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Timing and Setting of Billed Advance Care Planning among Medicare Decedents in 2017–2019

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Abstract

BACKGROUND: The Centers for Medicare & Medicaid Services (CMS) began to reimburse clinicians for advance care planning (ACP) discussions, effective January 1, 2016. We sought to characterize the timing and setting of first-billed ACP discussions among Medicare decedents to inform future research on ACP billing codes.

METHODS: Using a random 20% sample of Medicare fee-for-service beneficiaries aged 66 years and older who died in 2017–2019, we described the timing (relative to death) and setting (inpatient, nursing home, office or outpatient with or without Medicare Annual Wellness Visit [AWV], home or community, or elsewhere) of the first-billed ACP discussion for each beneficiary.

RESULTS: Our study included 695,985 decedents (mean [SD] years of age, 83.2 [8.8]; 54.2% female); the proportion of decedents who had at least one billed ACP discussion increased from 9.7% in 2017 to 21.9% in 2019. We found that the proportion of first-billed ACP discussions held during the last month of life decreased from 37.0% in 2017 to 26.2% in 2019, while the proportion of first-billed ACP discussions held more than 12 months before death increased from 11.1% in 2017 to 35.2% in 2019. We also found that the proportion of first-billed ACP discussions held in the office or outpatient setting along with AWV increased over time (from 10.7% in 2017 to

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14.1% in 2019), while the proportion held in the inpatient setting decreased (from 41.7% in 2017 to 38.0% in 2019).

CONCLUSIONS: We found that with increasing exposure to the CMS policy change, uptake of the ACP billing code has increased; first-billed ACP discussions are occurring sooner before the end-of-life stage and are more likely to occur with AWV. Future studies should evaluate changes in ACP practice patterns, rather than only an increasing uptake in ACP billing codes, following the policy implementation.

Keywords

advance care planning; end-of-life care; Medicare; Medicare Annual Wellness Visit

INTRODUCTION

Advance care planning (ACP) is a process that prepares patients and their surrogate decision-makers to participate with clinicians in making medical decisions that are consistent with their values, goals, and preferences.[1,2] Randomized controlled trials have demonstrated that ACP makes a positive impact on patients' and caregivers' satisfaction with care and decision-making and decreases caregiver burden and distress.[3–6] Recognizing its importance, the Centers for Medicare & Medicaid Services (CMS) began to reimburse clinicians for ACP discussions effective January 1, 2016, and early studies suggest that the rate of billed ACP discussions has been increasing.[7–9]

It is possible that the timing and setting of billed ACP discussions have changed over time since the CMS policy was implemented. CMS in effect encourages conducting ACP discussions early in the office setting by providing financial incentives for ACP discussions for all Medicare beneficiaries 65 years and older regardless of their illness and by waiving the ACP coinsurance and the Part B deductible when ACP claims are billed along with Medicare Annual Wellness Visits (AWV).[10] Studies using Medicare claims data showed that 38.1% and 21.9% of billed ACP discussions occurred in the last month of life among general Medicare fee-for-service beneficiaries who died in 2017 and those with serious conditions who died in 2017 or 2018, respectively.[11,12] Other studies also showed that most billed ACP visits took place in the office setting in 2016 and 2017.[7,9] However, evidence is limited on whether the timing and setting of billed ACP discussions have changed in recent years.

In this context, we sought to describe how the timing (relative to death) of first-billed ACP discussions among Medicare fee-for-service decedents changed as more time for exposure to the CMS policy change on ACP elapsed by using recent Medicare claims data. We also described how the setting of first-billed ACP discussions has changed in recent years, with special attention to ACP discussions billed with AWV. Understanding how the timing and setting of ACP discussions evolved in response to the policy interventions would have implications for future policy and ACP practices.

METHODS

Data source and study participants

Our study used a 20% random sample of Medicare fee-for-service beneficiaries 66 years or older who died in 2017–2019. We used the Master Beneficiary Summary File to obtain beneficiary characteristics including age, sex, race and ethnicity, verified death dates (available for more than 99% of decedent beneficiaries), monthly Part A and B coverage status, and indicators for chronic conditions based on the definitions by the Chronic Condition Data Warehouse.[13] Fee-for-service coverage was defined by continuous enrollment in Medicare Part A and B. The institutional review boards at the University of California, Los Angeles reviewed the study and waived informed consent.

Advance care planning

We identified billed ACP discussions for each beneficiary, defined as the Current Procedural Terminology (CPT) codes of 99497 (an initial thirty-minute advance care planning discussion) or 99498 (each additional thirty minutes) in Medicare Part B claims 2016–2019.

Statistical analysis

First, we compared characteristics between beneficiaries who had at least one billed ACP discussion and those who did not. We also compared characteristics between beneficiaries who had multiple (vs. one) billed ACP discussions, between those who had the first billed ACP discussion during (vs. before) the last month of life, and between those who had the first billed ACP discussion in the inpatient (vs. a non-inpatient) setting.

Second, we calculated the time (in months) from the date of the first billed ACP discussion to the date of death for each beneficiary, and compared the proportion of the first billed ACP discussion that occurred in each month relative to death across decedents in 2017, 2018, and 2019. Because the length of the look-back period differs by beneficiary (e.g., a beneficiary who died on July 1, 2017, had a look-back period of 18 months; a beneficiary who died on December 31, 2019, had a look-back period of 4 years), we conducted a sensitivity analysis using a one-year look-back period. Specifically, we restricted the sample to beneficiaries who had a billed ACP discussion in the last year of life and compared the timing of the first-billed ACP discussion during that period across decedents in 2017, 2018, and 2019. We also conducted a sensitivity analysis using a two-year look-back period and compared the timing of the first-billed ACP discussion during the last two years of life between decedents in 2018 and 2019 who had a billed ACP discussion during the last two years of life.

Third, we determined the setting of the first-billed ACP discussion using the place-of-service code in the claims data (inpatient, nursing home, office or outpatient, home or community, or elsewhere), and compared the overall number and proportion of the first billed ACP discussions that occurred in each setting across decedents in 2017, 2018, and 2 019. For billed ACP discussions in the office or outpatient setting, we further examined whether they were billed along with Medicare Annual Wellness Visits (AWV) (defined by CPT code G0438 or G0439) on the same day.

RESULTS

Our study included 695,985 Medicare fee-for-service beneficiaries (mean [SD] years of age, 83.2 [8.8]; % female, 54.2%) (Table 1). Among our study sample, 15.5% had at least one billed ACP discussion (9.7%, 15.7%, and 21.9% among decedents in 2017, 2018, and 2019, respectively). Beneficiaries who had at least one (vs. no) billed ACP discussion, had multiple (vs. one) billed ACP discussions, and had the first-billed ACP discussion in the inpatient (vs. non-inpatient) setting were more likely to be non-White and have comorbidities (Table 1 and Supplementary Tables S1-3). An additional analysis showed that non-White (vs. White) beneficiaries were more likely to have comorbidities (Supplementary Tables S4).

Timing of the first-billed ACP discussion

We found that 37.0%, 29.8%, and 26.2% had their first billed ACP discussion during their last month of life among decedents in 2017, 2018, and 2019, respectively (Figure 1). The proportion of the first-billed ACP discussion held more than 12 months before death increased from 11.1% among decedents in 2017 to 35.2% among decedents in 2019. Our sensitivity analysis using a one-year look-back period (among beneficiaries who had a billed ACP discussion in their last year of life) showed that the proportion of the first-billed ACP discussion held more than 6 months before death increased from 21.1% among decedents in 2017 to 25.0% among decedents in 2019 (Supplementary Figure S1). Another sensitivity analysis using a two-year look-back period (among beneficiaries who had a billed ACP discussion during their last two years of life) showed that the proportion of first-billed ACP discussions held more than 12 months before death increased from 22.6% among decedents in 2018 to 25.3% among decedents in 2019 (Supplementary Figure S2).

Setting of the first-billed ACP discussion

We found that the overall number of first-billed ACP discussions in each setting increased substantially over time (Supplementary Figure S3). For example, the overall number of first billed ACP discussions held in the office or outpatient setting with AWV was 2.6 times larger among decedents in 2019 compared with those in 2017. Among decedents in 2017, 41.7% of the first-billed ACP discussions were held in the inpatient setting, and the proportion decreased to 38.0% among those in 2019 (Figure 2). The proportion of first-billed ACP discussions held in the office or outpatient setting slightly increased from 27.2% (10.7% with AWV) among decedents in 2017 to 28.8% (14.1% with AWV) among those in 2019. The proportions of billed ACP discussions held in the nursing home or home or community setting remained largely unchanged.

DISCUSSION

Using Medicare fee-for-service claims data, in addition to an increased uptake of ACP billing codes, we found that the proportion of decedents who had their first-billed ACP discussion during their last month of life has decreased over time, while the proportion of first-billed ACP discussions held more than 12 months before death increased. While we observed an increase in the number of first-billed ACP discussions held in the office or

outpatient setting, particularly with AWV, the increase in the proportion was relatively small given that the numbers of first-billed ACP discussions held in other settings also increased.

Our results showed that, over time, individuals' first-billed ACP discussions are increasingly occurring before the end-of-life stage. In 2016, CMS began to encourage early ACP discussions by reimbursing clinicians for ACP discussions for any beneficiaries 65 years and older regardless of their illness and waiving the ACP coinsurance and the Part B deductible when billed with Medicare AWV.[10] These incentives may be driving the shift to earlier first-billed ACP discussions. However, given the smaller changes in our sensitivity analyses using one- and two-year look-back periods, a significant source of the changes we observed is likely that the billing policy has been in place longer (i.e., a longer look-back period among decedents in 2019). Because our analysis is descriptive in nature, future studies should examine the impact of CMS policy changes with a robust methodology accounting for the differences in the look-back periods.

We found only a small increase in the proportion of first-billed ACP discussions held in the office or outpatient setting, while the increase in the proportion of first-billed ACP discussions with AWV was more evident. Along with the finding that only less than a quarter of decedents had billed ACP discussions after three years of policy implementation, additional incentives (e.g., waiving coinsurance in other outpatient settings) might be of consideration to help promote the current shift in billed ACP discussions.

It is important to note that we could not capture non-billed ACP discussions because we used claims data. Therefore, it does not necessarily mean that the changes we observed reflect changes in actual ACP discussions (including both billed and non-billed). Clinicians might not file ACP claims for various reasons, including structural and professional reasons, such as time needed to bill for an ACP discussion, lack of awareness and training on ACP billing, and concerns of patients getting charged.[7,9,14–16] Further studies would be warranted including those with electronic health records or survey data on ACP use or qualitative studies looking at clinicians' perspectives.

We found that beneficiaries who had at least one (vs. no) billed ACP discussion, had multiple (vs. one) billed ACP discussions, and had the first billed ACP discussion in the inpatient (vs. a non-inpatient) setting were more likely to be non-White and have comorbidities. Prior research suggests that patients with chronic conditions are more likely to have billed ACP discussions,[17] which may, in part, explain these results, given our data showing a higher prevalence of comorbidities among non-White (vs. White) beneficiaries. Further research is needed to fully understand these observed differences and potential underlying disparities for racial and ethnically minoritized groups.

Our study builds upon previous work that examined the timing and setting of billed ACP discussions. An early study using Medicare claims data found that 38.1% of decedents in 2017 had a billed ACP discussion within the last 30 days of death.[12] Another study showed that 21.9% of billed ACP discussions occurred in the last month of life among Medicare beneficiaries with serious conditions who died in 2017–2018.[11] Similarly, existing studies demonstrated that 60–70% of ACP visits took place in the office setting among Medicare

beneficiaries in 2016 and 2017 [7,9] and the number of ACP claims billed with AWV among Medicare beneficiaries has increased from 2016 to 2019.[16] While informative, these studies did not examine how the timing and setting of billed ACP discussions have changed over time.[7,9] We provide new evidence using 2016–2019 Medicare claims data.

Our study has limitations. First, we focused on the first ACP discussion billed per beneficiary while ACP is a process—rather than just one conversation—that ideally occurs over the course of life.[18] Second, we could not examine the content or quality of billed ACP discussions or the timing of billed ACP discussions in relation to the treatment (e.g., intensive care) a beneficiary received. Last, our findings may not be generalizable to those younger than age 66 years or covered by Medicare Advantage.

In summary, using a nationally representative sample of Medicare fee-for-service decedents, we found that with increasing exposure to the CMS policy change, uptake of the ACP billing code has increased; the first-billed ACP discussions are occurring earlier before the end-of-life stage and are more likely to occur with AWV. Future studies should evaluate whether there have been changes in ACP practice patterns following the policy implementation.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Funding sources and related paper presentations:

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Key Points

- The proportion of decedents who had at least one billed advance care planning (ACP) discussion increased from 9.7% in 2017 to 21.9% in 2019.
- The proportion of first-billed ACP discussions held more than 12 months before death increased from 11.1% in 2017 to 35.2% in 2019.
- There was a mild increase over time in the proportion of first-billed ACP discussions held in the office or outpatient setting billed along with Medicare Annual Wellness Visits.

Why Does this Paper Matter?

Understanding how ACP billing codes are implemented informs future research examining the impact of ACP policy change on clinician practice patterns.

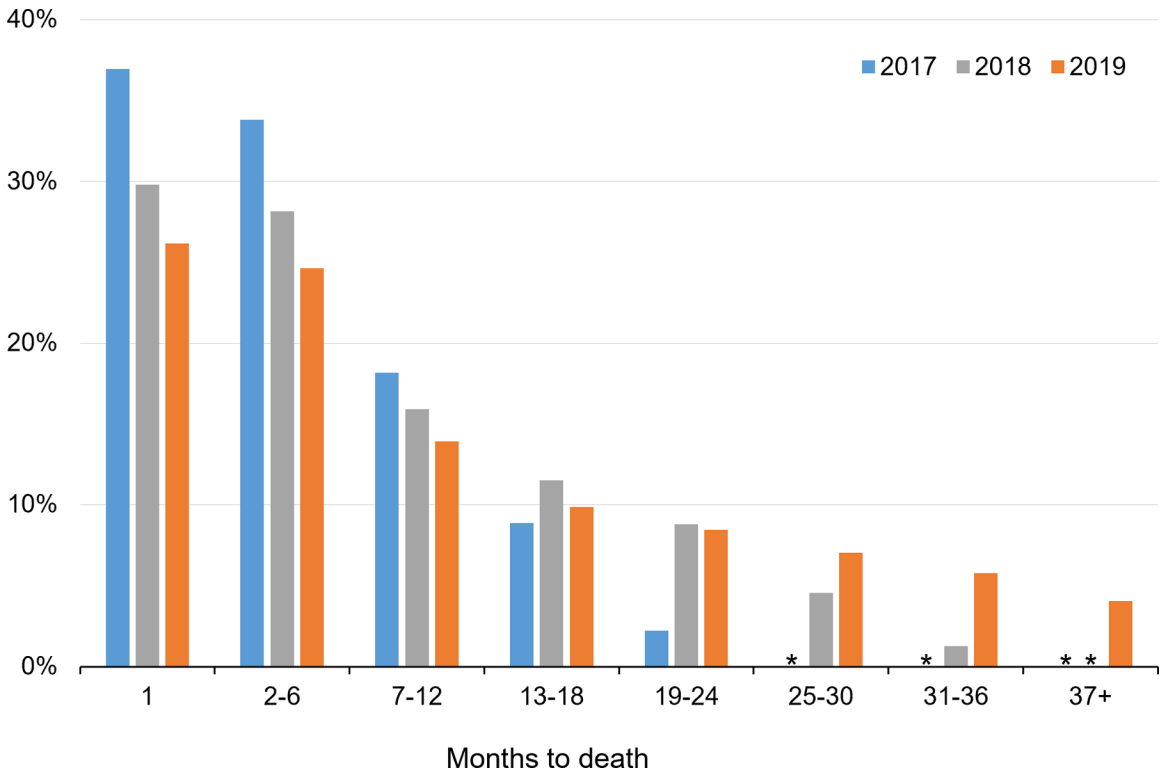

Figure 1.

Proportion of first-billed advance care planning (ACP) discussions held during a given month according to year of death

Note: Bars indicate the proportions of first-billed ACP discussions held during a given month by year of death based on a 20% random sample of Medicare fee-for-service claims data 2016–2019. *Decedents in 2017 could not have data for 25–30, 31–36, or 37+ months and decedents in 2018 could not have data for 37+ months because the reimbursement of ACP discussions had not been implemented yet.

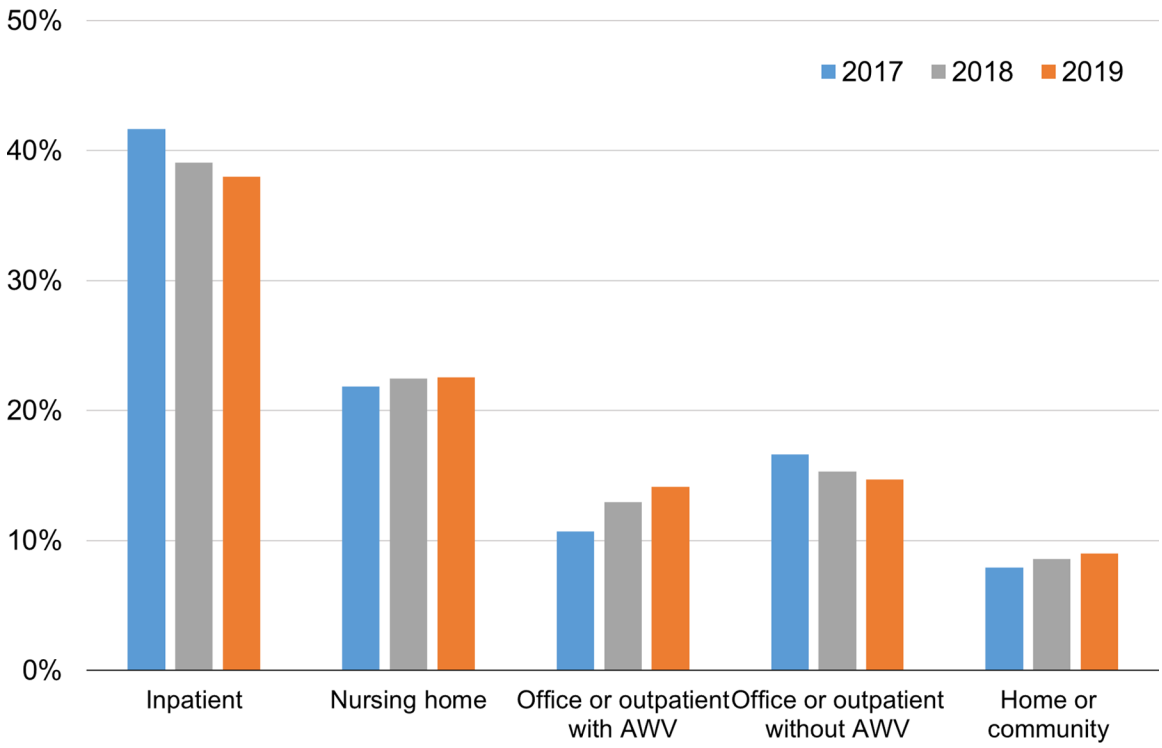

Figure 2.

Proportion of first-billed advance care planning (ACP) discussions held in a given setting according to year of death

Note. Bars indicate the proportions of first-billed ACP discussions held in a given setting by year of death based on a 20% random sample of Medicare fee-for-service claims data 2016–2019. Proportions do not add up to 100% because ACP discussions billed in other settings such as emergency department are not presented (less than 2% in total). Abbreviation: AWV, Annual Wellness Visit.

Table 1.
Characteristics of decedents by advance care planning (ACP) status

	Overall (n=695,985)	Beneficiaries with ACP (n=108,130)	Beneficiaries without ACP (n=587,855)
Age, mean (SD), yr	83.2 (8.8)	83.5 (8.5)	83.1 (8.8)
Female, %	54.2	55.3	54.0
Race/ethnicity, %			
White	84.7	83.6	85.0
Black	7.6	8.2	7.5
Hispanic	4.3	4.5	4.2
Other	3.4	3.7	3.3
Median zip-code level household income (SD), $	66,489 (27,327)	71,303 (29,302)	65,600 (26,852)
Medicaid coverage, %	19.7	18.9	19.9
Selected coexisting condition, %			
Congestive heart failure	50.7	59.7	49.0
Chronic obstructive pulmonary disease	29.2	35.5	28.1
Chronic kidney disease	59.8	70.2	57.9
Diabetes	38.6	43.5	37.7
Cancer	18.1	22.3	17.4
Dementia	52.2	59.5	50.9

Note. Values are among a 20% random sample of Medicare fee-for-service beneficiaries who died in 2017–2019. All characteristics were different among beneficiaries with ACP vs. those without ($p<0.001$).