



## Commentary

### Advance Care Planning for Patients with New Serious Illnesses after Medicare's New Payments

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#### Introduction

Advance Care Planning (ACP) supports adults to understand and communicate their values and wishes for future medical care in order to ensure goal-concordant care in serious illness when patients are too ill to make their own decisions [1,2]. In recognition of the misalignment between payment for ACP and its value, the Center for Medicare & Medicaid Services (CMS) authorized payment for ACP through new Current Procedural Terminology (CPT) codes (99497 and 99498) in 2016 [1]. While studies suggest limited use of these new ACP billing codes in the first two years after their introduction in the general population, [3,4] their use in patients with newly diagnosed serious illnesses is unknown. Understanding their use since the CMS policy change could shed light on actions needed to ensure more patients with serious illness can receive goal concordant care.

#### Methods

This retrospective study using national claims from January 1, 2016 to September 30, 2018 from the OptumLabs® Data Warehouse, a longitudinal, real-world data asset with de-identified administrative claims and electronic health record data, included patients age 65 or older enrolled in a Medicare Advantage (MA) plan or commercial health insurance with medical and pharmacy benefits.

We hypothesized that ACP is more salient for patients with a new serious illness diagnosis, our main explanatory variable, than for patients without a new serious illness. In order to accurately identify a new serious illness diagnosis, we imposed a 6-month "clean window"

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during which time no serious illness diagnoses were reported. Our list of serious illnesses was drawn from the National Committee on Quality Assurance's (NCQA) Palliative and End-of-Life Care Measurement Set. To minimize underestimation of ACP services, we included both the ACP billing codes (99497 and 99498) and ACP codes for Quality Improvement (QI) purpose (1123F, 1124F, 1157F and 1158F). We examined the distribution of ACP codes by patient characteristics and used Cox proportional hazards regression to analyze their association with the time to any ACP claim. Covariates included patient age, sex, race/ethnicity, and type of insurance MA or commercial.

#### Results

The study cohort consisted of 4,035,488 patients, mean age 71.7 years (SD=10.1), 56% female and 82% with MA insurance. By the end of the observation period, 12.2% had any ACP claims; 9.2% had any ACP QI claims; 3.9% had any ACP billings. Among the 17% (686,033) who had developed a new serious illness, 41.0% (281,274) had any ACP claims; 33.2% (227,763) had QI claims compared to 12.5% (85,754) with billing claims (Table 1).

Table 2 contains results from regression analyses which suggest that clinicians are more likely to have a claim for ACP when patients have a new serious illness than when they do not have a new serious illness (HR4.2, CI=4.15, 4.25). Compared with white patients, patients of all other races were more likely to have ACP claims, especially Asian (HR 1.6, CI=1.59, 1.65) and Hispanic (HR 2.2, CI=2.19, 2.24) patients. MA patients were more likely to have ACP claims than those with commercial insurance (HR 2.0, CI=1.97, 2.03). Older patients (e.g., 80+) with new serious illnesses had increased likelihood of having ACP claims (HR 1.1, CI=1.09, 1.14).

#### Discussion

Almost three years after the payments' introduction, only 3.9% of a national sample of Medicare beneficiaries had any billings for ACP, almost three years after the payments' introduction. Compared with earlier evidence of ACP billings for 2.2% of Medicare beneficiaries [3-5] this may be a modest increase. While billings data do not always accurately reflect how often clinicians actually engage in ACP discussions, the 3-times higher rate of ACP billings (12.5%) among patients with new serious illnesses and the significant association between them suggest that ACP claims could reflect plausible clinician behavior consistent with clinical context. With regards to concerns about disparities in ACP, [4] we found no evidence of non-white patients being less likely to engage in ACP services compared to white patients.

#### Acknowledgement

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#### Conflict of Interest

Sarah Thayer, PHD, and Nina Veeravalli, MPH, are employees of OptumLabs. No other conflict of interest.

		Total*	With ACP Claims			
			Any ACP Claims	ACP QI Claims	ACP Billing Claims	ACP QI and Billing Claims
	N	4,035,488	491,036	371,217	159,315	39,496
%						
	% of total	100%	12.2	9.2	3.9	1.0
Gender	Female	56%	12.6	9.5	4.2	1.1
	Male	44%	11.5	8.8	3.7	1.0
Age	65-74	73%	10.6	8.1	3.3	0.8
	75-79	11%	15.4	11.7	5.0	1.3
	>=80	16%	16.1	11.8	5.7	1.4
Coverage	Medicare Advantage	82%	13.8	10.3	4.5	1.0
	Commercial	18%	4.9	4.0	1.3	0.4
Race	White	64%	11.1	8.2	3.7	0.8
	Black	11%	14.7	10.9	5.0	1.2
	Hispanic	9%	21.4	18.1	5.1	1.8
	Asian	3%	15.9	11.3	7.6	3.0
	Other	13%	7.8	5.7	2.5	0.4
New SI during study period	Yes	17%	41.0	33.2	12.5	4.4
	No	83%	6.4	4.5	2.3	0.4

**Table 1:** Demographics for older patients included in study.

\*: who are over or turn 65 within the study window and are insured at some point during the study window after they are 65.

	Any ACP Claims		ACP QI Claims		ACP Billing Claims	
	HR	95% CI	HR	95% CI	HR	95% CI
New serious illness diagnosis	4.2	(4.15,4.25)	4.4	(4.38, 4.49)	3.5	(3.41, 3.54)
Age 75-79	0.9	(.91, 0.93)	0.9	(0.88, 0.91)	0.9	(0.92, 0.94)
Age 80 +	0.9	(.84, 0.86)	0.8	(0.80, 0.82)	0.9	(0.88, 0.92)
SI*Age 75-79	1.1	(1.03, 1.07)	1.1	(1.02,1.08)	1.1	(1.07, 1.14)
SI*Age 80+	1.1	(1.09, 1.14)	1.0	(1.02, 1.07)	1.3	(1.31,1.38)
Gender: Male	0.9	(.94, 0.95)	1.0	(0.95, 0.97)	0.9	(0.91, 0.94)
Medicare Advantage	2.0	(1.97, 2.03)	1.9	(1.84, 1.91)	2.3	(2.21, 2.32)
Asian	1.6	(1.59, 1.65)	1.5	(1.51, 1.58)	2.2	(2.11, 2.22)
Black	1.2	(1.15, 1.17)	1.1	(1.11, 1.14)	1.2	(1.16, 1.21)
Hispanic	2.2	(2.19, 2.24)	2.6	(2.53, 2.59)	1.4	(1.42, 1.47)
Other race	1.8	(1.77, 1.82)	1.9	(1.83, 1.88)	1.7	(1.63, 1.70)

**Table 2:** Cox proportional hazards of ACP claim with time varying covariates\*.

\* All p-values are <log (-16). HR: Hazard Ratio, CI: Confidence Interval. Reference groups are those with no new Serious Illnesses (SI), age 65-74, female, commercially insured and white.

## Author's Contribution

Study concept and design: M.T.S, S.T; acquisition of subjects and/or data: M.T.S., N.V., S.T.; analysis and interpretation of data: K.H., F.V., M.T.S., S.T., N.V., L.Y.; and preparation of manuscript: all.

## Funding Sources and Related Paper Presentations

None.

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