

Is Geriatric Care Associated with Less Emergency Department Use?

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OBJECTIVES: To determine whether community-dwelling individuals and nursing home (NH) residents treated by a geriatrician were less likely to use the emergency department (ED) than individuals treated by other physicians.

DESIGN: Retrospective cohort study using data from a national sample of older adults with a history of cardiovascular disease.

SETTING: Ambulatory care or NH.

PARTICIPANTS: Fee-for-service Medicare beneficiaries aged 66 and older diagnosed with one or more geriatric conditions from 2004 to 2007 and followed for up to 3 years.

MEASUREMENTS: Emergency department use was measured in Medicare inpatient and outpatient claims; geriatric care was measured as geriatrician visits in ambulatory or NH settings coded in physician claims.

RESULTS: Multivariable analyses controlled for observed and unobserved subject characteristics that were constant during the study period. For community-dwelling participants, one or more nonhospital geriatrician visits in a 6-month period were associated with 11.3% lower ED use the following month (95% confidence interval (CI) = 7.5–15.0, N = 287,259). Participants who received primary care from geriatricians were less likely to have ED use than those who had traditional primary care. Results for participants who received consultative care from geriatricians were similar to those for participants who received primary care from geriatricians. Results for NH residents (N = 66,551) were similar to those for community-dwelling participants.

CONCLUSION: Geriatric care was associated with an estimated 108 fewer ED visits per 1,000 community-dwelling residents and 133 fewer ED visits per 1,000 NH residents per year. Geriatric consultative care in collaboration with primary care providers may be as effective in reducing ED use as geriatric primary care. Increased provision of collaborative care could allow the existing supply of geriatricians to reach a larger number of individuals. *J Am Geriatr Soc* 61:4–11, 2013.

Key words: geriatric care; primary care; nursing home; emergency department

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Health care for older adults with chronic conditions is costly and often of suboptimal quality.^{1,2} The quality of health care for geriatric conditions such as dementia and urinary incontinence may be considerably poorer than for chronic conditions such as hypertension.³ Suboptimal outpatient care may result in excessive emergency and hospital healthcare use. For example, emergency department (ED) use in adults aged 65 to 74 increased 34% from 1993 to 2003.⁴ This trend is problematic because ED use is costly, is stressful for frail older adults, and often leads to inappropriate medication use and hospitalization.^{4–6} Thus, reducing ED use is desirable from the perspectives of individuals, providers, payers, and society.

Geriatricians' training and experience may enable them to better address the complex physical, cognitive, mental, and social problems that older adults face. Geriatricians have expertise in managing geriatric syndromes, optimizing use of medications, and supporting the individuals and caregivers who make critical healthcare decisions.⁷ This expertise may allow them to manage acute and chronic illnesses in ways that reduce acute care episodes, including ED use.

The current evidence base for geriatric care is derived from clinical trials of interdisciplinary care delivered in controlled circumstances. Results from these trials suggest that comprehensive geriatric assessment delivered as part

of multivisit outpatient or in-home care reduces ED use, but the same is not true for consultative care.^{8–10} These trials are of limited use in understanding the effect of care from geriatricians in real-world settings because they have excluded nursing home (NH) residents and are conducted using structured protocols in optimal academic settings. Results of five observational studies suggest that geriatric care may be associated with fewer primary care physician visits, lower likelihood of inappropriate prescribing or hospitalization, shorter hospital length of stay, and lower healthcare costs,^{11–15} but drawing conclusions from these studies is difficult because they used varied definitions of geriatric care, had small sample sizes with limited generalizability, and failed to control for unobservable factors that may have affected the relationship between geriatric care and outcomes.

The current study assesses the real-world association between care from geriatricians in nonhospital settings and ED use using longitudinal Medicare claims data from a large national sample of Medicare beneficiaries with a history of acute coronary syndromes (ACS) and at least one geriatric condition. The primary study hypothesis was that receipt of geriatric care would be associated with less ED use; this hypothesis was tested separately for community-dwelling individuals and long-term NH residents.

METHODS

Data and Sample

Subjects were drawn from a national sample of Medicare enrollees with a history of ACS and a subsequent diagnosis of at least one of 16 geriatric conditions that have been used for inclusion in trials of comprehensive geriatric assessment or recognized as a characteristic of individuals who are most likely to benefit from geriatric care (Figure 1).¹⁶ The sample came from a nationally representative group of 965,087 fee-for-service Medicare beneficiaries included in a study of cardiovascular disease.¹⁷ That group of nearly 1 million individuals included all Medicare beneficiaries who met the following criteria: acute care hospital stay with a diagnosis of ACS (*International Classification of Diseases, Ninth Revision, Clinical Modification* codes 410.xx, 411.1x, and 413.9x) from January 2003 through mid-October 2004, aged 66 and older and living in the United States (excluding territories) at hospital admission, and continuous enrollment in Medicare Parts A and B and no enrollment in Medicare Advantage until death or December 31, 2007.

From the original study sample, participants diagnosed with a geriatric condition at least 1 year after the hospitalization for ACS who were not diagnosed with the same condition in the prior 2 years were identified. These criteria created a buffer between measurement of geriatric care and use of cardiac care related to ACS and maximized the likelihood that the geriatric condition diagnosis represented the onset of the condition. Individuals with cardiovascular disease may have poorer functional status and overall health status than the general population of older adults.¹⁸ Therefore, by including individuals with ACS subsequently diagnosed with a geriatric condition, the study sample represents older adults with a higher likelihood of benefiting from geriatric care than the general

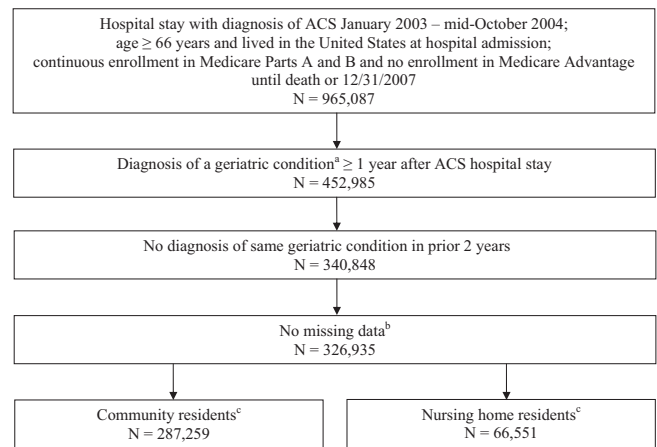


Figure 1. Sample selection. ^aStroke (*International Classification of Diseases, Ninth Revision, Clinical Modification* codes 430.xx–432.xx, 434.xx–437.1x, 437.3x–438.xx), dementia (290.0–290.43, 294.0–294.8, 331.0–331.2, 331.7, 797), depression (300.4, 301.12, 309.0, 309.1, 311), delirium (293.0x, 293.1x), pressure ulcer (707.0x, 707.2x–707.9x), fracture (800.xx–829.xx), dislocation (830.xx–839.xx), laceration (870.xx–879.xx, 880.xx–884.xx, 890.xx–894.xx), osteoporosis (733.0), syncope (780.2), hearing impairment (389.xx), vision impairment (369.xx), urinary incontinence (596.51–596.52, 596.54–596.59, 599.8x, 625.6x, 788.3, 788.30–788.34, 788.37–788.39), weight loss or failure to thrive (260–263.9, 783.21–783.22, 783.7x), or dehydration (276.5). ^bMost participants with missing data had missing income data; their ZIP code did not match a ZIP code tabulation area in the 2000 Census. ^c26,875 participants were in both samples. ACS = acute coronary syndromes.

Medicare population. In addition, the large sample provided sufficient power to conduct an analysis of geriatric care, which is rare.

Data from Medicare Provider Analysis and Review, Outpatient, Carrier, and Denominator files were available for 2002 through 2007. By combining these files for each participant, the data set included data from inpatient care, outpatient care, physician visits in all settings, and demographic characteristics. Observations were constructed for 30-day periods (subsequently referred to as “months”) for each participant, beginning with the date of diagnosis of the geriatric condition (Figure 2). Participants were in the community sample until death, end of study, or first month identified as a long-term NH resident. Participants were in the NH sample from the first month identified as being a long-term NH resident until death or end of study. Participants were classified as NH residents if they had three consecutive months or longer with one or more NH Carrier claims and no skilled nursing facility (SNF) claims for at least one of those months. Upon entering a long-stay hospital, a participant was permanently excluded from both samples because their patterns of healthcare use were substantially different from those of other participants.

Measures of Geriatric Care

Physician visits were identified according to codes for evaluation and management services provided during office, home, and NH visits or for consultations provided in one

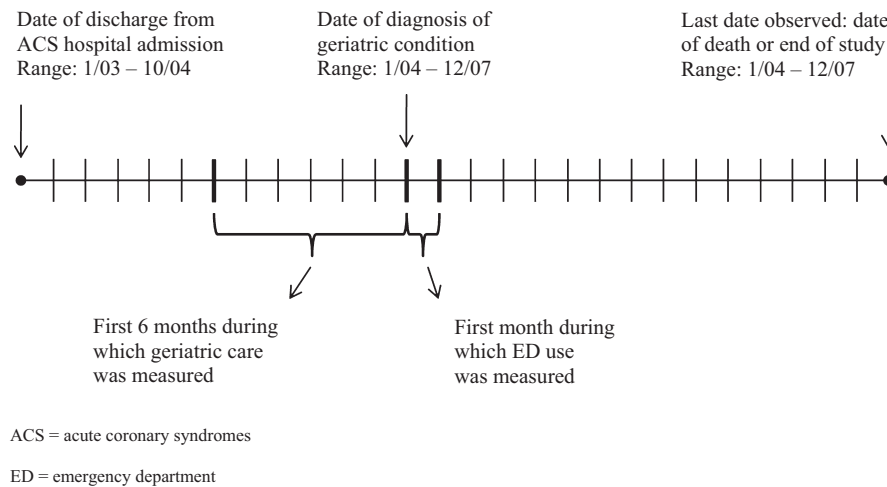


Figure 2. Study timeline.

of those settings.^{19,20} (Visits with Berenson–Eggers Type of Service codes M1A, M1B, M4A, M4B, and M6 were included unless one of the following Healthcare Common Procedure Coding System codes was present: 99221–99239, 99251–99255, 99261–99263, 99271–99275, 99411–99412, 95115–95117, or G0175.) Each physician was identified using a unique provider identification number that started with a letter between A and M.^{20,21} Physicians (or their institutions on physicians' behalf) initially self-designate specialty when applying to become Medicare providers. Specialty appears on each claim in the physician visit claims file; 38 refers to geriatric medicine.

Geriatricians, who usually initially specialize in family medicine or internal medicine, may have multiple specialties on claims in a single year (e.g., internal medicine on hospital claims and geriatric medicine on office claims). Because physicians for whom geriatric medicine is listed in any claim were likely to apply their knowledge and experience in the care of all older adults, each physician with two or more visits coded as geriatric medicine in 1 year was considered to be a geriatrician for all office, home, and NH visits and consultations in that year. Most (79.3%) physicians with two or more visits coded as geriatric medicine in 1 year had all physician visits for the original sample of nearly 1 million Medicare beneficiaries coded as geriatric medicine in that year, suggesting that the majority were practicing geriatricians.

Physician visits were measured according to specialty group. Three specialty groups were used: geriatricians, family and internal medicine (FM/IM) physicians, and other specialists. Visits to general practitioners, preventive medicine physicians, nurse practitioners, and physician assistants were included with FM/IM physicians. Other specialists included physician specialties other than geriatrics or primary care.

Three measures of geriatric care over 6-month periods were used. Two measures indicated the dose of geriatric care (0 vs ≥ 1 visits) and number of visits (0 vs 1, 2, or ≥ 3 visits). The third measure indicated geriatric care as a share of all physician visits, because plurality of visits has been used as a measure of primary care in studies of pay for performance.^{20,22} The reference category was participants with no geriatrician visits for whom FM/IM visits

represented the largest share of physician visits (FM/IM plurality). Three groups were compared with FM/IM plurality: participants for whom geriatrician visits represented the largest share of physician visits (geriatrician plurality), participants who had one or more geriatrician visits but for whom geriatrician visits did not represent the largest share of physician visits (geriatrician consultation), and participants who had no geriatrician visits and for whom specialist visits represented the largest share of physician visits (specialist plurality). These definitions of physician plurality and consultation do not provide information about the type of care provided; instead, they indicate whether the specialty group was the predominant provider for the participant.

Outcome and Control Variables

The dichotomous outcome (whether the participant had any ED use in a month) was obtained from inpatient and outpatient claims.²³ Control variables of age, sex, and race came from the Denominator (demographic) file. Comorbidities were measured in inpatient, outpatient, and physician visit claims data using the Elixhauser index and geriatric conditions used for sample selection.^{16,24,25}

Metropolitan status was obtained by linking participant ZIP code to Rural–Urban Commuting Area Codes.²⁶ ZIP code level data on median household income were included.²⁷ Dual eligibility was measured according to whether the state Medicaid program paid some or all of the participant's Medicare costs.²⁸ Dichotomous month variables controlled for seasonal variation in ED use, and year variables captured annual trends in ED use that occurred during the study period.

Statistical Analyses

To account for control variables that may influence the relationship between geriatric care and ED use, an ordinary least squares linear regression model was used to estimate the association between ED use in a month and geriatric care received during the previous 6 months. This approach ensured that geriatric care was measured before the period during which ED use was measured.

Preliminary analyses showed that unobserved participant characteristics were related to ED use and use of geriatric care, which suggested that selection bias affected preliminary estimates of the association between ED use and use of geriatric care. In other words, participants who used geriatric care may have been different from those who did not in unobservable ways that affected ED use. A statistical method that accounts for this selection was initially used (instrumental variables analysis), but because those results were implausibly large, final analyses minimized the effects of selection bias by controlling for individual-level unobserved characteristics that did not vary during the study period (fixed effects analysis). In addition, study results were interpreted conservatively as evidence of associations rather than causal relationships.

Three sets of sensitivity analyses were conducted: effect of county-level geriatrician supply on the relationship between geriatric care and ED use, use of 3- and 9-month measures of geriatric care rather than the 6-month measure, and use of a less-restrictive measure of long-term NH use (≥ 2 consecutive months with ≥ 1 NH claims and no restriction on SNF claims). In all three cases, results were similar to those from the primary analyses and therefore are not discussed further.

A more-detailed description of methods and full regression results are available from the authors upon request. All analyses were performed using Stata 11.1 (StataCorp LP, College Station, TX). The Public Health-Nursing Institutional Review Board at the University of North Carolina at Chapel Hill approved this study.

RESULTS

Descriptive Statistics

Sample sizes were 287,259 community-dwelling participants (5,277,762 patient-month observations) and 66,551 NH residents (1,005,122 observations); 26,875 individuals had observations in both groups. After diagnosis of a geriatric condition, participants were observed for a median of 17 months in the community and 14 months in the NH. The majorities of both groups were female, white, and aged 80 and older in the first month of observation. At baseline, community-dwelling participants with one or more geriatrician visits had more geriatric conditions (1.5 vs 1.3) and comorbidities (3.6 vs 3.2) than those with no visits. NH residents with one or more geriatrician visits had more geriatric conditions (2.0 vs. 1.8) but not more comorbidities (4.6 for both groups) than those with no visits (Table 1). These data suggest that community-dwelling participants may be more likely than NH residents to selectively use geriatric care based on poor health status.

Geriatric care was uncommon in both groups but more common in NH residents than community-dwelling participants. NH residents had one or more geriatrician visits during 5.2% of their 6-month periods, compared with 1.4% for community-dwelling participants (Table 2). In addition, NH residents who used geriatric care were more likely to have multiple geriatrician visits in a 6-month period than were community-dwelling participants who used geriatric care. Geriatrician plurality and geriatrician consultation occurred approximately equally often in both groups.

Community-dwelling participants were much more likely to have specialist plurality than NH residents.

The monthly rate of ED use was somewhat higher in NH residents (9.6%) than community-dwelling participants (8.0%). The majority of NH residents (65.8%) and community-dwelling participants (60.2%) had at least one ED visit during the time that participants were observed after diagnosis of a geriatric condition.

Association Between Geriatric Care and ED Use

Most measures of geriatric care were associated with less ED use for community-dwelling participants and NH residents. Although small in an absolute sense, estimated differences in ED use were large compared with average monthly rates of ED use. One or more geriatrician visits was associated with an average 11.3% lower monthly ED use for community-dwelling participants (Figure 3). For NH residents, one or more geriatrician visits was associated with an average 11.5% lower monthly ED use. The largest reduction in the predicted probability of ED use was associated with three or more geriatrician visits (16.3% for community-dwelling participants, 18.8% for NH residents), although the estimated effect of three or more geriatrician visits was not significantly different from the estimated effect of two visits for either sample.

Participants with geriatrician plurality or geriatrician consultation were less likely to have ED use than participants for whom FM/IM physicians accounted for the plurality of visits. For community-dwelling participants, ED use was 10.0% less with geriatrician plurality and 11.3% less with geriatrician consultation. For NH residents, ED use was 9.4% less with geriatrician plurality and 11.5% less with geriatrician consultation. The lower ED use associated with geriatrician plurality was not significantly different from the lower ED use associated with geriatrician consultation in either sample.

For NH residents, use of specialty care for the plurality of visits was associated with a 9.4% greater predicted probability of ED use in 1 month than FM/IM plurality (reference group). ED use for community-dwelling participants with specialist plurality was not significantly different from ED use with FM/IM plurality.

DISCUSSION

Randomized trials demonstrate benefits from interdisciplinary geriatric assessment, but little is known about how geriatric care affects the health service use of Medicare beneficiaries in real-world settings. This study is the first to examine the association between geriatric care and ED use in a national sample of community-dwelling individuals and NH residents. In Medicare beneficiaries with a history of ACS who were subsequently diagnosed with a geriatric condition, geriatric care was associated with less ED use by community-dwelling individuals and NH residents. Estimated differences (7.5–18.8% lower likelihood of ED use in 1 month) were significant at the participant level and have broad public health implications in this population. These results suggest that, for older adults like those in this study, having one or more geriatrician visits in a year is associated with an estimated fewer 108 ED visits per

Table 1. Descriptive Statistics in the First Month of Observation Based on Whether Participant Had Geriatric Care in Previous 6 Months

Variable	Community		Nursing Home	
	0 Geriatrician Visits	≥ 1 Geriatrician Visits	0 Geriatrician Visits	≥ 1 Geriatrician Visits
Observations, n	284,088	3,171	64,074	2,477
Demographic characteristics				
Age, mean	80.4	82.6 ^b	84.1	84.6
Male, %	37.8	32.2 ^b	28.6	28.2
Nonwhite, %	10.2	13.9 ^b	11.5	14.2 ^b
Dual eligible, %	17.1	17.1	35.0	34.3
ZIP code annual income, \$, median	42,664	46,296 ^b	43,826	48,148 ^b
Metropolitan area, %	68.4	88.1 ^b	72.4	90.4 ^b
Geriatric conditions				
Number of geriatric conditions, mean	1.3	1.5 ^b	1.8	2.0 ^b
Stroke, %	20.4	19.6	33.3	30.8 ^b
Dementia, %	13.1	23.3 ^b	44.0	52.8 ^b
Osteoporosis, %	16.2	19.8 ^b	15.8	18.4 ^b
Urinary tract infection, %	7.1	10.3 ^b	7.7	9.2 ^b
Depression, %	11.5	16.5 ^b	16.1	20.1
Dehydration, %	15.2	14.5	14.3	14.2
Hearing impairment, %	5.5	6.1	3.9	3.9
Syncope, %	12.5	10.9 ^b	6.3	6.5
Fracture, %	12.8	10.9 ^b	16.6	13.6 ^b
Pressure ulcer, %	2.6	4.1 ^b	7.1	8.0
Weight loss, %	6.8	8.9 ^b	6.1	9.7 ^b
Vision impairment, %	1.2	1.4	1.8	1.7
Failure to thrive, %	.7	1.2 ^b	1.7	3.2 ^b
Laceration, %	3.5	3.2	3.1	4.3 ^b
Delirium, %	1.0	1.5 ^b	2.2	2.7
Dislocation, %	1.9	.8 ^b	.4	.4
Comorbidities				
Total number of comorbidities, mean	3.2	3.6 ^b	4.6	4.6
Hypertension, %	76.7	82.3 ^b	84.4	85.1
Congestive heart failure, %	34.1	42.2 ^b	60.2	60.8
Diabetes mellitus, %	34.4	34.2	42.9	41.5
Anemia, %	26.6	33.7 ^b	46.9	52.2 ^b
Chronic obstructive pulmonary disease, %	26.7	26.0	36.8	32.9 ^b
Peripheral vascular disease, %	17.9	22.4 ^b	34.8	34.0
Hypothyroidism, %	17.9	21.1 ^b	24.9	26.4
Valvular disease, %	15.6	18.1 ^b	19.4	16.6 ^b
Neurological condition, %	7.3	10.1 ^b	18.5	19.7
Diabetes mellitus with complications, %	10.9	12.8 ^b	16.8	16.4
Renal failure, %	10.5	11.7 ^a	17.0	16.3
Tumor, %	10.6	10.2	9.2	8.0 ^a
Electrolytes, %	8.2	8.4	10.7	10.9
Hypertension with complications, %	9.0	8.8	9.2	7.7 ^a
Psychoses, %	2.2	3.4 ^b	9.2	9.3

Comorbidities with a prevalence of less than 5%, month indicators, and time trend variables were included in the model but are not reported here.

^aDifferences between participants with one or more geriatrician visits and those with no geriatrician visits are statistically significant at $P < .05$.

^bDifferences between participants with one or more geriatrician visits and those with no geriatrician visits are statistically significant at $P < .01$.

1,000 community-dwelling participants and 133 ED visits per 1,000 NH residents per year. Furthermore, these results may underestimate the effect of geriatric care on ED use. The descriptive statistics show that community-dwelling participants with one or more geriatrician visits were older and had more geriatric conditions than community-dwelling participants with no geriatrician visits. The finding that community-dwelling participants who received geriatric care had poorer health and were less likely to use the ED than those who did not receive geriatric care is notable, because one would normally expect individuals with poorer health to be more likely to use the ED.

Low geriatrician supply in the United States has long been a concern.^{29,30} In this study, geriatric care was relatively rare; only 2.7% of community-dwelling participants and 8.4% of NH residents had one or more geriatrician visits during time they were observed (median 17 months). An estimated 36,000 geriatricians will be needed to serve the growing population of older adults in 2030, but the projected supply is only 7750.^{2,31} One factor that is likely to reduce geriatrician supply is remuneration. Despite having completed fellowship training, geriatricians are typically paid less than FM/IM physicians.^{32,33} Geriatricians were included in the list of primary care providers eligible

Table 2. Use of Geriatric Care and Emergency Department Use

Variable	Community	Nursing Home ^a
Patient-month observations	5,277,762	1,005,122
Geriatric care during previous 6 months		
≥ 1 geriatrician visits, %	1.4	5.2
Number of geriatrician visits, %		
0	98.6	94.8
1	.5	1.2
2	.3	.9
≥ 3	.6	3.1
Physician use, %		
Family medicine/internal medicine plurality	68.2	84.8
Geriatrician plurality	.7	2.5
Geriatrician consultation	.7	2.7
Specialist plurality	30.4	10.0
Any emergency department use in 1 month, %	8.0	9.6

^aDifferences between samples are statistically significant at $P < .01$ for all variables.

for a 10% incentive payment from Medicare for primary care services from 2011 to 2015 as part of the Patient Protection and Affordable Care Act.³⁴ A bill reintroduced in the Senate in 2011 would have amended the National Health Services Corps program to include geriatrics under primary health services, which would enable geriatricians to receive loan repayment in exchange for work in Health Professional Shortage Areas,³⁵ but the committee to which it was assigned did not vote on the bill.

The effects of policy changes on geriatrician supply are unlikely to occur in the short term (if at all). Therefore, the leading policy implication of this study may be that the existing supply of geriatricians should be used more efficiently. For example, less monthly ED use associated with geriatrician consultation and geriatrician plurality were similar. This may suggest that consultative care or co-management may be as effective as primary care by geriatricians for this population. The similar lower ED use associated with geriatrician consultation and geriatrician plurality differs from results of randomized controlled trials of comprehensive geriatric assessment, which have found that only ongoing multivisit geriatric care reduced ED use, not consultative care.⁸⁻¹⁰ This difference could be

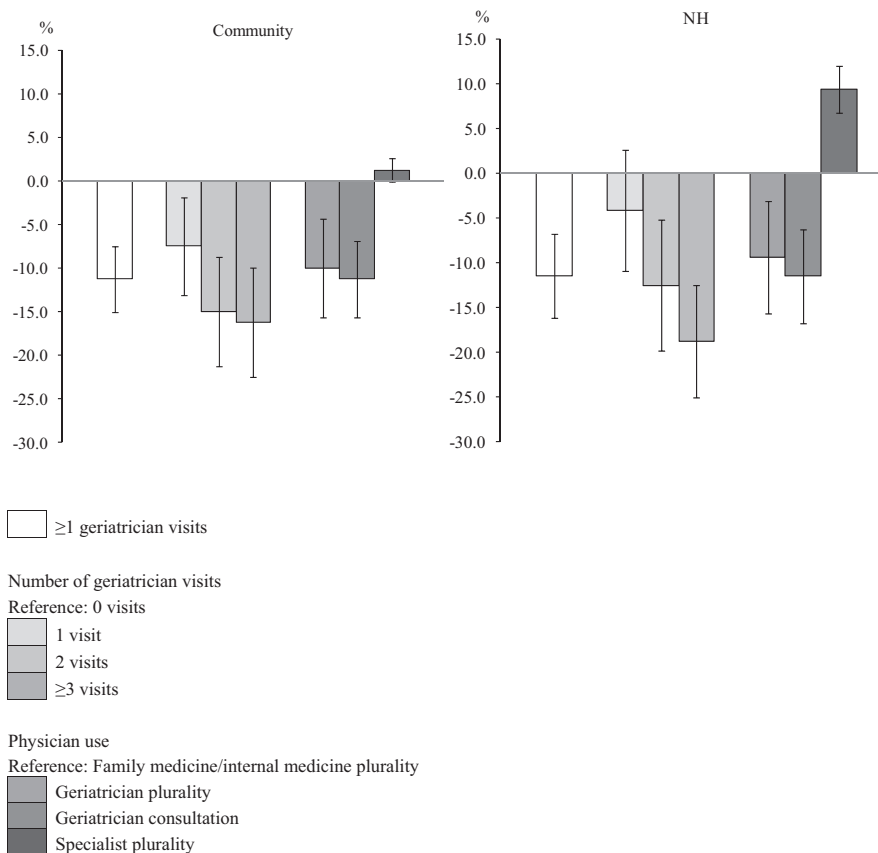


Figure 3. Percentage change in predicted probability of emergency department use in 1 month associated with geriatric care. ≥ 1 geriatrician visits; Number of geriatrician visits (reference 0); 1; 2; ≥ 3; Physician use (reference family medicine/internal medicine plurality); Geriatrician plurality; Geriatrician consultation; Specialist plurality; NH = nursing home. Models control for demographic variables, geriatric conditions, comorbidities, month indicators, and time trends; 95% confidence intervals shown. Percentage change calculated as change in predicted probability of emergency department (ED) use (not reported) divided by the sample mean of ED use (Table 1) multiplied by 100. For example, for community-dwelling participants, the reduction in ED use associated with one or more geriatrician visits was 0.9 percentage points; compared with the sample average of 8.0% for ED use for community-dwelling participants, the result is 11.3% lower ED use.

due in part to differences in populations or definitions of geriatrician consultation. For example, in 44% of the 6-month periods that community-dwelling participants had geriatrician consultation, the plurality of visits was to specialists. In that case, the geriatrician may have been acting as the primary care physician even though the 6-month period was identified as geriatrician consultation.

Further studies using primary data collection or intervention designs could examine how geriatrician consultants can work collaboratively with FM/IM physicians to help reduce rates of ED use and improve other health outcomes.^{8,36} Among the list of payment and delivery reform models that the Centers for Medicare and Medicaid Innovation at the Centers for Medicare and Medicaid Services are to give priority is the use of geriatric assessments.³⁷ If additional evidence suggests that geriatric consultation is effective in conjunction with primary care from FM/IM physicians, then the existing supply of geriatricians could reach a larger number of individuals using collaborative care.

This study has several limitations. First, results cannot be generalized to individuals without a history of ACS and a geriatric condition or to those enrolled in Medicare managed care. Second, the claims data lacked a number of variables that would have been useful, including functional and cognitive status, social support, provider-level variables (e.g., nurse practitioner and physician assistant specialty), and quality of life. The mechanisms by which geriatric care may reduce ED use are unclear because such details are not in claims data. Third, because unobserved time-varying characteristics such as declining functional status may be associated with ED use and geriatric care, study results were interpreted conservatively as evidence of associations rather than causal relationships. Finally, some FM/IM physicians have extensive experience caring for individuals with geriatric conditions. Because physicians self-identify specialty when applying to become a Medicare provider, the measure of geriatric care used in this study does not require that a physician be certified in geriatric medicine.

This research extends current knowledge by examining the real-world association between geriatric care and ED use by elderly Medicare beneficiaries. The findings provide insights into effective models of care for elderly adults with geriatric conditions, which is critically important in light of the rapidly growing population of older adults and looming challenges to financial solvency for Medicare. Studies should continue to examine the models of geriatric care that have the greatest potential for improving the health of older adults and reducing unnecessary healthcare use and expenditures. Effective dissemination of geriatric care with avoidance of some ED use has potential benefits to all stakeholders—individuals, families, providers, and payers.

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