emergency department, or doctor's office ^d	37.4%	50.7%	12.65 (0.22)***	5.90 (0.24)***
Made any appointments for a checkup or routine care at a doctor's office or clinic ^e	88.5%	45.0%	15.89 (0.27)***	9.52 (0.28)***
Received care from more than 1 kind of health care provider or used more than 1 kind of health care service ^f	72.2%	48.3%	10.87 (0.24)***	4.27 (0.27)***
Made any appointments to see a specialist ^g	73.9%	46.9%	14.70 (0.21)***	8.93 (0.25)***
Spent 1 or more nights in a hospital ^h	13.1%	55.0%	14.20 (0.34)***	5.12 (0.35)***
Rurality ⁱ : rural	15.8%	41.8%	-0.56 (0.27)*	-2.56 (0.29)***
Census region				
Northeast	17.9%	43.4%	0 (ref)	0 (ref)
Midwest	18.9%	37.4%	-5.91 (0.32)***	-2.61 (0.32)***
South	37.7%	44.3%	0.92 (0.29)**	-0.67 (0.29)*
West	21.9%	40.3%	-3.03 (0.32)***	-1.82 (0.32)***
Puerto Rico	3.7%	67.9%	24.58 (0.70)***	8.22 (0.90)***

CBSA, core-based statistical area; MA, Medicare Advantage; ref, reference.

* $P < .05$; ** $P < .01$; *** $P < .001$.

^aPercentages and models are weighted for probabilities of survey sampling and response. All health and health care utilization measures are self-reported and contain missing values; missing values were imputed as the within-contract mean for the regression models. Geographic characteristics (rurality, Census region) were drawn from Medicare administration data and are complete. All models are linear, with reported use of customer service scored as 100 and no use scored as 0. The sample size was 241,652 for all models. The multivariate model additionally adjusts for the demographic and coverage measures presented in Table 1. Cells for bivariate and multivariate models are estimate (SE).

^bThe multivariate model spans Table 1 and Table 2 variables.

^cCount of previous diagnosis with 6 chronic conditions: heart attack; angina or coronary heart disease; hypertension or high blood pressure; cancer other than skin cancer; emphysema, asthma, or chronic obstructive pulmonary disease; and any kind of diabetes or high blood sugar level.

^d"In the last 6 months, did you have an illness, injury, or condition that needed care right away in a clinic, emergency room, or doctor's office?"

^e"In the last 6 months, did you make any appointments for a checkup or routine care at a doctor's office or clinic?"

^f"In the last 6 months, did you get care from more than 1 kind of health care provider or use more than one kind of health care service?"

^g"In the last 6 months, did you make any appointments to see a specialist?"

^h"In the last 6 months, did you spend 1 or more nights in a hospital?"

ⁱRurality was defined using CBSA codes. CBSAs contain the following entities: metropolitan divisions, metropolitan statistical areas, and micropolitan statistical areas. For analysis, metropolitan divisions and metropolitan statistical areas were considered urban; these are urbanized areas of at least 50,000 people. Micropolitan statistical areas (areas with at least 1 urban cluster with between 10,000 and 49,999 people) and areas not in a CBSA were considered rural.

Census region and were highest in Puerto Rico (25 PP higher than in New England).

The last columns of Tables 1 and 2 summarize multivariate results from a single multivariate model. Asian American (7 PP), multiracial (8 PP), Hispanic (9 PP), and Black (10 PP) enrollees were more likely than White enrollees to seek CS help. Spanish survey response was associated with a 7 PP higher rate of CS compared with English-survey response. DE/LIS enrollees were 7 PP more likely to contact CS after adjustment for all enrollee characteristics. SNP enrollees had a 6 PP higher rate of getting CS help than other enrollees with MA-PD coverage. Enrollees with MA-only coverage were 6 PP less likely to get CS help than enrollees with non-SNP MA-PD coverage.

Turning to Table 2, enrollees with poor general health had a 4 PP higher rate of getting CS help than those with excellent or very good general health. Enrollees with 3 or more chronic conditions had a 5 PP higher rate of getting CS help than those with no chronic conditions. Enrollees with a personal doctor had a 10 PP higher rate of getting CS help than enrollees who did not. Enrollees who made an appointment for routine or specialist care had 9 to 10 PP higher rates than other enrollees.

eAppendix A (eAppendices available at ajmc.com) describes parallel results for 2019. Notable is that reported use of CS declined by approximately 1.1 PP in 2019-2022. The unadjusted and adjusted patterns are broadly similar by patient characteristics. **eAppendix B** shows that plans with higher CS use had slightly worse CS experiences but that, taken together, contracts with better CS experiences had markedly higher ratings and those with more CS use had slightly higher ratings. **eAppendix C** indicates that nonresponse to the CS item was similar to that for other items.^{20,21}

DISCUSSION

MA enrollees with poorer general and mental health, greater medical complexity, limited income and assets, and higher health care utilization, as well as those who belong to a racial or ethnic minority group or prefer another language to English, were more likely than others to report using MA CS. This evidence adds to the current knowledge about the higher importance placed on CS among some patient groups. CS users may have higher-than-average needs and barriers to care or require clarification about specific aspects of coverage or help with access or care.

We found that plans with high CS use had lower CS performance and that CS performance is a strong driver of plan ratings, underscoring that better serving the population of CS users can improve care. As such, our findings suggest that health plan CS needs to be staffed and trained to meet the needs of a racially, ethnically, and linguistically diverse population with lower-than-average income and assets and worse-than-average health, with multiple chronic conditions. Furthermore, representatives' conversations with members should include asking how to best support the caller, including whether the caller has access to others who can help or prefers information provided in writing or in another language. Any

written material provided for follow-up should be simple and clear, at most at a 6th-grade reading level,^{22,23} culturally appropriate, and in multiple languages (as needed). The best method to exchange information may differ across patient groups.

Further, findings suggest that health plans can differentiate themselves in service quality and experience by using call center metrics to analyze communications and member needs to assess health risks and status of various segments of their member population and to better target process improvements that support high users' needs. This may require health plans to improve their database management and integrate information management and call center strategies.

To provide more personal assistance, health plans have instituted several CS approaches; these also could assist high-need patients. For example, some health plans use a personal service representative, pairing each member of certain patient groups with a single dedicated service representative to personalize the member's service for all their calls. This approach led to lower costs through greater efficiencies in plan member referrals to needed services based on the representative's familiarity with the member.^{3,24} Health plans could provide a dedicated representative for high-need patients and frequent callers to emphasize continuity and active follow-up; this could include an option to have a service representative who remains on a given case, including any needed follow-up, assistance in navigating the health system, and follow-up calls to gain resolution. Another innovative CS approach is to set up community-based locations where Medicare members can attend free events and gain answers to their Medicare questions.²⁵

Limitations

Our study has limitations. The national MA survey data provide information about the CS experience and user characteristics but do not include the content of the CS inquiries, which are data that only health plans can examine. However, our findings point out the importance of examining call center data and member characteristics to improve and target services. High CS use could indicate difficulties with the plan, but it is also the case that good CS may encourage more CS use.

CONCLUSIONS

MA CS supports a less healthy, higher-need population with greater-than-average barriers to health care, as well as a culturally and linguistically diverse population, so it should be designed and staffed to effectively serve complex, high-need patients. Effective CS that is aligned with the needs of users results in better patient experiences with their health plan and their care. Measuring and analyzing CS data are vital for improving quality and addressing health equity. ■

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eAppendix A. 2019 Results

The response rate to the 2019 MA surveys was 38.4%. The national sample comprised 197,355 respondents enrolled in a Medicare Advantage (MA) plan in 2019. Those who did not respond to the customer service item (n=14,205; 7.2%) were excluded from analyses. The final analytic sample size was 183,150 in 2019.

eAppendix A Table. Medicare Advantage enrollees' use of health plan customer service in the last 6 months, overall and by demographic coverage, health, healthcare, and geographic characteristics, with summary of bivariate and multivariate linear regression models, 2019

		Distribution among enrollees using customer service, (N=85,969)	Weighted % reporting use of customer service	Bivariate Model	Multivariate Model
Overall			43.4%		
Age	18-64	14.8%	55.0%	10.89 (0.43) ***	2.11 (0.44) ***
	65-69	19.8%	44.1%	0 (ref)	0 (ref)
	70-74	25.2%	42.3%	-1.82 (0.35) ***	-1.44 (0.34) ***
	75-79	18.6%	41.7%	-2.40 (0.37) ***	-1.90 (0.36) ***
	80+	21.7%	39.8%	-4.34 (0.35) ***	-3.79 (0.35) ***
Sex	Male	45.3%	44.6%	2.12 (0.23) ***	2.75 (0.23) ***
Race-and-ethnicity	AI/AN	0.4%	49.3%	10.28 (1.95) ***	6.19 (1.90) **
	Asian American	3.6%	42.0%	2.85 (0.62) ***	4.37 (0.62) ***
	Black	13.2%	54.0%	14.98 (0.38) ***	11.03 (0.40) ***
	Hispanic	16.7%	57.0%	17.95 (0.35) ***	8.02 (0.46) ***
	Multiracial	2.6%	51.1%	12.02 (0.79) ***	8.77 (0.77) ***
	NHPI	0.3%	44.9%	5.76 (2.16) **	7.32 (2.11) ***
	White	63.1%	39.1%	0 (ref)	0 (ref)
Language of survey data collection ^a	English	90.6%	41.9%	0 (ref)	0 (ref)
	Spanish	9.4%	65.5%	23.60 (0.48) ***	12.71 (0.73) ***
	Other	<0.1%	44.2%	2.21 (6.04)	0.45 (5.88)

Highest educational attainment	8th grade or less	7.6%	51.4%	10.22 (0.52) ***	-1.02 (0.54)
	Some high school	9.3%	47.8%	6.38 (0.46) ***	0.68 (0.46)
	High school or equivalent	29.8%	41.7%	0 (ref)	0 (ref)
	Some college or higher	53.3%	42.4%	0.60 (0.27) *	1.94 (0.27) ***
Low income (eligible for Medicaid or a low-income subsidy to purchase prescriptions)		25.6%	54.0%	13.30 (0.28) ***	4.98 (0.37) ***
Part D coverage / enrollment in a SNP	MA-PD, no SNP	74.1%	42.5%	0 (ref)	0 (ref)
	MA-PD, chronic condition SNP	2.2%	56.7%	14.20 (0.89) ***	7.47 (0.88) ***
	MA-PD, dual eligible SNP	14.2%	58.4%	15.90 (0.38) ***	3.56 (0.46) ***
	MA-Only	9.5%	34.0%	-8.48 (0.36) ***	-5.90 (0.36) ***
Rurality ^b	Rural	15.8%	43.9%	0.56 (0.32)	-1.48 (0.34) ***
Census Region	Northeast	18.5%	45.7%	0 (ref)	0 (ref)
	Midwest	17.9%	37.7%	-8.01 (0.37) ***	-4.76 (0.37) ***
	South	36.8%	46.3%	0.54 (0.34)	-1.57 (0.33) ***
	West	22.8%	40.0%	-5.72 (0.36) ***	-5.15 (0.36) ***
	Puerto Rico	4.0%	66.2%	20.42 (0.76) ***	0.11 (1.03)
General health	Very good or excellent	31.5%	37.9%	-4.11 (0.27) ***	0.40 (0.30)
	Good	36.2%	42.0%	0 (ref)	0 (ref)
	Fair	25.6%	51.4%	9.50 (0.32) ***	2.50 (0.34) ***
	Poor	6.7%	58.9%	16.97 (0.56) ***	7.78 (0.61) ***
Mental health	Very good or excellent	52.7%	40.1%	-5.01 (0.27) ***	-1.17 (0.30) ***
	Good	28.7%	45.1%	0 (ref)	0 (ref)
	Fair	15.5%	53.0%	8.01 (0.40) ***	0.49 (0.41)
	Poor	3.1%	51.5%	6.57 (0.76) ***	-4.37 (0.79) ***
Count of chronic conditions ^c	0	21.4%	37.7%	0 (ref)	0 (ref)

	1	33.7%	42.1%	4.45 (0.30) ***	1.83 (0.30) ***
	2	26.5%	45.8%	8.15 (0.33) ***	2.20 (0.33) ***
	3+	18.5%	51.6%	13.89 (0.37) ***	4.33 (0.39) ***
Have a personal doctor	Yes	96.9%	43.8%	10.25 (0.60) ***	6.30 (0.59) ***
In the last 6 months:	Needed care right away in a clinic, emergency room, or doctor's office ^d	42.9%	52.2%	14.06 (0.24) ***	7.16 (0.26) ***
	Made any appointments for a checkup or routine care at a doctor's office or clinic ^e	89.0%	45.6%	14.41 (0.33) ***	7.95 (0.33) ***
	Got care from more than one kind of health care provider or use more than one kind of health care service ^f	71.5%	49.4%	10.67 (0.27) ***	3.23 (0.30) ***
	Made any appointments to see a specialist ^g	73.4%	48.4%	15.34 (0.25) ***	9.32 (0.28) ***
	Spent one or more nights in a hospital ^h	15.4%	57.0%	15.41 (0.36) ***	5.65 (0.38) ***

Notes: *p<0.05, **p<0.01, ***p<0.001. Percentages and models are weighted for probabilities of survey sampling and response. N=sample size. AI/AN=American Indian/Alaska Native. NHPI=Native Hawaiian or other Pacific Islander. MA=Medicare Advantage. SNP=special needs plan. MA-PD=Medicare Advantage with Part D coverage. Ref=reference group for models. Highest educational attainment, race-and-ethnicity, and all health and healthcare utilization measures are self-reported and contain missing values; missing values were imputed as the within-contract mean for the regression models. All other characteristics were drawn from Medicare or survey administration data and are complete. All models are linear, with reported use of customer service scored as '100' and no use scored as '0'. The sample size was 183,150 for all models. Cells for bivariate and multivariate models are estimate (standard error).

^a 'Other' languages of survey data collection were Chinese and Vietnamese in 2019.

^b Rurality was defined using Core Based Statistical Areas (CBSAs) codes: Metropolitan divisions, Metropolitan statistical areas, and Micropolitan statistical areas. For analysis, Metropolitan divisions and Metropolitan statistical areas were considered urban; these are

urbanized areas of at least 50,000 people. Micropolitan statistical areas (areas with at least one urban cluster with between 10,000 and 49,999 people) and areas not in a CBSA were considered rural.

^c Count of previous diagnosis with 6 chronic conditions: a heart attack; angina or coronary heart disease; hypertension or high blood pressure; cancer other than skin cancer; emphysema, asthma or COPD (chronic obstructive pulmonary disease); and any kind of diabetes or high blood sugar.

^d In the last 6 months, did you have an illness, injury, or condition that needed care right away in a clinic, emergency room, or doctor's office?

^e In the last 6 months, did you make any appointments for a checkup or routine care at a doctor's office or clinic?

^f In the last 6 months, did you get care from more than one kind of health care provider or use more than one kind of health care service?

^g In the last 6 months, did you make any appointments to see a specialist?

^h In the last 6 months, did you spend one or more nights in a hospital?

eAppendix B. Contract-Level Associations between Customer Service Use, Customer Service Quality, and Overall Plan Rating

The average CS score among respondents to the 2022 MA CAHPS survey was 90.3 (on a 0-100 scale, using linear mean scoring).²⁶ Of the three items used in the CS composite score, average scores were highest for items asking how often forms from the enrollee’s health plan were easy to fill out (95.2) and how often CS staff were courteous and respectful (93.4), while an item asking how often CS gave the enrollee the information or help they needed showed the most room for improvement (82.2).

Before contract-level scores for CAHPS measures are publicly reported, they are adjusted for differences in survey respondent characteristics that are not under the control of the contract but that are related to how people respond to survey items (case-mix adjustment).²⁷ Contract-level scores that cannot reliably distinguish performance between contracts are suppressed.

Here, we describe the contract-level relationship among adjusted contract-level CS scores, adjusted overall plan rating, and the percentage of respondents who report CS use. Analyses are limited to 528 MA contracts with publicly reportable CS scores in 2022 (94.5% of the MA contracts used in analyses for the main text). In bivariate analyses, CS scores and overall plan rating have a strong positive relationship (Pearson Correlation = 0.66, $p < 0.001$), contracts with higher CS use tend to have slightly lower CS scores (Pearson Correlation = -0.22, $p < 0.001$), and the relationship between CS use and overall plan rating is not statistically significant (Pearson Correlation = 0.02, $p = 0.62$).

eAppendix B Table summarizes models of overall plan rating on CS use and CS scores. Models 1 and 2 reflect bivariate relationships. After adjusting for both predictors, a 1-point increase in CS score is associated with a 0.90-point increase of the overall plan rating, and a 1-point increase in the percent of enrollees seeking CS is associated with a very small increase (0.05 points) in overall plan rating (all variables on a 0-100 scale; Model 3).

eAppendix B Table. Contract-level Regression of Overall Plan Rating on Customer Service Use and Customer Service Score

	Model 1	Model 2	Model 3
R-Square	0.431	0.001	0.459
Intercept	9.77 (3.87) *	86.64 (0.56) ***	3.21 (3.97)
CS Score	0.86 (0.04) ***		0.90 (0.04) ***
Percent Needing CS		0.01 (0.01)	0.05 (0.01) ***

Notes: Cells are estimate (SE) * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Among 528 MA contracts with reportable Customer Service scores in 2022.

26. Orr N, Zaslavsky AM, Hays RD, et al. Development, methodology, and adaptation of the Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) patient experience survey, 2007–2019. *Health Serv Outcomes Res Methodol.* 2023;23(1):1-20. doi:10.1007/s10742-022-00277-9

27. Scoring and star ratings. Medicare Advantage and Prescription Drug Plan CAHPS Survey. Accessed August 23, 2024.
<https://www.ma-pdcahps.org/en/scoring-and-star-ratings/>

eAppendix C. Predictors of Customer Service Use Item Nonresponse and Overall Item Nonresponse Rate

Of the 259,533 survey respondents in 2022, 17,881 (6.9%) did not respond to the Customer Service (CS) use item and were excluded from analyses presented in the main text. The rate of nonresponse for this item is similar to the average item missingness rate across all respondents (6.8%), calculated as the number of items that were skipped divided by the number of items the respondent was eligible to answer.

eAppendix C Table summarizes multivariate regression models of CS use item nonresponse and overall item nonresponse rate on demographic and geographic characteristics.

Those who were less likely to respond to this item are similar to those who skip more items on this and other surveys in general, similar to the findings of Klein et al. (2011) and Dembosky et al. (2018)- respondents age 80+ years, those who were Asian American, Black, or Spanish-preferring and Hispanic, those with lower levels of educational attainment or income. Given that item nonresponse for this item is low, similar to other items on this survey, and with similar patterning to other items, there is little evidence that nonresponse to this item pertains to its content.^{20,21}

eAppendix C Table. Multivariate Models of Customer Service Use Item Nonresponse and Overall Item Nonresponse Rate, 2022

		CS Use Item Nonresponse	Overall Rate of Item Nonresponse
Age	18-64	0.65 (0.19) ***	0.02 (0.10)
	65-69	0 (ref)	0 (ref)
	70-74	<0.01 (0.15)	0.17 (0.08) *
	75-79	1.91 (0.16) ***	0.94 (0.08) ***
	80+	5.08 (0.15) ***	3.07 (0.08) ***
Sex	Male	-1.48 (0.10) ***	-0.29 (0.05) ***
Race-and-ethnicity	AI/AN	-0.72 (0.86)	-0.16 (0.45)
	Asian American	2.05 (0.26) ***	1.32 (0.14) ***
	Black	3.96 (0.17) ***	2.32 (0.09) ***
	Hispanic	0.26 (0.20)	1.34 (0.11) ***
	Multiracial	-0.30 (0.39)	-0.21 (0.20)
	NHPI	0.73 (0.95)	0.62 (0.49)
	White	0 (ref)	0 (ref)
Language of survey data collection ^a	English		
	Spanish	3.64 (0.31) ***	3.72 (0.16) ***

	Other	-1.68 (0.91)	1.33 (0.47) **
Highest educational attainment	8th grade or less	0.77 (0.25) **	0.09 (0.13)
	Some high school	2.99 (0.20) ***	1.29 (0.11) ***
	High school or equivalent	0 (ref)	0 (ref)
	Some college or higher	-2.29 (0.12) ***	-1.23 (0.06) ***
Low income (eligible for Medicaid or a low-income subsidy to purchase prescriptions)		1.75 (0.13) ***	2.03 (0.07) ***
Rurality ^b	Rural	0.37 (0.15) *	-0.27 (0.08) ***
Census Region	Northeast	0 (ref)	0 (ref)
	Midwest	0.16 (0.16)	-0.28 (0.08) ***
	South	1.09 (0.14) ***	0.17 (0.07) *
	West	1.08 (0.16) ***	0.45 (0.08) ***
	Puerto Rico	-4.40 (0.45) ***	-3.86 (0.23) ***

Notes: *p<0.05, **p<0.01, ***p<0.001.

CS = Customer Service. AI/AN=American Indian/Alaska Native. NHPI=Native Hawaiian or other Pacific Islander. Ref=reference group for models. Highest educational attainment and race-and-ethnicity were self-reported and contain missing values; missing values were imputed as the within-contract mean for the regression models. All other characteristics were drawn from Medicare or survey administration data and are complete. Models are weighted for probabilities of survey sampling and response. Models are linear, with outcomes scaled 0-100. The sample size was 259,533 for both models (survey respondents in 2022). Cells are in the form estimate (standard error).

^a ‘Other’ languages of survey data collection were Chinese, Vietnamese, Korean, and Tagalog in 2022.

^b Rurality was defined using Core Based Statistical Areas (CBSAs) codes. CBSAs contain the following entities: Metropolitan divisions, Metropolitan statistical areas, and Micropolitan statistical areas. For analysis, Metropolitan divisions and Metropolitan statistical areas were considered urban; these are urbanized areas of at least 50,000 people. Micropolitan statistical areas (areas with at least one urban cluster with between 10,000 and 49,999 people) and areas not in a CBSA were considered rural.