

Top-Rated Health Care and Ease of Access to Medications Linked to Lower Medicare and ADRD Costs

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Importance: Little is known about the extent to which patient self-perception of care experience is associated with costs, especially for people with Alzheimer disease and related dementias (ADRD).

Objective: This study explores the relationship between self-reported quality measures and Medicare costs and examines whether the ease of obtaining prescribed medications is associated with reduced overall Medicare costs, focusing on Medicare beneficiaries with ADRD.

Design, Setting, and Participants: In this cross-sectional study, Medicare Beneficiary Summary File data from 2018, 2019, and 2021 were linked to the Medicare Consumer Assessment of Health Care Providers and Systems (CAHPS) Survey using beneficiary IDs. The study sample included community-dwelling Medicare fee-for-service beneficiaries.

Exposures: Five quality measures were used as key exposure variables: (1) beneficiary's rating on health care; (2) ease of getting care/tests/treatment through the health plan; (3) whether the doctor always explained, listened, respected; and spent enough time with the patient; (4) ease of obtaining prescribed medications; and (5) whether doctor always talked about all the prescription medicines the beneficiary was taking.

Main Outcome and Measure: Annual total Medicare payments per person.

Results: The study included 230,617 Medicare fee-for-service beneficiaries aged 65 and older, including 16,452 beneficiaries with ADRD. Among the total beneficiaries, 53% were females (vs. 56% of ADRD beneficiaries), with a mean (SD) age of 75.8 (SD 7.27) years [vs. 82.5 (SD 7.97) years for ADRD beneficiaries]. Fully adjusted analyses showed significant negative associations between quality measures and total per-capita payments, with more pronounced cost reductions among patients with ADRD. Specifically, patients with ADRD who reported it was always easy to get care had reductions of \$1,922.0 (95% CI, -\$3304.8 to -\$539.2), while those who reported it was always easy to get prescribed medications had reductions of \$2964.5 (95% CI, -\$4518.8 to -\$1410.1). In addition, beneficiaries who reported that doctors always discussed the medicines experienced cost reductions of \$2299.7 (95% CI, -\$3800.5 to -\$799.0) in Medicare costs.

Conclusion and Relevance: Our findings suggest that high-quality care is not necessarily associated with high costs. Meanwhile, focusing on the ease of access to needed care, obtaining prescription drugs, and effective communication about medication is critical in improving care quality while reducing costs.

Key Words: ADRD, Medicare costs, CAHPS study, medication access, care quality, health care costs, self-reported quality

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Medicare spending totaled \$689 billion in 2021, accounting for 10% of the total federal spending, and is estimated to reach 18% in 2032.¹ Medicare costs have been a significant concern,^{2,3} with spending projected to grow substantially in the coming years^{1,4,5} as the percentage of people aged 65 and older in the United States is expected to increase from 18% currently to 23% by 2054.⁶

Managing Medicare costs while ensuring high-quality care is critical. Self-reported quality measures have become important for assessing patient experiences and outcomes.^{7,8} Patient-reported measures are critical as they capture the impacts of a health condition or its treatment beyond clinical charts, such as quality of life, subjective patient experiences, and satisfaction with health care services.^{7,8} Prior studies have also found that higher patient satisfaction is associated with lower 30-day readmission and mortality risks,^{7–10} while poor satisfaction is associated with 2 or more emergency department (ED) visits and poor mental health scores.¹⁰

High health care costs have been particularly concerning for individuals with Alzheimer disease and related dementias (ADRD), who often face complex health needs and require extensive medical care and support.^{11,12}

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J.C. and S.J. had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

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People with ADRD frequently suffer from a disproportionate burden of other high-cost conditions, such as diabetes and cardiovascular disease.^{11,13} The lifetime total cost of care for older adults with ADRD is estimated at \$400,000 per person,^{11,14} which is about 1.8 times greater than the estimated average of total lifetime Medicare spending for an ordinary Medicare beneficiary at age 65.¹⁵ Given the complexity of their health needs, self-perceived quality of care and easiness of receiving care can be critical for patients with ADRD.

Despite the importance of these factors, empirical evidence of their associations with health care costs is limited, and the direction of these associations remains inconsistent.^{16,17} Studies that focused on the satisfaction or quality of care are concentrated in the contexts of health outcomes and health care utilization, not costs of care.¹⁶ Particularly, there is a dearth of evidence for patients with ADRD.¹⁸ Many studies using claims data lack quality measures, while survey data often do not include sufficient participants with dementia to draw robust conclusions. This gap limits our understanding of how patient-perceived quality and cost interact, especially for vulnerable populations such as those with ADRD. Hence, this paper aims to explore the relationship between self-reported quality measures and Medicare costs, focusing on beneficiaries with ADRD. We hypothesize that self-reported quality measures, such as the rating of health care, easiness of getting needed care, and physician-patient relationships, relate to lower costs, and the cost reduction is more pronounced among patients with ADRD who have complex health needs and high demand for health care. The selected quality measures represent the interpersonal-level intermediary determinants that affect risk factors of ADRD, access, quality, and cost of care based on the framework of structural racism and discrimination in ADRD.¹⁹ They have also been used by previous studies to measure patients' perception of quality of care.^{17,20,21}

We are also interested in studying whether the ease of obtaining needed medications is associated with reduced overall Medicare costs. Easy access to medications can help reduce total health care costs by improving medication adherence, preventing complications, and reducing the need for more expensive treatments.^{22–24} Roebuck et al (2011) found that improved medication adherence leads to increased drug spending but generates substantial savings in total medical care costs due to reductions in hospitalizations and ED visits.²⁴ Hence, we hypothesize that the ease of getting the medication needed is associated with lower total Medicare costs. Similarly, we further hypothesize that the ease of getting medications is associated with more reduction for patients with ADRD, who account for a significant portion of Medicare's prescription drug spending.^{11,13}

By addressing the gaps in current research, this study can provide supporting evidence on the benefits of value-based payment programs that incentivize health care providers to improve care quality while managing costs effectively. Improving patient-perceived quality of care and access to medications is necessary for advancing patient-centered care and health equity.

METHOD

Data

The primary dataset used in the study was the Centers for Medicare and Medicaid Services Medicare Beneficiary Summary File (CMS MBSF). Using the beneficiary ID, we linked the CMS MBSF with the 2018, 2019, and 2021 Medicare Consumer Assessment of Health care Providers and Systems Survey CAHPS (MCAHPS).²⁵ Data collection for 2020 was suspended due to the pandemic. CAHPS measures have been used widely in the literature to measure this patient/consumer-centered care through the patient experience.^{20,26,27} The fee-for-service (FFS) CAHPS Survey is an annual survey conducted with a subset of Medicare beneficiaries enrolled in FFS. The survey focuses on beneficiaries' experiences with Medicare and their FFS providers, covering areas such as communication, coordination of care, experiences obtaining necessary health care, interactions with personal doctors and specialists, and customer service.²⁵

Our study focused on Medicare FFS beneficiaries aged 65 and above. In the sub-analysis, we also examined the association among ADRD; ADRD was defined using the CMS Chronic Conditions Data Warehouse (CCW) measure, indicating whether a beneficiary met the CCW criteria (ie, having at least one inpatient, skilled nursing facility, home health, Part B institutional, or Part B non-institutional claim with a related diagnostic code) for ADRD or senile dementia as of the end of the calendar year.²⁸ This study was approved by the University of Maryland's Institutional Review Board. The study followed the STrengthening the Reporting of OBservational studies in Epidemiology (STROBE) reporting guideline.

Measures

The outcome measure is the annual total Medicare payment per person. We used the same Medicare payment measure used in the 2021 Alzheimer Disease Facts and Figures Special Report on Race, Ethnicity and Alzheimer in America to ensure consistency with existing literature.²⁹ We generated a variable of total Medicare payments per person per year, calculated as the sum of Medicare expenditures on key services, including acute inpatient care, other inpatient hospital services, skilled nursing facilities, hospice care, home health services, hospital outpatient care, ambulatory surgery centers, anesthesia, Part B drugs, evaluation, and management, Part B physician services, other procedures, imaging, tests, other Part B carrier services, and Part D Medicare payments. The costs were inflation-adjusted using 2021 as the base year.³⁰

Our key independent variables include 2 categories of self-reported quality measures. The first group of quality measures focused on overall health care quality: (1) beneficiary's rating on health care (0–10 best); (2) a binary variable if the rating of health care is 10, the best, and 0 if the rate is 0–9; (3) a measure of ease of getting care/tests/treatment through health plan, which equals 1 if always, and 0 if usually, sometimes, or never; and (4) the CAHPS score. The CAHPS score equals 1 if beneficiaries

TABLE 1. Sample Characteristics of Medicare FFS Beneficiaries and Beneficiaries With ADRD (Unit: 100 Percent, Unless Otherwise Specified) Source²⁵

	Medicare FFS beneficiaries total n = 230, 617		Medicare FFS beneficiaries with ADRD n = 16,452	
	Mean	SD	Mean	SD
Outcome measures				
Annual total Medicare cost per person per year (\$)*	11,197.21	24,488.45	28,291.49	40,044.53
Key independent variables				
Rating of health care (0–10 best)*	8.60	1.67	8.33	1.89
Rating of health care was 10, the best	0.39	0.49	0.36	0.48
Always easy to get care/tests/treatment through the health plan	0.64	0.48	0.57	0.49
CAHPS: Doctor always explained, listened, respected, and spent enough time	0.64	0.48	0.56	0.50
Always easy to get medicines the doctor prescribed	0.80	0.40	0.76	0.43
Doctor always talked about all the prescription medicines the beneficiary was taking	0.63	0.48	0.54	0.50
Other covariates				
Female	0.53	0.50	0.56	0.50
Age 65–74	0.51	0.50	0.18	0.39
Age 75–84	0.35	0.48	0.39	0.49
Age 85 or older	0.14	0.35	0.42	0.49
White	0.84	0.36	0.84	0.36
Black	0.05	0.23	0.06	0.25
Hispanic	0.04	0.20	0.05	0.21
Native American	0.01	0.08	0.01	0.08
Asian	0.02	0.15	0.02	0.15
Unknown race	0.02	0.15	0.01	0.08
Other race	0.01	0.09	0.01	0.09
Heart disease	0.15	0.36	0.40	0.49
Diabetes	0.25	0.43	0.36	0.48
Depression	0.13	0.34	0.34	0.47
Hypertension	0.58	0.49	0.79	0.41
Hyperlipidemia	0.52	0.50	0.63	0.48
Asthma	0.05	0.21	0.06	0.23
Dementia	0.07	0.26	1.00	0.00
Medicaid dual status	0.06	0.24	0.13	0.33
Have insurance that pays part or all the cost of prescribed medicines	0.88	0.33	0.86	0.35
2018	0.36	0.48	0.37	0.48
2019	0.33	0.47	0.33	0.47
2021	0.30	0.46	0.30	0.46

*Continuous variable; all the other variables are categorical variables. The primary dataset of the study was the CMS MBSF. Using the beneficiary ID, we linked the CMS MBSF with the 2018, 2019, and 2021 MCAHPS. Our study focused on community-dwelling residents, Medicare FFS, aged 65 and above. We also examined the association among people with ADRD. We created a “total Medicare payments per person per year” variable as the summation of Medicare payments on major services, including “acute inpatient-, other inpatient hospital-, skilled nursing facility-, hospice-, home health-, hospital outpatient-, ambulatory surgery center-, anesthesia-, Part B drug-, evaluation and management-, Part B physician, other procedure-, imaging-, test-, other Part B carrier-, and Part D- Medicare payments.”

The majority of the FFS beneficiaries in our study were community-dwelling. Only 10% of our sample used any skilled nursing facilities, and among those, 98% had only 1 or 2 stays, with a maximum of 10 stays.

The sample size for the rate of care is 230,617, while the sample sizes for other variables vary slightly. Always easy to get care/tests/treatment through health plan: FFS = 227,550; ADRD = 16,196; CAHPS: Doctor always explained, listened, respected, and spent enough time: FFS = 185,183; ADRD = 13,513; Always easy to get medicines doctor prescribed: FFS = 207,670; ADRD = 14,979; Doctor always talked about all the prescription medicines the beneficiary was taking: FFS = 178,711; ADRD = 13,281.

ADRD indicates Alzheimer disease and related dementias; CAHPS, Consumer Assessment of Health Care Providers and Systems; CMS MBSF, Centers for Medicare and Medicaid Services Medicare Beneficiary Summary File; FFS, fee-for-service; MCAHPS, Medicare CAHPS.

reported that the personal doctors always explained things in a way that was easy to understand, listened carefully, showed respect for what beneficiaries had to say, and spent enough time with beneficiaries, and 0 otherwise.

The second group of quality measures focuses on medicine access and use³¹: (1) ease of getting medicines the doctor prescribed (1 = always, 0 = usually, sometimes, or never), and (2) whether the personal doctor talked about all the prescription medicines the beneficiary was taking (1 = always, 0 = usually, sometimes, or never).

Other independent variables include the beneficiary's race (White, Black, Hispanic, Native American, Asian, unknow race, or other race), age (65–74, 75–84, or 85 or

older), sex (male or female), dual eligibility status for Medicare and Medicaid (no or yes), insurance coverage that pays part or all the cost of prescription drugs (none or have), and the presence of major chronic conditions, including heart diseases, asthma, depression, diabetes, hyperlipidemia, and hypertension. Year dummies were controlled, and state-fixed effects were applied.

Analysis

We first presented sample characteristics of all Medicare FFS beneficiaries and the subgroup of people with ADRD. We also presented and compared Medicare payments by quality measures. Then, we applied a

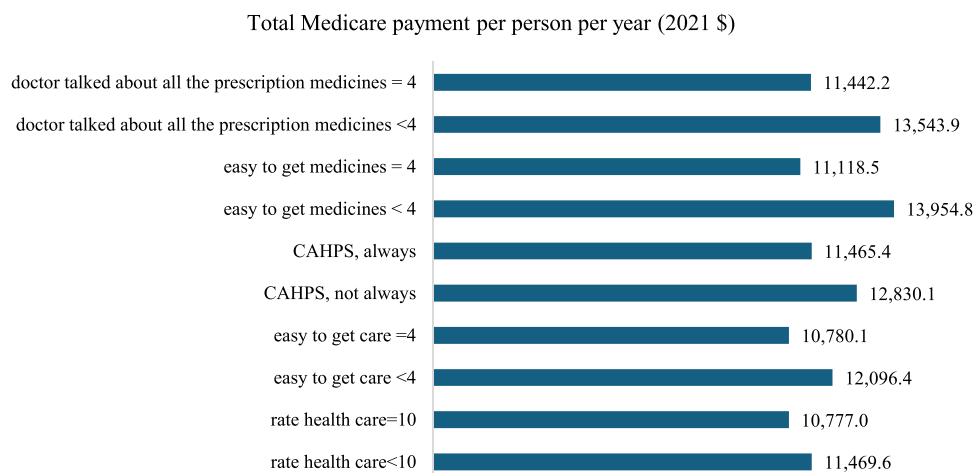


FIGURE 1. Variation of total Medicare payment per person per year by quality measures. Beneficiary's rate on health care (10 best vs. <10); easy to get care/tests/treatment through health plan ("4"=always vs. "<4", usually, sometimes, or never); CAHPS ("always" if the personal doctor always explained things in a way that was easy to understand, listened carefully, showed respect for what beneficiary had to say, and spent enough time with beneficiary; "not always" otherwise); easy to get medicines doctor prescribed ("4"=always vs. "<4", usually, sometimes, or never); personal doctor talked about all the prescription medicines beneficiary was taking ("4"=always vs. "<4", usually, sometimes, or never). *T* tests were performed between paired groups, and all differences were statistically significant at the 95% confidence level. Specific survey questions of the outcome measures: Rate health care: "Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 6 months?" Easy to get care: "In the last 6 months, how often was it easy to get the care, tests or treatment you needed?" CAHPS: "In the last 6 months, how often did your personal doctor explain things in a way that was easy to understand? In the last 6 months, how often did your personal doctor listen carefully to you? In the last 6 months, how often did your personal doctor show respect for what you had to say? In the last 6 months, how often did your personal doctor spend enough time with you?" Easy to get medicine: "In the last 6 months, how often was it easy to get the medicines your doctor prescribed?" Doctor talked about all the prescriptions on medicines: "In the last 6 months, how often did you and your personal doctor talk about all the prescription medicines you were taking?" CAHPS indicates Consumer Assessment of Health Care Providers and Systems.

state-fixed effect generalized linear model (GLM) with log link and gamma distribution to estimate the association of each quality measure with Medicare payment controlling for age, sex, and race (Model 1). GLM was selected considering the skewed distribution of Medicare costs.³² We also expanded the model (Model 2) by adding major health conditions, drug coverage, dual eligible status, and year dummies (all the covariates presented above). Survey individual weight (ie, the poststratification weight for comparing patient subgroups and for national point estimates) was applied to all regressions. Finally, we reported the marginal effect of each quality measure on the total cost for all Medicare FFS beneficiaries and people with ADRD. Analyses were conducted from January to June 2024.

RESULTS

Table 1 presents sample characteristics. Our sample included 230,617 Medicare FFS beneficiaries aged 65 and older, including 16,452 ADRD (sample sizes varied slightly by outcomes). Among all the beneficiaries, ~39% rated health care at 10, the best score. Most beneficiaries reported always easy to get care needed (64%), get medicines needed (80%), and doctors talked about the medicines they were taking (63%). And 64% reported doctors

always explain, listen, respect, and spend enough time with them (Table 1).

Figure 1 consistently shows that beneficiaries who reported higher quality measures encountered lower total Medicare costs. For example, beneficiaries who rated their health care a 10 had total costs of \$10,777.0, compared with \$11,469.6 for those who rated it below 10 (Fig. 1). *T* tests were performed between paired groups, and all differences were statistically significant at the 95% confidence level.

Beneficiaries with ADRD encountered higher total costs. Specifically, people with ADRD who rated their health care a 10 had total costs of \$26,873.5 compared with \$29,077.2 for those who rated it below 10. In addition, people with ADRD who reported always having easy access to prescriptions had total costs of \$27,725.2 compared with \$32,097.2 for those who did not always find it easy to get medicine. Discrepancies of cost between high-quality and low-quality measures among ADRD patients were larger compared with the discrepancies among the general population (Fig. 2).

Table 2 presents the results of the GLM, reporting the marginal effects of each regression. In Model 1, the base model, results show that the association between quality measures and total costs was significantly negative across all quality measures. A similar pattern was observed among patients with ADRD. Specifically, people

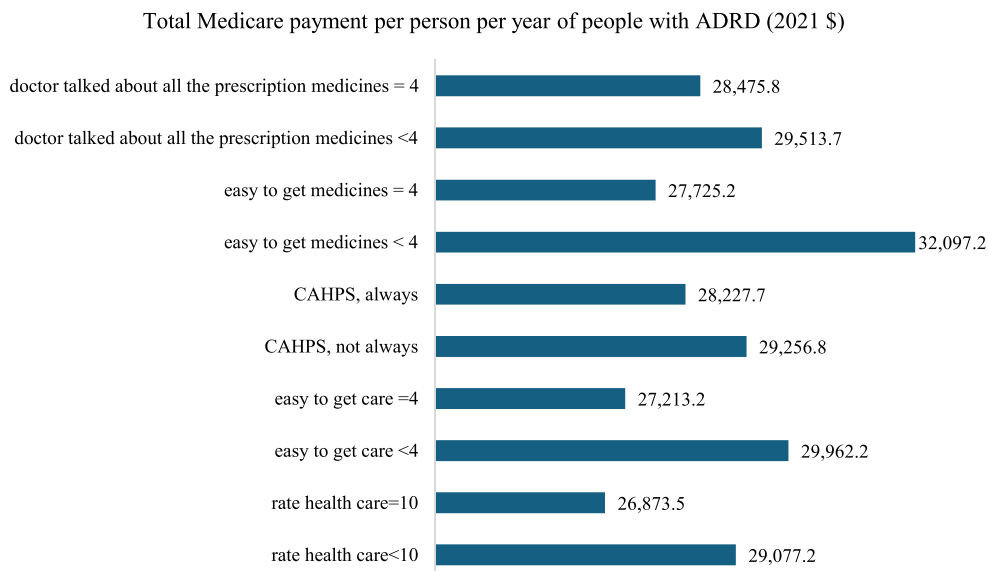


FIGURE 2. Variation of total Medicare payment per person per year among people with ADRD by quality measures. Beneficiary's rating of health care (10 best vs. <10); easy to get care/tests/treatment through health plan ("4"=always vs. "<4", usually, sometimes, or never); CAHPS ("always" if the personal doctor always explained things in a way that was easy to understand, listened carefully, showed respect for what beneficiary had to say, and spent enough time with beneficiary; "not always" otherwise); easy to get medicines doctor prescribed ("4" = always vs. "<4", usually, sometimes, or never); personal doctor talked about all the prescription medicines beneficiary was taking ("4" = always vs. "<4", usually, sometimes, or never). *T* tests were performed between paired groups, and all differences were statistically significant at the 95% confidence level.

with ADRD who rated their health care a 10 [ME, -\$2149.3 (95% CI, -\$3594.3 to -\$704.3)], reported always having easy access to care [ME, -\$2510.5 (95% CI, -\$3869.9 to -\$1151.0)], and reported it was easy to get medicine [ME, -\$4082.1 (95% CI, -\$5728.8 to -\$2435.4)] encountered lower costs (Table 2).

After controlling for health needs and other covariates, the results of the full model (Model 2) show that higher ratings of health care were associated with lower costs (ME, -\$357.3 [95% CI, -\$656.6 to -\$57.9]). People who reported easy access to prescriptions [ME, -\$1645.0 (95% CI, -\$2009.3 to -\$1280.7)], and those whose doctors talked about prescriptions [ME, -\$1209.8 (95% CI, -\$1554.1 to -\$865.4)] reported significantly lower costs.

A similar pattern was observed among people with ADRD. Higher quality measures were consistently and significantly associated with lower Medicare costs. Specifically, people with ADRD who rated their health care a 10 [ME, -\$2242.0 (95% CI, -\$3667.8 to -\$816.3)], those who reported always having easy access to care [ME, -\$1922.0 (95% CI, -\$3304.8 to -\$539.2)], reported it was easy to get prescriptions [ME, -\$2964.5 (95% CI, -\$4518.8 to -\$1410.1)], and whose doctors talked about prescriptions [ME, -\$2299.7 (95% CI, -\$3800.5 to \$799.0)] reported significantly lower costs (Table 2).

DISCUSSION

Our results showed that most Medicare FFS beneficiaries, including those with ADRD, reported easy access

to care and medicine, with over a third rated their health care as the best. In addition, descriptive statistics and regression results consistently demonstrated that higher self-reported quality was associated with significantly lower total Medicare costs. It is worth noting that the magnitude of key covariates was smaller in the full model (Model 2) compared with the simpler model. In line with our conceptual framework, patient demographics, health needs, and access factors all contribute to health care expenditures. However, self-reported quality of care remains independently associated with Medicare costs. Results also showed that the cost reductions associated with high quality were more pronounced among those with ADRD.

Particularly, beneficiaries who rated their health care a 10 (~40% of the total) encountered ~\$357 in reduced costs, and \$2242 for those with ADRD. Some may argue that self-reported high-quality care does not necessarily mean the appropriateness of care and may imply issues like overutilization.³³ Our study indicates that reporting the best health care is associated with lower costs, suggesting that high quality and low cost are not mutually exclusive.

CAHPS is considered an important and reliable measure of physician-patient relationships.³⁴ Its ratings are incorporated into national hospital rankings, Medicare star ratings, and Medicare reimbursement models.³⁴ Higher CAHPS scores, particularly higher ratings of patient-provider communication, have been associated with positive clinical outcomes, such as fewer ED visits and inpatient hospital stays, and lower risks of prolonged hospitalization.³⁴⁻³⁶ Patients with positive care experiences are also more likely to

TABLE 2. Marginal Effects of GLM Regressions

	Medicare FFS beneficiaries total				Medicare FFS beneficiaries with ADRD			
	ME (\$)	95% CI		P	ME (\$)	95% CI		P
Model 1: Basic model								
Rating of health care (0–10 best)	−261.0	−338.5	−183.5	<0.001	−769.3	−1111.0	−427.6	<0.001
Rating of health care was 10, the best	−694.9	−957.3	−432.5	<0.001	−2149.3	−3594.3	−704.3	0.004
Always easy to get care/tests/treatment through the health plan	−1,070.0	−1,327.0	−813.0	<0.001	−2510.5	−3869.9	−1151.0	<0.001
CAHPS: doctor always explained, listened, respected, and spent enough time	−971.9	−1,265.7	−678.2	<0.001	−938.7	−2457.8	580.5	0.226
Always easy to get the medicines the doctor prescribed	−2954.6	−3275.3	−2633.9	<0.001	−4082.1	−5728.8	−2435.4	<0.001
Doctor always talked about all the prescription medicines the beneficiary was taking	−1710.2	−2006.3	−1414.1	<0.001	−1370.1	−2899.8	159.6	0.079
Model 2: Full model								
Rating of health care (0–10 best)	142.7	53.5	231.9	<0.001	−644.8	−987.4	−302.1	<0.001
Rating of health care is 10, the best	−357.3	−656.6	−57.9	<0.001	−2242.0	−3667.8	−816.3	0.002
Always easy to get care/tests/treatment through the health plan	27.1	−272.5	326.6	0.859	−1922.0	−3304.8	−539.2	0.006
CAHPS: doctor always explained, listened, respected, and spent enough time	−80.3	−420.7	260.2	0.644	−901.0	−2453.7	651.7	0.255
Always easy to get the medicines the doctor prescribed	−1645.0	−2009.3	−1,280.7	<0.001	−2964.5	−4518.8	−1410.1	<0.001
Doctor always talked about all the prescription medicines the beneficiary was taking	−1,209.8	−1554.1	−865.4	<0.001	−2299.7	−3800.5	−799.0	0.003

Model 1, the basic model controlled for age, race, and sex. Model 2, the full model controlled for age, race, sex, chronic conditions, Medicare and Medicaid dual status, having drug plan, year dummies and state-fixed effect (variables listed in Table 1). Only the coefficients of the key independent variables of each regression were presented.

Sample sizes of each regression varied slightly. The sample size of the regression of rate of care was 230,617; easy to get care was 227,550, CAHPS was 185,183, easy to get Rx was 207,670; doctor talked about Rx was 178,711 and had delays in using Rx was 212,552. Similarly, sample sizes of regressions of the subgroup, people with ADRD, varied slightly. The sample size of the regression of rate of care was 16,452; easy to get care was 16,196, CAHPS was 13,513, easy to get Rx was 14,979.

ADRD indicates Alzheimer disease and related dementias; CAHPS, Consumer Assessment of Health Care Providers and Systems; 95% CI, 95% confidence interval; FFS, fee-for-service; GLM, generalized linear model; ME, marginal effects.

choose the same health care providers for future health care needs,³⁷ enabling continuity of care and care coordination that are critical components of ADRD management.^{11,12,20} Our results showed that beneficiaries reporting “always” in CAHPS scores (ie, doctors always explained, listened, showed respect, and spent enough time) encountered significantly lower costs, although this association became insignificant after controlling for health needs and other factors. The subcategories of the CAHPS score reflect strong patient-provider communication associated with improved patient adherence to treatment plans, health outcomes, and reduced hospital readmissions and ED use,^{17,21} potentially leading to lower total costs of care.

Our results also showed that the ease of access to prescription drugs was associated with a \$1645.0 reduction in costs and \$2964.5 in cost reduction for patients with ADRD. In addition, when doctors discussed medications with patients, costs were further reduced. Prescription drug costs are high, especially among the elderly. High costs of prescription drug costs may result in low medication adherence and discontinuation.^{38,39} Reduced and fixed incomes in retirement make older adults further vulnerable.⁴⁰ Ensuring drug compliance and ease of access can delay disease progression, while effective communication about drug side effects and polypharmacy interactions is crucial.^{22,38} Most patients with ADRD have multiple co-existing conditions and face additional medication regimen complexity and increased pill burden, leading to medication nonadherence and complications.^{39,41} They also experience more difficulties managing medications and subsequent hospitalization risks.⁴² In addition, they have substantially

higher medication costs, with the incremental total drug costs attributable to ADRD ranging from \$410 at the 25th quartile to \$3684 at 90th quartile.⁴³ Hence, patients with ADRD may benefit more from better access to prescription drugs and providers’ explanations of the medications that they are taking.

The Inflation Reduction Act (IRA), passed in 2022, aims to reduce high-cost drug prices. The IRA’s provisions, including drug pricing negotiations and caps on out-of-pocket (OOP) costs, have been phased for implementation since 2023.^{44,45} These initiatives will directly or indirectly influence drug costs and financial burdens for Medicare beneficiaries, particularly those with complex health needs like ADRD. Our findings suggest that the IRA has significant potential to reduce overall costs beyond drug price control, emphasizing the importance of drug access and communication about medications, including value-based pricing of prescription drugs. Policy efforts to improve the affordability and access to prescription drugs need to be integrated with value-based payment models to maximize their impacts and incentivize appropriate drug use.⁴⁶ The IRA also promotes a patient-centeredness approach by employing comparative effectiveness research that emphasizes patient experiences to assess the relative effectiveness of different drugs and support drug price negotiations.⁴⁷

Our study has several limitations. First, we used a cross-sectional design to estimate associations; thus, we cannot suggest a causal relationship between self-reported quality and health care costs. Second, we focused on Medicare FFS beneficiaries, which differ from Medicare Advantage (MA) and Prescription Drug Plan (PDP)

beneficiaries in terms of measures and datasets. Variations of quality were observed across PDPs. Beneficiaries with standalone plans experienced difficulty in getting medication and information on coverage and costs relative to their MA counterparts.⁴⁸ Future studies on self-reported quality by different drug plans are required. Third, we analyzed recent CAHPS measures to examine health care patterns among FFS beneficiaries in recent years. The 2020 survey was halted due to the pandemic. Future studies may explore long-term trends and patterns during the pandemic period. Finally, we could not adjust for the severity of ADRD and the proxy's participation in the survey due to data unavailability. Future studies may focus on low-income and racial/ethnic minority patients. Medicare beneficiaries who temporarily lost the Medicare Part D low-income subsidy encountered a 7-fold increase in OOP costs and 15% reductions in overall prescription fills, and racial/ethnic minority groups were more likely to experience the temporary subsidy losses.⁴⁹ Hence, further investigations of self-reported quality measures among socioeconomically disadvantaged Medicare beneficiaries may guide the areas needing improvements and reduce disparities.

CONCLUSION

Our study highlights the importance of improving the quality of care. Self-reported increases in quality of care are associated with lower, not higher, costs. There is potential to revisit the relationship between quality and cost to identify strategies for improving quality while reducing costs. Focusing on ease of access to needed care, obtaining prescription drugs, and effective communication about medications is critical. While our current dataset does not include measures of medication adherence, a follow-up study could explore the relationship between better CAHPS ratings for medication variables and medication adherence by linking patient-reported CAHPS data with adherence metrics available in claims datasets or electronic health records. This would allow us to test the hypothesis and provide a more comprehensive understanding of the association between patient experience and medication adherence. Future studies should emphasize ensuring the consistency of measurements and developing metrics that capture the diverse and heterogeneous health needs of the population.

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