

Racial/Ethnic Differences in Those Accompanying Medicare Patients to the Doctor: Insights from the 2013 Medicare Current Beneficiary's Survey

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Abstract Surprisingly little current, population-level detail exists regarding companion accompaniment for health care among Medicare beneficiaries, particularly by race/ethnicity. For respondents in the 2013 Medicare Current Beneficiary's Survey Access to Care public use data (N=12,253), multivariable models predicted accompaniment to the doctor by race/ethnicity, adjusting for confounders. Chi square analyses compared, by race/ethnicity, who was accompanying and why. Overall, 37.5% of beneficiaries had accompaniment. In multivariable analyses, non-Hispanic blacks (OR 1.18; 95% CI 1.03–1.36) and Hispanics (OR 1.47; 95% CI 1.25–1.74) were significantly more likely than non-Hispanic whites to have accompaniment. Over 35% of all three groups had someone to “take notes,” “ask questions,” and/or “explain things,” which did not vary by race/ethnicity; significant differences were seen for “explain instructions,” “translate,” and “moral support.” Hispanics had the highest percentages for all three. Many

Medicare beneficiaries have accompaniment to doctors' appointments, particularly in minority racial/ethnic groups, which should be considered in policy and practice.

Keywords Medicare · Race/ethnicity · Caregiving · Health communication

Introduction

Growing evidence supports the inclusion of caregivers, spouses, and other family members in the clinical encounter, particularly for chronic care management [1–4]. These individuals play an important role in health care consultations and decision-making, including working as a team and explaining health information [2, 5–7]. This perspective is underscored by a large literature that eschews the “individual-centered” definitions of health maintenance and chronic disease self-management and, instead, provides critical evidence that health is impacted by a wide social context that includes family, friends, and neighbors [8–13].

A focus on greater inclusion of social networks in health care delivery may be a fruitful mechanism for reducing health disparities. Literature suggests that many racial/ethnic minority groups, including Latinos and African Americans, have a communal rather than an individualist cultural orientation [14–18]. A relevant traditional Hispanic value in this domain for caregiving is called *familismo*, which places the family as being of greater importance than the self and is important to health care preferences and decision-making [19–21]. In African American caregiving, this manifests as a strong cultural norm of intergenerational family support as well as extended kinship networks [18]. Rates of nursing home use are historically lower in African Americans than whites and the percent of individuals

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performing caregiving roles among community-dwelling elders have been found to be higher in African Americans than whites [22, 23]. In both populations, these strong family and social network ties have critical implications for health care use and delivery.

Including this communal context in intervention design and clinical care is likely to improve health outcomes, intervention sustainability, doctor-patient communication, and patient satisfaction [5, 14, 15, 24]. As Latinos and African Americans also experience persistent health inequities in health care delivery and outcomes in the United States (US), greater inclusion of the culturally relevant social context in health care delivery may thus be a particularly useful avenue for reducing health disparities for these populations [14, 15].

Medicare has issued useful guidelines for caregivers and payment mechanisms designed to improve chronic care management that may include family members and other caregivers [25, 26]. Medicare has also recommended that, specifically towards the goal of reducing racial/ethnic health disparities, patients' families and social networks should be included to a greater degree in health care [27]. Cross-cultural, population-based quantitative research on this topic in the US is needed to understand patterns, identify variations, and to help understand policy implications [4]. However, population-based empirical evidence of the role of caregivers, especially those who accompany older adults to a clinical encounter, is understudied, particularly by race/ethnicity [2, 28–31].

There are two notable exceptions. The first is a nationally-representative study of Medicare beneficiaries conducted with 2004 data [5], which found that 38.6% of Medicare beneficiaries reported being accompanied to routine medical visits. These companions played a vital communication role, particularly in taking notes, describing symptoms to doctors, and asking questions [5]. However, this study did not consider racial/ethnic differences. A follow-up study using 2005 and 2006 Medicare data found that the percent of beneficiaries reporting having accompaniment across both years of data did not differ by race/ethnicity; however, non-white Medicare beneficiaries were significantly less likely to have the same person accompanying them over time [32]. Again, this study did not consider racial/ethnic differences in the percent having accompaniment (as they focused on continuity of accompaniment). Also, these data are now over a decade old and patterns may have changed.

The current study goal was to use a recent nationally-representative sample of Medicare beneficiaries to fill knowledge gaps about those accompanying Medicare beneficiaries to the doctor by race/ethnicity. Our main research question was whether some racial/ethnic groups had a higher likelihood of accompaniment, controlling for

other factors. Our hypothesis was that Hispanics and non-Hispanic blacks would be more likely than non-Hispanic whites to have someone accompany them to a doctor due to the greater likelihood of a communal rather than an individualist cultural orientation in Hispanic and non-Hispanic black populations and the implications for caregiving as discussed above. We also investigated variation by racial/ethnic group in who was accompanying Medicare beneficiaries to the doctor and why. These data provide key detail into companion involvement in medical care delivery, with important insights into potential mechanisms for reducing health disparities and in building better doctor-patient communication.

Methods

Medicare Current Beneficiary Survey

We used the 2013 Medicare Beneficiary's Survey (MCBS) Access to Care public use data file, which includes a nationally representative cross-sectional sample of beneficiaries enrolled in one or both parts of the Medicare program during 2013. Beneficiaries in Accountable Care Organizations (ACOs), those over 85 years and over, and the disabled (<65 years) were oversampled to allow for detailed analyses of these subgroups. The MCBS, a continuous, in-person survey of the Medicare population, is the leading source of information on Medicare and its impact on beneficiaries [33]. The MCBS data includes sampling weights to account for the complex sample design (including stratification, clusters, and oversampling) and to adjust for survey nonresponse. All percentages use weighted data.

Sample

For the overall sample, we first considered all adults ($n=13,924$). We dropped individuals of "Other" race/ethnicity ($n=812$), due to lack of specificity on our key independent variable. Also excluded were respondents who did not report having a place in which they received medical care as they were missing responses on our main outcome variable (if someone accompanied them to the doctor) and other related questions due to skip patterns ($n=811$). We also dropped respondents who stated "refused" or "don't know" for all our outcome and control variables. After these exclusions, our final sample was 12,253 Medicare beneficiaries.

Race/Ethnicity

The race variable was non-Hispanic black, non-Hispanic white, or Hispanic.

Outcomes

Our primary outcome was if a respondent had someone accompany them to their doctor’s office. This was obtained from the question: “Does someone accompany you to the doctor’s office?” Answers were *yes* or *no*. Those reporting *don’t know* or *refused* (6 individuals; <0.01% of the full sample) were excluded from the analysis sample as described above.

Among those reporting someone accompanying them to the doctor’s office, we considered descriptively who they brought and why they brought someone. We determined who they brought from the question “Who goes with you to the doctor’s office?” Choices available in the data, asked only of those who had accompaniment, were *spouse*, *children*, and *other* and were mutually exclusive. However, respondents could report more than one reason why they brought someone with them to the doctor. Options were: *to take notes*, *to explain things to doctor*, *to explain instructions*, *to ask questions*, *to translate*, *to schedule appointments*, *for moral support*, *for transportation*, *to assist with ADLs*, and/or *for other reasons*.

Control Variables

Multivariable models predicting whether or not people brought other to the appointment adjusted for gender (*male* or *female*), age group (<65, 65–74, 75+ years), marital status (*married* vs. *not married*, including *widowed*, *divorced/separated*, *never married*), dual eligible Medicare/Medicaid (*dichotomized as dual eligible full part of the year*, vs. *not dual*), education (<*high school*, *high school graduate*, or *college or more*), and self-reported health status (*poor*, *fair*, *good*, *very good*, or *excellent*). We considered two focal chronic diseases (*having diabetes*, *having heart disease*, or *having both* compared to *having neither*) based on self-reported diabetes and heart disease, defined by self-reporting a history of coronary artery disease, heart attack, heart failure, and/or other heart disease.

Statistical Analyses

First, we descriptively compared the study sample and having accompaniment to doctors’ appointments by race/ethnicity overall. We then ran a multivariable logistic model predicting accompaniment to doctors’ appointments by race/ethnicity adjusting for gender, age group, marital status, dual Medicare/Medicaid eligibility, education, self-reported health status, and our focal chronic diseases. Non-Hispanic whites were the racial/ethnic comparison group to provide comparability to other studies. Finally, among those who did bring someone to the doctor, using chi-squared analyses, we examined who Medicare beneficiaries

brought to the doctor and why they brought them, by beneficiary race/ethnicity.

All analyses were conducted using STATA 14.1 (College Station, TX, 2016) adjusting for weights provided in the public use data file. Because this was a public use data file from the federal government, it did not meet the criteria of human subjects research and was exempt from IRB approval. We followed STROBE guidelines for observational studies [34].

Results

Descriptive results for the sample are found in Table 1. Overall, the sample varied significantly by race/ethnicity across all control variables except for percent female. Of note, compared to non-Hispanic whites, non-Hispanic blacks and Hispanics were less likely to have excellent or very good health. Overall, 54.6% of the sample had neither diabetes nor heart disease, 18.5% had only heart disease, 16.7% had diabetes, and 10.6% had both. These percentages varied significantly by race/ethnicity with more

Table 1 Descriptive results from the 2013 Medicare Current Beneficiary Survey (unweighted N = 12,253). All percentages are weighted

	Non-Hispanic white	Non-Hispanic black (%)	Hispanic (%)	P value
Female	54.3	56.3	54.5	0.46
Age group				<0.001
<65	12.9	31.0	25.6	
65–74	47.5	39.9	42.7	
75+	39.6	29.1	31.7	
Married	57.3	34.4	50.6	<0.001
Education				<0.001
<High school	13.4	30.0	45.6	
High school	37.3	36.0	26.5	
College+	49.3	34.0	27.9	
Dual Medicare/Medicaid	11.1	35.3	33.4	<0.001
Self reported health				<0.001
Excellent	18.4	10.2	11.3	
Very good	32.1	20.1	16.2	
Good	27.6	32.4	30.0	
Fair	15.0	29.2	30.0	
Poor	6.94	8.21	12.6	
Chronic disease				<0.001
Neither	54.6	47.6	48.1	
Heart disease	18.5	12.2	13.2	
Diabetes	16.7	27.8	26.3	
Both	10.2	12.5	12.5	

non-Hispanic blacks and Hispanics having heart disease, diabetes, or both compared to non-Hispanic whites.

Overall, 37.5% of Medicare beneficiaries had accompaniment to their doctors' appointment. Figure 1 shows the percent of beneficiaries having accompaniment at the doctor's office by race/ethnicity. Significant variation was seen by race/ethnicity with both non-Hispanic blacks (44%) and Hispanics (54%) more likely than non-Hispanic whites (35%) to have accompaniment.

Table 2 shows the multivariable model examining role of others by race/ethnicity. In multivariable analyses, both non-Hispanic blacks (OR 1.18; 95% CI 1.03–1.36) and Hispanics (OR 1.47; 95% CI 1.25–1.74) were significantly more likely than non-Hispanic whites to have someone else come to the doctor with them. Other groups significantly more likely to have accompaniment in the overall model were women (OR 1.22; 95% CI 1.11–1.34), those in the oldest age group (75+ years compared to those < 65 years) (OR 1.71; 95% CI 1.46–2.01), those who were married (OR 2.43; 95% CI 2.22–2.66), those who were dual eligible for Medicare/Medicaid (OR 1.83; 95% CI 1.56–2.14), and those with the lowest educational attainment. Persons in poorer health were also more likely to be accompanied to the doctor with those in each level being significantly more likely, in a stepwise fashion, to have someone accompany them. Those with heart disease were significantly more likely to have someone accompany them compared to those with neither chronic disease (OR 1.18; 95% CI 1.04–1.35) as were those with both diabetes and heart disease (OR 1.52; 95% CI 1.30–1.78), but those with diabetes did not vary significantly. Those between 65 and 74 years were significantly less likely to have someone accompany them (OR 0.59; 95% CI 0.50–0.70) compared to those < 65 years.

Table 3 shows the role and relationship to the beneficiary of others by race/ethnicity. Overall, the type of person accompanying Medicare beneficiaries did not vary significantly by race/ethnicity overall, but still showed

Table 2 Multivariable model predicting use of someone else from the 2013 medicare current beneficiary survey overall (N= 12,253)

	OR (95% CI)
Race/ethnicity	
Non-Hispanic black	1.18 (1.03–1.36)
Hispanic	1.47 (1.25–1.74)
Non-Hispanic white	–
Female (vs. male)	
	1.22 (1.11–1.34)
Age group	
<65	–
65–74	0.59 (0.50–0.70)
75–84	1.71 (1.46–2.01)
Married (vs. not married)	
	2.43 (2.22–2.66)
Education	
<High school	–
High school	0.53 (0.47–0.61)
College+	0.38 (0.34–0.43)
Dual Medicaid/Medicare eligibility	
	1.83 (1.56–2.14)
Self-reported health	
Excellent	–
Very good	1.29 (1.13–1.47)
Good	1.80 (1.53–2.11)
Fair	2.87 (2.45–3.38)
Poor	4.33 (3.57–5.26)
Focal chronic diseases	
Neither	–
Heart disease	1.18 (1.04–1.35)
Diabetes	1.07 (0.94–1.21)
Both	1.52 (1.30–1.78)

Data was weighted

interesting trends with non-Hispanic whites (57%) having the largest percent of spouses accompanying, compared to 30% of non-Hispanic blacks and 40% of Hispanics. Non-Hispanic blacks (32%) and Hispanics (34%) had

Fig. 1 Percent reporting having someone accompany them to the doctor's office by race ethnicity (unweighted N= 12,253). Variation was significant at p<.001

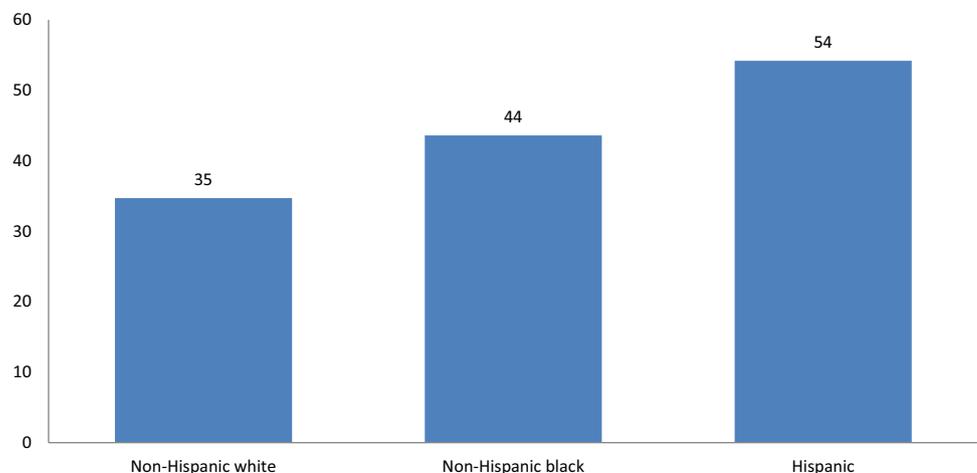


Table 3 Among Medicare beneficiaries who have someone accompany them to the doctor, who is accompanying them and why, by race/ethnicity, from the 2013 Medicare Current Beneficiary Survey (N=5147)

	Non-hispanic white (%)	Non-hispanic black (%)	Hispanic (%)	P value (%)
Who accompanies^a				
Spouse	56.6	29.9	39.9	
Children	21.9	32.4	33.9	
Other	21.6	37.7	26.2	
Why they accompany^b				
Take notes	55.3	59.3	59.1	0.11
Explain things to doctor	42.8	40.1	45.1	0.29
Explain instructions	32.2	34.0	41.9	0.001
Ask questions	42.4	37.8	45.0	0.06
Translate	1.01	1.10	9.03	<0.001
Schedule appointments	25.9	25.9	29.1	0.34
Moral support	37.4	38.7	45.7	0.006
Transportation	43.2	29.7	36.2	<0.001
Assist with ADLs	12.9	20.4	17.5	<0.001
Other reasons	<1	<1	<1	0.74

All percentages are weighted

^aRespondents had only one choice in the data

^bNot mutually exclusive; respondents could pick more than 1 reason

larger percentages of children (22%) accompanying than non-Hispanic whites.

Overall, over 35% of all groups had someone accompanying to “take notes,” “ask questions,” and/or “explain things,” with no significant differences across race/ethnicity for these three informational reasons. Significant differences were seen by race/ethnicity in having accompaniment to “explain instructions,” “translate,” and “moral support,” with Hispanics having the highest percentages for all three. Significant differences were also seen by race/ethnicity in having accompaniment for transportation, highest in non-Hispanic whites, and in having support for Activities of Daily Living (ADLs), highest in non-Hispanic blacks.

Discussion

This study provides important, current detail about who was attending doctor’s appointments with Medicare beneficiaries and why. Key findings include the fact that a high percentage (38%) had someone accompanying them. In addition, minority racial/ethnic groups were more likely than non-Hispanic whites to have someone accompany them to the doctors’ appointment. Our findings provide detail to support the inclusion of these health care companions, many who are likely to also be primary caregivers in health care delivery [35]. This may be especially useful among those in poor health and/or with chronic illness, particularly heart disease. Across racial/ethnic groups, these companions played vital informational roles in health care

delivery, including asking questions and explaining symptoms. While percentages were high (>30%) in all racial/ethnic groups, Hispanics, in particular, had higher percentages of companions explaining instructions (42%) and translating (9%).

The fact that a substantial proportion of Medicare beneficiaries have accompaniment to doctors’ appointments who are clearly involved in their experience and interpretation of disease symptoms, care management, and doctor-patient communication is critical information for designing high-quality, patient-centered care. Significantly higher percentages of racial/ethnic minorities report such companions, providing important insights for including these companions in efforts to reduce disparities in both health care quality and outcomes, particularly in chronic care management. Minority groups in this sample were significantly more likely to report having poor health or one of our focal chronic diseases, factors that were independently associated with bringing a companion. These are urgent issues as non-Hispanic blacks and Hispanics are known to receive less information from their doctors than whites about treatment decision-making and report poorer doctor-patient communication [36, 37]. Shared decision in health-care settings may fruitfully extend beyond the dyadic encounter between a patient and a health professional, especially for racial/ethnic minorities [14, 15, 24].

It is important to consider who these companions are. Previous research has found that who accompanies individuals is significantly related to persistent involvement of the same person at one-year follow-up; spouses are

more likely to be consistent than adult children and other relatives or non-family companions [32]. The greater non-spousal accompaniment for non-white beneficiaries may have potential loss of companion continuity over time. Less consistency of accompaniment may reduce quality of care in the context of care effectiveness, efficiency, timeliness and safety [38].

This study supports previous findings using the 2003 version of this dataset [5], and extends these analyses to specific racial/ethnic groups. Congruent with previous research, we find that individuals in groups more likely to experience disparities in health outcomes and access (including not just the racial/ethnic minority groups that were the focus of this study, but also those with lower education, the dual eligible, etc.) were more likely to have someone accompany them [4–6]. Consideration of family, health care companions, and other caregivers in the clinical encounter may, thus, also help address other health disparities beyond race/ethnicity [4–6].

Disease severity clearly plays a role in accompaniment; particularly high percentages of African Americans with accompaniment were to assist with ADLs. Also, in multi-variable models, those with dual diagnoses of our two focal chronic diseases were significantly more likely to have accompaniment as were those with just heart disease. This was in addition to the almost stepwise effect seen by self-reported health status.

Chronic diseases necessitate intensive outpatient management and lifestyle changes that may involve others in maintenance. It has been estimated that those with chronic disease only spend around 1% of time in actual contact with health professionals [3]. In contrast, the companions attending doctor visits with Medicare beneficiaries may also be present during many other times outside of the doctor visit and thus important partners in chronic disease management. Family and other social network members generally often offer support towards good health and the positive contribution of active companions is very substantial [39, 40]. Yet social network members, in some cases, may also discourage good health [8, 41]. In chronic care management this can manifest as obstructive behaviors, such as criticizing illness management or nagging [41]. Patients with lower levels of health literacy may particularly need help from their social network to access or optimize health care, but may also be particularly vulnerable to the negative effects of social networks and/or to the obstructive behaviors by family members or others [41]. Deliberately including companions present in primary care and other doctor visits into health care conversations may help emphasize the importance and relevance of treatment plans and help reduce obstructive behaviors.

Medicare has made important strides towards including caregivers in health care [16–18]. Our findings support

this work, as it is likely that many of the companions at the doctors' office are important caretakers in other health domains. Findings emphasize the need for more payment mechanisms and innovative programs supporting this goal. At the same time, current population dynamics point to policy-relevant challenges related to these issues. Social networks tend to get smaller as individuals enter old age [1, 42]. Informal caregivers and/or unpaid health care companions may become harder to find as our population ages, particularly as families also become more diffused across distant locations. These are important questions as reduced social networks can have negative health effects [1, 42].

Our study has many strengths, including a national, population-based sample of high quality and established policy relevance. However, we also have limitations. While our nationally-representative sample is a key study strength, cultural norms in accompaniment to the doctor's office may vary across regions and neighborhoods in important ways that we are unable to evaluate. We only consider three racial/ethnic groups. Future work should consider Asian and Pacific Islander subgroups and others with a communal orientation [43, 44]. We could not assess health literacy or other factors for which family participation may be helpful, nor could we assess the quality of those relationships and interactions. In our data, respondents had only one response to who accompanied them. They could not report that both their children and their spouse accompanied them to appointments, though many may have several individuals who accompany them for the same or different appointments. This may be a useful area for future research and may also show interesting variation by race/ethnicity. We also only consider two types of focal chronic illness while there may be many more with relevance. We are studying companions accompanying patients to the doctor's office; these may not necessarily be patients' health caretakers and/or a primary caretaker with whom health care decisions would likely be made. Understanding such nuances in caretaking relationships may be important topics for future research.

New Contributions

Our study confirms that a substantial proportion of Medicare beneficiaries have accompaniment to doctors' appointments, particularly individuals in minority racial/ethnic groups. These individuals accompanying Medicare recipients are playing vital informational roles, including asking questions and explaining symptoms. Our nationally-representative findings provide specific detail to support the inclusion of these companions in health care delivery, which may help reduce health disparities given the greater

role of these companions among minority racial/ethnic groups.

Compliance with Ethical Standards

Conflict of interest Tetine Sentell, Chengli Shen, Doug Landsittel, Mary Helen Mays, Janet Southerland, Deborah A. Taira declares that they have no conflict of interest. Marshaleen Henriques King received partial support from the “ENTELLIGENCE Young Investigator Award” funded by Actelion.

Funding This research was supported by the Expanding National Capacity in Patient Centered Outcomes Research Through Training (ENACT) Program (grant number R25HS023185 from the Agency for Healthcare Research and Quality (AHRQ)) and also from the following National Institutes of Health (NIH) grants: U54MD008149 from the National Institute on Minority Health and Health Disparities (NIMHD); 1U54GM104944 from the National Institute of General Medical Sciences; and P20 MD000173 from NIMHD. The content is solely the responsibility of the authors and does not necessarily represent the official views of NIH or AHRQ.

Ethical approval Because this was a public use data file from the federal government, it did not meet the criteria of human subjects research and was exempt from IRB approval. Thus, this article does not contain any studies with human participants or animals performed by any of the authors.

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