ORIGINAL RESEARCH

Features of U.S. Primary Care Physicians and Their Practices Associated with Advance Care Planning Conversations

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Introduction: **Primary care practices are essential settings for Advance Care Planning (ACP) conversations with patients. We hypothesized that such conversations occur more routinely in Advanced Primary Care/Patient Centered Medical Home (APCP/PCMH) Practices using practice transformation strategies.**

Methods: **We analyzed characteristics of physician respondents and their practices associated with ACP discussions in older and sicker patients using US data from the 2015 Commonwealth Fund International Survey of Primary Care Physicians in 10 Nations. The primary outcome was how routinely these ACP conversations are reported. We developed an index of APCP/PCMH features as a practice covariable.**

Results: **Respondents (N = 1001) were predominantly male (60%) and ≥45 years old (74%). Multivariable analyses showed that suburban practice location was associated with fewer ACP conversations; working in a practice commonly seeing patients with multiple chronic conditions or who have palliative care needs, and working in a practice from which home visits are made, were associated with more ACP conversations. Physicians compensated in part by capitation were more likely to report ACP conversations. No association was found between a single item asking if the practice was an APCP/PCMH and having ACP conversations. However, higher scores on an index of APCP/PCMH features were associated with more ACP conversations.**

Conclusions: **In this sample of US primary care physicians, the types of patients seen, practice location, and physician compensation influenced whether physicians routinely discuss ACP with patients who are older and sicker. Practices demonstrating more features of APCP/PCMH models of primary care are also associated with ACP discussions. (J Am Board Fam Med 2019;32:835–846.)**

Keywords: **Advance Care Planning, Health Care Surveys, House Calls, Multimorbidity, Multiple Chronic Conditions, Palliative Care, Patient-Centered Care, Physician-Patient Relations, Primary Care Physicians, Terminal Care**

Many individuals with serious illness are not given the opportunity to consider what is most important to them and decide what health care they wish to receive as their illness progresses. Advance Care Planning (ACP) is a process of supporting individuals in understanding and sharing their personal values, life goals, and preferences regarding future medical care to help ensure that they receive medical care that is consistent with what they want during serious and chronic illness.[1] ACP often impacts care delivered near the end of life, including

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decreasing use of life-sustaining treatments, reducing hospitalizations, increasing use of hospice and palliative services, and leading to care consistent with patient end-of-life wishes.[2,3]

Primary care is the foundation of models for quality patient-centered health care and is a natural venue for ACP engagement.[4–6] People with a consistent source for care, such as those with a primary care provider (PCP), report higher levels of ACP document completion.[7] However, ACP within primary care practice is not routine.[8] Several studies point to barriers in routinely engaging patients in ACP in primary care practices. Barriers cited by clinicians include the following: clinicians' concern about the time and other resources it takes to discuss ACP, concerns about transferring patients' documents about ACP, clinician skills in communicating about vague requests from patients, loss of interactions with patients as they enter the end of life, clinician concerns about finding the right time to discuss these issues, patients' lack of understanding limitations and complications of life-sustaining treatments, and clinician concerns about impacting patient hope.[9,10]

Little is known about the characteristics of PCP or their practices in relation to how commonly they engage patients in ACP conversations. Small studies suggest that physician age (evidence for both younger and for older physicians) and also physician experience with ACP, either personally or professionally, seem more likely to routinely engage patients.[9,11] In addition, clinician perceptions of their communication skills and an attitude that they should initiate ACP conversations are also known facilitators of ACP conversations.[9]

Features and processes common to primary care practices that have also been shown to be important to expanding ACP conversations with patients include the following: transferable electronic health records,[10,12,13] enhancing capacity of clinicians,[10] integrating ACP conversations into practice workflow,[10] potential for team-based care, and continuity of conversations across visits.[14,15] These are features of practices that may be found in Advanced Primary Care Practice transformation models such as the Patient Centered Medical Home (hereafter designated APCP/PCMH), a major innovation in primary care over the last 2 decades.[16]

Advanced primary care models focus on the provision of comprehensive, accessible, patient-centered care that is coordinated across care settings and that improve the patient experience and quality of care provided. Practices that have transformed to these advanced models demonstrate higher quality and higher value health care, especially for patients with more complex problems.[17,18] Recognizing a potential link between primary care practice quality and ACP, the Center for Medicare and Medicaid Services recently revealed its intention to fund a demonstration project with ACP as one of the quality measures.[19]

There is some evidence that patients reporting higher quality primary care services are also more likely to engage in ACP activities.[20] In that report, the assessment of primary care services quality was derived from an index of activities in primary care practices associated with quality care.[21] We have found no other studies evaluating the association of quality primary care services with engaging patients in ACP activities.

This study aims to describe the characteristics of a representative sample of US PCPs who routinely engage patients in ACP conversations and the associated features of the primary care settings in which they practice. Given the potential association between higher quality primary care practices with engaging patients in ACP conversations,[20] we also evaluated the research question of whether physicians who report working in APCP/PCMH are more likely to routinely engage patients in ACP.

Methods

Data Source

We used data from the 2015 Commonwealth Fund International Health Policy Survey of Primary Care Physicians in 10 Nations dataset to perform our secondary analysis. This survey consists of physician responses from nationally representative random samples of 12,049 primary care physicians in 10 countries (Australia, Canada, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland, United States, and United Kingdom); only US primary care physician data were used for this analysis (N = 1001). The Commonwealth Fund survey is an International Health Policy survey that collects nationally representative data in several Organization for Economic Cooperation and Development countries to compare features of health system performance. The sample included general practitioners, family physicians, internists, and pediatricians. Responses were collected online or by

mail in the United States. Complete survey data and methods are available.[22] This study was approved by the Colorado Multiple Institutional Review Board.

Outcome

Physicians were asked "Do you have conversations with older or sicker patients about the health care treatment they want or do not want in the event they become very ill or injured, and cannot make decisions for themselves?" An indicator for ACP conversations was created by grouping responses as "yes, routinely" versus other responses.

Independent Variables

Independent variables included physician characteristics and primary care practice characteristics. Physician variables included the following: age (<45 years vs 45 years or greater), sex, physician payment sources (ie, fee for service, salary, capitation, incentives based on clinical targets, and Centers for Medicare and Medicaid-based incentives), and whether the physician considered their work to be high stress ("Extremely" and "Very" vs other). Respondents could list multiple mechanisms for payment.

Practice characteristics included location (rural, small town, suburb, urban); whether practice was part of an accountable care organization, an organization tying payments to quality metrics and costs of care; whether the practice was part of a large integrated provider system (Yes [Kaiser Permanente, Veterans Health Administration, Mayo, etc.] vs other); and whether the practice cared for patients with multiple chronic conditions or who have a need for palliative care, or through home visits. Multiple chronic conditions and need for palliative care were not specifically defined in the survey. Responses for whether the practice was part of a larger system or cared for patients with specific health needs included a response option of "not sure". Indicators for these items were created by grouping responses as "yes" versus other ("not sure" and "no").

There were low levels of missing data for the independent variables. Missing data rates ranged from 0.06% for sex to 16.9% for physician payment source. Single random imputation, where values for missing items were randomly identified based on the range of values of responses to the item, was performed for all independent variables to decrease missing data burden in our sample.

Assessment of APCP or PCMH

We assessed the issue of whether respondents worked in an APCP/PCMH in 2 ways: (1) use of the survey item, and (2) creation of an APCP/PCMH index as a substitute for the single item question.

1. Respondents were asked as a survey item if their practice was identified as an APCP or PCMH. Thus, the first way we assessed this issue was by using respondents to create the binary APCP/PCMH variable ("yes" vs "no" and "unsure").
2. Because 19% of the responses were "unsure" ("yes" = 33%, "no" = 46%), we also created an index from other survey items thought to be indicative of APCP/PCMH practices by using the following approach:
   (a) We identified 4 primary care researchers to participate in a small modified Delphi panel for the purpose of identifying potential Commonwealth survey questions to be included in an APCP/PCMH index. The researchers were recruited as a convenience sample from our contacts. Each panelist was familiar with various logic models of APCP/PCMH and each conducts research around characteristics and outcomes of APCP/PCMH practices.
   (b) We provided each member with a logic model[18] for APCP/PCMH practices and all the survey items other than physician demographics.
   (c) We conducted a 2-round Delphi process to identify which survey items belonged in the APCP/PCMH index. In round 1, we asked the panel to identify which survey items should not be included in the final index reflecting characteristics of an APCP/PCMH practice. Items were excluded if 75% of respondents agreed the item did not belong. For the second round, we presented the respondents with the narrowed item pool and asked them to identify which remaining items should be included in an index reflecting APCP/PCMH practice characteristics. Items were retained as candidates if 75% of respondents agreed that the item should be retained. This process identified

47 survey items from the original 92 for consideration in our index.

(d) The initially derived APCP/PCMH index was then subject to further assessment using multiple methods. First, we examined the internal consistency of all 47 items selected by the Delphi panel. This resulted in a Cronbach α of 0.862; however, some items showed negative and extremely low item-total correlations. Because this index may be multidimensional and likely assesses broad characteristics of APCP/PCMH, we chose a lower item-total correlation cutoff of 0.20 for item inclusion in the final APCP/PCMH index. After systematically removing items that did not meet this threshold, the resulting APCP/PCMH index had a Cronbach α of 0.879, showing high internal consistency (N = 41 items; Supplemental Appendix). The Spearman-Brown split-half reliability coefficient was 0.660, and the χ^2 test of parallel models was nonsignificant, indicating that the split halves do not significantly differ. Thus, the final 41-item APCP/PCMH index demonstrated good consistency and reliability as a group of items, available through this survey, assessing the APCP/PCMH features of a practice. This analysis was completed using IBM SPSS version 25.

(e) We assessed the validity of the derived index further by comparing it to the binary ACPC/PCMH variable (yes = 1, other = 0) based on the survey item using a 2-sample *t* test. In addition, unadjusted and adjusted logistic regression analyses were performed using the binary PCMH item as the outcome and the APCP/PCMH index as the predictor to determine the odds ratio for how well the APCP/PCMH index predicts the binary variable.

Data Analysis

Bivariate analysis were performed using χ^2 tests

We then created 2 multivariable logistic regression models to identify independent variables predicting ACP conversations (the outcome). One model used the APCP/PCMH single-item question and the other used the APCP/PCMH index. Both adjusted and unadjusted logistic regression analyses were performed for this analysis. Adjusted models included the imputed independent variables. These analyses were performed using R version 5.3.1. *P* values less than .05 were considered statistically significant.

Results

Table 1 describes the US PCP respondents and their practices. Most of the sample consists of male physicians (60%) that are 45 years or older (74%). A total of 45% of the PCP respondents identified their work as causing high stress. Most (70%) practice in cities or suburbs. The most common payment mechanism is fee for service (69%) and the least common is capitation (26%). The practices they work in often see patients with multiple chronic conditions but much less commonly (23%) care for patients with palliative needs. About one-third of practices provided home visits, belonged to an accountable care organization, or were identified as a APCP/PCMH practice based on the 1-item question. Nearly 30% of respondents worked in a large integrated system.

Table 1 displays physician and practice characteristic differences between respondents who indicated that they routinely engage older or sicker patients in ACP conversations compared with those physicians who indicated otherwise. The differences between these 2 groups are statistically significant for all independent variables except for whether work is high stress ($P = .07$) and whether the practice is identified as a APCP/PCMH practice based on the binary variable ($P = .18$). In addition whether the practice is part of an integrated system was not significantly associated ($P = .38$) and not depicted in Table 1 due to the finding that $P > .2$. This variable was also excluded in additional analyses.

Multivariable logistic regression results of physician and practice characteristics with ACP conversations are shown in Table 2. In this analysis, the binary APCP/PCMH variable was incorporated as an independent variable. In this multivariable analysis, most of the variables previously associated (in the bivariate comparisons) with whether or not the physician routinely engaged older or sicker patients in ACP conversations were no longer found to be associated. However, working in a practice with the following features were statistically significant: practice in the suburbs (negative association) ($P = .05$), practice seeing patients with multiple chronic conditions ($P < .001$), practice seeing patients with

Table 1. Bivariate Associations of Physician and Practice Characteristics with Advance Care Planning*

Variable	Total Respondents, n (%)	Routinely Engage About ACP, n (%)	Do Not Routinely Engage About ACP, n (%)	*P* value
Practice is a APCP/PCMH (binary variable)	338 (34.6)	169 (36.9)	169 (32.6)	.18
Age 45+	714 (73.6)	349 (76.9)	365 (70.7)	.001
Male	589 (60.6)	308 (67.7)	281 (54.4)	.001
Consider work high stress	433 (44.8)	217 (47.9)	216 (42.0)	.07
Practice location				.001
City	379 (39.2)	186 (41.1)	193 (37.6)	
Suburb	304 (31.5)	119 (26.3)	185 (36.1)	
Small town	175 (18.1)	91 (20.1)	84 (16.4)	
Rural	108 (11.2)	57 (12.6)	51 (9.9)	
Practice belongs to an ACO	347 (36.1)	184 (40.6)	163 (32.0)	.01
Physician payment				
Clinical targets	370 (38.2)	200 (44.2)	170 (32.9)	.001
CMS incentives	441 (45.6)	237 (52.2)	204 (39.7)	.001
Fee for service	604 (68.5)	300 (73.2)	304 (64.4)	.01
Capitation	210 (25.8)	119 (31.4)	91 (20.9)	.001
Salary	461 (52.7)	200 (49.0)	261 (56.0)	.05
Practice often sees patients with:				
Multiple chronic conditions	812 (84.4)	443 (98.0)	369 (72.4)	.001
Palliative care needs	216 (22.5)	157 (35.0)	59 (11.6)	.001
Practice does home visits	333 (35.2)	217 (48.8)	116 (23.2)	.001

*N = 1001. All these analyses were done using χ^2 tests, using data that had not yet undergone imputation. Therefore, each row has slightly different Ns associated due to different levels of missing data for each variable. APCP/PCMH, Advanced Primary Care Practice/Patient Centered Medical Home; ACO, Accountable Care Organization; CMS, Centers for Medicare & Medicaid services..

palliative needs ($P < .001$), and practice providing home visits ($P < .001$) (all positively associated). In addition, having some physician payment through a capitation mechanism was also associated with engaging in ACP conversations ($P = .05$).

As described previously, we created the APCP/PCMH index from survey items to reflect APCP features because there were numerous "unsure" responses to the APCP/PCMH single survey item. For respondents who identified their practices as non-APCP/PCMH by using the binary variable, the average APCP/PCMH index value was 21.8, whereas the average for the APCP/PCMH group using the binary variable was 27.2 (possible range, 0 to 41). These means are significantly different by a 2-sample *t* test ($P < .001$). The unadjusted logistic regression for the APCP/PCMH index predicting the binary PCMH variable found an odds ratio of 1.11 ($P < .001$), as demonstrated in Table 3. Thus, an increase in the index score corresponds significantly with an increase in the odds of the binary APCP/PCMH variable being a "Yes" response.

When the multivariable logistic regression analysis predicting ACP conversations was repeated using the APCP/PCMH index rather than using the binary variable, the index is significantly positively associated with ACP conversations (odds ratio, 1.07; $P < .001$). Table 4 demonstrates this and additionally shows that practices where physician payment source involved capitation ($P = .04$), caring for patients with multiple chronic illness, or with palliative needs or when the practice provides home visits (each $P < .001$) all remain significantly associated with physicians routinely engaging older or sicker patients in ACP conversations.

Discussion

In this large representative sample of US primary care physicians, 47% report that they routinely have conversations with older or sicker patients about the health care they would or would not want in the event that they became ill, injured, or unable to make their own health care decisions. Another 31% report that they occasionally have such con-

Table 2. Multivariable Regression Predicting Physicians Routinely Engaging Older and Sicker Patients in Advance Care Planning, Using Binary PCMH Variable*

Variable	Odds Ratio	95% Confidence Interval	*P* value
Practice is APCP/PCMH (binary variable)	1.00	(0.72–1.49)	.99
Age 45+	1.22	(0.87–1.72)	.25
Male	**1.40**	**(1.03–1.90)**	**.03**
Consider work high stress	0.99	(0.74–1.32)	.94
Practice location			
City	reference		
Suburb	**0.66**	**(0.46–0.94)**	**.02**
Small town	0.98	(0.65–1.48)	.94
Rural	0.86	(0.53–1.40)	.55
Practice belongs to an ACO	1.14	(0.82–1.57)	.43
Physician payment			
Clinical targets	**1.42**	**(1.04–1.94)**	**.03**
CMS incentives	1.18	(0.87–1.60)	.28
Fee for service	1.14	(0.73–1.78)	.57
Capitation	**1.48**	**(1.03–2.11)**	**.03**
Salary	0.92	(0.61–1.37)	.67
Practice often sees patients with:			
Multiple chronic conditions	**11.53**	**(5.67–23.42)**	**<.001**
Palliative care needs	**2.36**	**(1.65–3.36)**	**<.001**
Practice does home visits	**2.12**	**(1.56–2.88)**	**<.001**

APCP, advanced primary care; PCMH, patient centered medical home; ACO, accountable care organization.
*N = 977. Values imputed when absent.
Bolded items and values are statistically significant.

versations.[23] Our evaluation of physician- and primary care practice-level characteristics reveals that physicians who receive at least some reimbursement through capitation mechanisms and who work in practices that see patients with multiple chronic illnesses or with palliative care needs or see patients in their homes are also more likely to have ACP conversations routinely. In addition, in the bivariate and multivariable model using the single APCP/PCMH question, male physicians more commonly had ACP conversations.

We hypothesized that physicians who work in APCP/PCMH practices would be more likely to routinely engage in ACP conversations with patients because (1) practices using these advanced models have built-in features and processes known to facilitate more ACP conversations, (2) APCP/PCMH practices meet quality standards to gain certification,[24] and (3) previous research has shown that patients who obtain care from higher quality primary care practices are more likely to report having engaged in ACP conversations.[20] The results we report demonstrate that whether being an APCP/PCMH practice is associated with ACP conversations depends on how APCP/PCMH practices are identified.

Table 3. APCP Index Predicting Binary PCMH Variable

	Unadjusted Logistic Regression		Adjusted Logistic Regression	
	OR (95% CI)	*P* value	OR (95% CI)	*P* value
APCP index	1.11 (1.09, 1.13)	<.001	1.09 (1.06, 1.12)	<.001

APCP, advanced primary care; PCMH, patient centered medical home; ACO, accountable care organization; OR, odds ratio; CI, confidence interval.

When physicians answered the single question about whether their practice was an APCP/PCMH practice, there was no association with having ACP conversations with patients. However, when we used an index of characteristic demonstrated by APCP/PCMH practices, there was a strong association with physicians having these conversations. This is a key finding in our analysis. Furthermore, the difference between male and female physicians in regard to how routinely they had ACP discussions with patients was no longer significant.

We believe that the constructed APCP/PCMH index is valid and potentially more reflective of an APCP/PCMH practice for several reasons. First,

Table 4. Multivariable Regression of Advance Care Planning Conversations, Including the APCP Index*

Variable	Odds Ratio	95% Confidence Interval	*P* value
APCP index	**1.07**	**(1.05–1.09)**	**.00**
Age 45+	1.26	(0.89–1.79)	.20
Male	1.30	(0.95–1.78)	.10
Considering work high stress	1.06	(0.79–1.42)	.70
Practice location			
City	reference		
Suburb	**0.65**	**(0.45–0.93)**	**.02**
Small town	0.94	(0.62–1.43)	.78
Rural	0.89	(0.54–1.46)	.63
Practice belongs to an ACO	0.96	(0.69–1.33)	.81
Physician payment			
Clinical targets	1.15	(0.83–1.59)	.40
CMS incentives	0.94	(0.69–1.29)	.71
Fee for service	1.16	(0.73–1.82)	.53
Capitation	**1.48**	**(1.03–2.13)**	**.04**
Salaried	0.83	(0.55–1.24)	.36
Practice often sees patients with:			
Multiple chronic conditions	9.95	(4.87–20.34)	.00
Palliative care needs	**2.03**	**(1.41–2.93)**	**.00**
Practice does home visits	**2.01**	**(1.47–2.75)**	**.00**

APCP, advanced primary care. ACO, accountable care organization.
*N = 977. Values imputed when absent.
Bolded items and values are statistically significant.

the APCP/PCMH question had a high rate of respondents who were "not sure" whether their practice was a APCP/PCMH. For analytic purposes, we grouped these responses with the "no" responses, but there may be misclassification as some "not sure" responses may actually work in PCMH practices. Second, the use of a modified Delphi approach to identify items to be included in the functional APCP/PCMH index, especially when anchored by a widely accepted logic model for APCP/PCMH, added rigor to the development of this index. Third, the created APCP/PCMH index described many behaviors of primary care practices that likely account for why APCP/PCMH practices deliver higher quality care.[18] In addition to addressing our hypothesis, we believe that the development, testing, and application of an index of quality, derived from a logic model of APCP/PCMHs, has advanced the science of quality practice assessment. Although the items composing our index are applicable only within this dataset, we hope that others might consider our approach when developing other measures of quality performance in primary care practices.

Our study has some limitations. The data result from the respondents' perspectives of various features of their patients and practice and several terms used, including "need for palliative care," were not defined. As has been identified by others,[25] the respondent interpretation of the term "palliative care" may influence their responses in unpredictable ways. As implied by "not sure" responses to the APCP/PCMH item, physicians may have an incomplete or incorrect perception of features of their practice. In addition, the analysis was limited to the survey items. This limited our ability to create an ideal index that captured all the domains found in logic models of APCP/PCMH. Our index, although functioning well in terms of internal consistency and strong association with whether a practice is identified as APCP/PCMH, may not be applicable beyond this dataset.

These data confirm previous findings that routine ACP conversations in primary care practices are not common, even with patients who are older or sicker.[8] The available data allowed us to describe physician and practice features associated with these conversations. Primary care practice features that are associated with routinely having these conversations (seeing patients with multiple chronic conditions, identifying palliative care needs, and providing home visits) have not been described before. It may be that some prac-

tices who find themselves providing care for sicker, less mobile patients adapt their mechanisms for delivering that care, including ACP. Our finding that respondents working in suburban practices are less likely to engage patients in ACP conversations suggests that practice location is associated with scope of care. The previous finding that family physicians practicing in rural areas report providing palliative services more commonly,[25] similarly tends to confirm this phenomena as it relates to an older or sicker population. In addition, the role of physician payment through capitation has not previously been described. Similar to previous findings that patients who complete any part of the ACP process are more likely to attend higher quality primary care practices,[20] we find here that physicians who work in practices that incorporate more processes and functions found in higher quality primary care also are more likely to engage patients in ACP conversations. The mechanism for this association between ACP conversations and higher quality primary care are unknown but may be related to enhanced use of team-based care models[26–28] or use of electronic health records to support these discussions.[10–13]

We believe that our findings have both clinical and policy implications in improving the uptake of routine ACP conversations in US primary care practices. As the population ages and develops associated multiple chronic conditions, these individuals also have associated palliative needs across the dimensions of illness experience, and these needs change over time.[29] Clinically, the integration of patient values, goals, and preferences into personalized health care planning processes is a patient-centered alternative to guideline-driven care.[30] ACP conversations can help support decision-making by specifying the domains of suffering or quality of life that patients experience along their chronic illness trajectories.[29] From a policy perspective, the routine incorporation of ACP facilitates care that meets the triple aim—improving patient experience through improving patient satisfaction,[3,31] improving population health by reducing caregiver distress,[31] and reducing per capita health care costs by creating care plans allowing patients to avoid hospitalizations when their goals are to remain at home.[2,3] The specific role that ACP conversations may have in the move toward value and quality-based primary health care delivery is currently unknown, but efforts are currently planned to evaluate their impact on quality and costs.[19]

Understanding how to support primary care practices to routinely incorporate ACP conversations are critical areas for research and policy initiatives. Several creative approaches to expand these conversations are being explored, including development of a Serious Illness Conversation Guide for use in primary care settings,[32] exploration of group visits models focused on ACP conversations,[33] and web sites that guide patients and their loved ones through initial ACP conversations and create documents that can be uploaded into electronic health records via patient portals.[34] Our study demonstrates how evidence-based tools to support ACP conversations may have enhanced reach and effectiveness when implemented in higher quality primary care practices.

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Appendix

Items and Statistics for Index of APCP-PCMH

Q#	Question
Q9.	Do you/other personnel that work in the practice provide care in any of the following:

Q#	Question
Q11.	How prepared is your practice to manage care for the following patients:
Q16.	When your pt goes to ED or admitted to hospital how often do you receive:

Q#	Question
Q20.	If any of your pts receive home health services how often do:
Q28b.	Does your practice offer patients the option to:
Q29.	Can your practice generate information about your patients using computerized processes:
Q30.	Are the following routinely performed in your practice using computer:
Q31.	Does the place where you practice routinely receive and review data re the following:

Index Item-Total Statistics

Question in 2015 Commonwealth Fund International Health Policy Survey of Primary Care Physicians in 10 Nations used to create the index of APCP/PCMH	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
q3 - Your rating of changes in quality of medical care patients receive compared to 3 years previously?	23.41	58.059	0.230	0.879
q8 - Does your practice have an arrangement where patients can see a Dr or nurse if needed when the practice is closed, without going to hospital or ED?	23.27	57.952	0.212	0.879
q9 - Do you/other personnel that work in the practice provide care in any of the following:				
q9b - Coordinate f/u care with hospitals?	22.80	58.164	0.284	0.878
q9d - Coordinate care with social services or other community providers?	22.77	58.627	0.225	0.878
q11. - How prepared is your practice to manage care for the following patients:				
q11a - Chronic illness?	22.91	57.411	0.333	0.877
q11b - Mental health problems?	23.51	58.352	0.229	0.878
q11c - Substance use issues?	23.51	58.242	0.255	0.878
q11d - In need of palliative care?	23.31	56.837	0.374	0.876
q11e - In need of Long Term Care?	23.25	56.555	0.401	0.876
q11f - With community needs?	23.37	57.149	0.349	0.877
q11g - Needing language translation?	23.32	57.705	0.254	0.878
q11h - With dementia?	23.29	56.876	0.363	0.876
q12 - Does your practice use personnel to monitor and manage care for patients with chronic conditions that need regular follow up care?	23.01	56.487	0.428	0.875
q13 - Are pts with chronic conditions given written instructions about how to manage their own care at home?	22.77	58.177	0.324	0.877
q14 - For patients with chronic conditions are their self management goals recorded in their med record??	22.87	57.870	0.285	0.878
q15a - A report back with all relevant health info?	22.91	57.524	0.316	0.877
q15b - Info about changes specialist has made to med or care plan?	22.95	57.232	0.344	0.877
q15c - Info that is timely and available when needed?	23.03	57.363	0.299	0.878
q 16. - When your patient goes to the ED or is admitted to the hospital how often do you receive:				
q16a - Notification seen in ED or admitted to hospital?	22.95	57.084	0.364	0.876
q16b - Notification being dc'd from hospital?	22.99	56.798	0.389	0.876
q17 - After hospital dc how long does it take for you to get info needed to manage the patient?	22.92	57.705	0.286	0.878
q20. - If any of your patients receive home health services how often do:				
q20a - You or practice personnel communicate with patient's home care provider?	23.22	56.955	0.342	0.877
q20b - Are you advised of a relevant change in patient's condition?	23.12	57.042	0.330	0.877
q21 - How easy or difficult is it to coordinate patient care with social services or other community providers?	23.34	57.393	0.302	0.878
q28b. - Does your practice offer patients the option to:				
q28ba - Email the practice?	23.08	57.102	0.325	0.877
q28bb - View, download, etc, information from the medical record?	23.05	56.424	0.425	0.875
q29 - Can your practice generate information about your patients using computerized processes:				
q29a - List of patients by diagnosis?	22.89	56.987	0.419	0.876
q29b - List by if patient is overdue for preventive care?	23.01	55.983	0.500	0.874
q29d - List of medications taken by individual patient?	22.94	56.580	0.448	0.875

continued

Continued

Question in 2015 Commonwealth Fund International Health Policy Survey of Primary Care Physicians in 10 Nations used to create the index of APCP/PCMH	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
q29e - List of lab results for individual patient?	23.04	56.409	0.431	0.875
q29f - Clinical summary for each visit to give to the patient?	22.89	56.982	0.415	0.876
Q30.- Are the following routinely performed in your practice using computer:				
q30a - Patient sent reminder notices about preventive or follow up care?	23.26	56.453	0.418	0.875
q30b - All lab tests followed until results reach clinicians?	23.05	56.503	0.415	0.875
q30c - You receive prompt to provide patient with test results?	23.16	56.428	0.412	0.876
q30d - You receive reminder about guideline based intervention/ screening?	23.20	56.067	0.462	0.875
q31. - Does the place where you practice routinely receive and review data about the following:				
q31a - Clinical outcomes?	23.15	55.875	0.488	0.874
q 31b. - Surveys of patient satisfaction?	23.03	56.270	0.453	0.875
q31c. - Patient hospital or emergency department use?	23.10	56.262	0.439	0.875
q31d. - % of patients receiving recommended care?	23.10	55.882	0.492	0.874
q32. Are any of your own clinical performance reviewed against targets at least annually?	22.92	56.825	0.419	0.876
q33. Do you receive info on how the clinical performance of your practice compares to other practices?	22.99	57.036	0.355	0.877