Characteristics of Physicians Who Adopted Medicare's New Advance Care Planning Codes in the First Year

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BACKGROUND

Advance care planning (ACP) is seen as a fundamental step in providing medical treatment toward the end of life (EOL) that is prognosis-informed and consistent with the care preferences of patients. In January 2016, Medicare began to reimburse clinicians for engaging in ACP conversations with patients and families. Reimbursing physicians to implement ACP underscores their critical role in initiating this care process. Recent studies have found a low take-up of the new ACP codes, and identified patient characteristics associated with a higher likelihood of the use of those codes. (1–3) However, the characteristics of physicians who adopted those codes and engaged in ACP discussions remains largely unknown.

OBJECTIVE

To identify the characteristics of physicians who adopted Medicare's new ACP codes in 2016.

METHODS

We linked two nationally-representative databases using physicians' National Provider Identifier: (1) the 2016 Medicare Carrier file and (2) a comprehensive physician database from Doximity. Doximity is an online professional network for physicians that has assembled data on all U.S. physicians—both those who are registered members of the service as well as those who are not—through multiple sources and data partnerships including the National Plan & Provider Enumeration System (NPPES) and the American Board of Medical Specialties. The

database includes information on physician age, gender, specialty, and type of medical training (i.e., allopathic [MD] versus osteopathic [DO] training). Prior studies have validated data using manual audits, (4, 5) with approximately 95% of physicians treating Medicare beneficiaries could be matched to the Doximity database. (6)

We first identified physicians who filed at least one claim for ACP in 2016, using the Current Procedural Terminology codes 99,497 and 99,498, and compared the proportion of physicians who filed ACP claims by specialty. Next, focusing on general internists and family physicians—who accounted for 81% (8971/11,035) of all physicians who adopted the new ACP codes—we examined the association between individual physician characteristics (age, gender, and type of medical training) and the probability of filing an ACP claim, using a multivariable logistic regression model. All analyses were conducted using Stata, version 14 (Stata-Corp). The study was approved by the institutional review board at Harvard Medical School, which waived informed consent for de-identified data.

FINDINGS

A total of 126,248 ACP codes were billed by 11,035 (1.8% of all physicians) physicians (mean [SD] age, 48.4 [11.7]; 30.5% female) in 2016. General internists (45.8%), and family physicians (35.5%) comprised the largest group, followed by hematologists and oncologists (2.8%) (Table 1).

Older physicians were more likely to bill for ACP services than younger physicians (Table 2). For example, the adjusted percentage of physicians filing an ACP claim was 3.90% among physicians aged <40 years (the reference group), compared to 5.58% among physicians aged 40–49 years (adjusted odds ratio [aOR], 1.46; 95%CI, 1.37 to 1.55; $P < 0.001$), 5.97% among physicians aged 50–59 (aOR, 1.57; 95%CI, 1.47 to 1.67; $P < 0.001$), and 4.69% among those ≥ 60 years (aOR 1.22; 95%CI, 1.13 to 1.31; $P < 0.001$). The probability of filing ACP claims did not differ between male and female physicians, or between physicians who underwent allopathic vs. osteopathic training.

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Table 1 Use of Medicare Advanced Care Planning (ACP) claims by specialty

Specialty	No. of physicians	No. of physicians who filed at least 1 Medicare ACP claim (% of all physicians)	Percentage of physicians with Medicare ACP claim (within a given specialty)
Internal Medicine	94,562	5055 (45.8)	5.3% (5055/94,562)
Family Medicine	87,177	3916 (35.5)	4.5% (3916/87,177)
Hematology/Oncology	6798	312 (2.8)	2.6% (312/11,774)
Pulmonology	8979	190 (1.7)	2.1% (190/8979)
Nephrology	9148	174 (1.6)	1.9% (174/9148)
Emergency Medicine	40,379	166 (1.5)	0.4% (166/40,379)
Cardiology	25,133	142 (1.3)	0.6% (142/25,133)
Neurology	14,254	95 (0.9)	0.7% (95/14,254)
General Surgery	26,412	68 (0.6)	0.3% (68/26,412)
Infectious Disease	6371	53 (0.5)	0.8% (53/6371)
Obstetrics & Gynecology	31,892	44 (0.4)	0.1% (44/31,892)
Gastroenterology	13,484	36 (0.3)	0.3% (36/13,484)
Psychiatry	24,900	21 (0.2)	0.1% (21/24,900)
Pediatrics	3450	20 (0.2)	0.6% (20/3450)
Radiation Oncology	4146	12 (0.1)	0.3% (12/4146)
Other specialties	221,899	731 (6.6)	0.3% (731/221,899)

DISCUSSION

Few physicians, the majority of whom were general internists and family physicians, filed ACP claims for Medicare beneficiaries in the first year of its implementation. Older physicians were more likely to adopt Medicare's new ACP codes than younger physicians, whereas the probability of filing ACP codes did not vary by physicians' gender or type of training. These findings should be informative for the policymakers to understand the underlying causes of the low take-up rate, and the variation in the adoption of the new ACP codes.

The lack of time for physicians to engage in detailed ACP discussions (low use of ACP codes does not necessarily mean low rate of actual EOL counseling, as physicians do not bill when

they are engaged in shorter ACP discussions), and relatively low reimbursement rate (\$80 to \$86 for the first 30 min, and \$75 for each additional 30 min) may be the reasons for the slow adoption. A better understanding of physicians who adopted new ACP codes could allow for targeting of interventions to physician groups who are less likely to document ACP codes.

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Table 2 Adjusted association between physician characteristics and filing Advance Care Planning billing codes, among general internists and family physicians

Physician characteristics	Adjusted probability, % (95% CI)	Adjusted odds ratio* (95% CI)	P value
Physician gender			
Male	4.92 (4.79 to 5.06)	Reference	0.18
Female	5.07 (4.90 to 5.25)	1.03 (0.99 to 1.08)	
Physician age (yr)			
<40	3.90 (3.72 to 4.07)	Reference	
40–49	5.58 (5.38 to 5.79)	1.46 (1.37 to 1.55)	<0.001
50–59	5.97 (5.74 to 6.20)	1.57 (1.47 to 1.67)	<0.001
≥60	4.69 (4.44 to 4.95)	1.22 (1.13 to 1.31)	<0.001
Credentials			
MD (allopathic)	4.96 (4.85 to 5.07)	Reference	0.35
DO (osteopathic)	5.12 (4.80 to 5.44)	1.03 (0.96 to 1.11)	

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