Periodic Health Examinations and Missed Opportunities Among Patients Likely Needing Mental Health Care

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ABSTRACT

OBJECTIVES: Periodic health examinations (PHEs) are the most common reason adults see primary care providers. It is unknown if PHEs serve as a "safe portal" for patients with mental health needs to initiate care. We examined how physician communication styles impact mental health service delivery in PHEs.

STUDY DESIGN: Retrospective observational study using audio-recordings of 255 PHEs with patients likely to need mental health care.

METHODS: Mixed-methods examined the timing of a mental health discussion (MHD), its quality, and the relationship between MHD quality and physician practice styles. MHD quality was measured against evidence-based practices as a 3-level variable (evidence-based, perfunctory, or **absent**). Physician practice styles were measured by: visit length, verbal dominance, and elicitation of a patient's agenda. A generalized ordered logit model was used.

RESULTS: Many patients came with mental health concerns, as over 50% of the MHDs occurred in the first 5 minutes of the visit. One-third of the 255 patients had an evidence-based MHD, another third had a perfunctory MHD, and the remaining had no MHD. MHD quality was significantly associated with physician communication styles. Visits with physicians who tend to spend more time with patients, fully elicit patients' agendas, and let patients talk (instead of being verbally dominant) were more likely to deliver evidence-based MHD.

CONCLUSIONS: If done well, PHEs could be a safe portal for patients to seek mental health care, but most PHEs fell short. Improving PHE quality may require reimbursement for longer visits and coaching for physicians to more fully elicit patients' agendas and to listen more attentively.

Am J Manag Care. 2016;22(10):e350-e357

The majority of patients with mental health concerns turn to their primary care physicians for help.[1,2] Many rely on periodic health examinations (PHEs)—the most common reason for adults to visit physicians.[3] Proponents of PHEs argue that, besides increasing the use of preventive services, PHEs bring patients into contact with their primary care physicians, and therefore, provide a route by which patients seek services that they feel uncomfortable disclosing to the scheduling staff. In fact, as many as 1 in 3 patients have undisclosed reasons for requesting a PHE.[4] Mental health care needs may be an example of undisclosed reasons that prompt some patients to use the time-honored PHE tradition as a "safe portal" to seek mental health care.

Evidence-based mental health care improves patient outcomes not only through the reduction of mental illness symptoms, but also by improving physical and social functioning.[5] Primary care physicians' communication practices and skills have been documented to influence the quality of mental health service delivery in primary care visits.[6] It has been shown that even when patients have an agenda, they commonly do not make it explicit in ambulatory encounters.[7-9] Essential communication approaches that can be employed by the physician to ensure effective communication (eg, being open to patients' agendas[10]), fully eliciting patients' concerns and preferences,[11] and co-creating the visit agenda with them,[12-17] contribute to improving the overall quality of patient–provider communication.

In addition to fully eliciting patients' agendas for the visit, physicians must give patients enough time to speak. It is not uncommon that some physicians dominate the conversation, in order to control the time used; however, it is necessary to balance the need to manage the conversation with the need to let the patient speak. Verbally dominant physicians disempower patients and impair patient engagement.[18] It has been well-documented that patients were less satisfied with their physicians when physicians talked more and when patients perceived their physicians as domineering, and patients were ultimately less likely to sue physicians with low verbal dominance.[14,19] The literature is relatively silent on how

primary care physicians' verbal dominance could affect the quality of discussions about mental health during PHEs.

Giving patients time to speak rather than dominating the conversation can affect the length of visits, however. Visit length has long been the subject of research and has been shown to be associated with the delivery of evidence-based preventive health services (both screening and counseling).[20,21] It is not known if patients with mental health needs who see primary care providers (PCPs) who tend to provide longer visits with patients may be more likely to receive evidence-based mental health services. Mental health issues are perceived to be difficult and have been well-documented to receive suboptimal attention in ambulatory care settings.[6] Furthermore, the provision of mental health screening and counseling during PHEs has received less attention than the delivery of evidence-based biomedical screening and lifestyle counseling during PHEs.[20]

TAKE-AWAY POINTS

Periodic health exams (PHEs) could be a "safe portal" for patients with mental health needs to receive care. We found:

- The quality of mental health discussions varied greatly in 255 audio-recorded PHEs in an integrated delivery organization: 1 of 3 was evidence-based, 1 of 3 was perfunctory, and 1 of 3 was nonexistent.
- Physicians who spend more time with patients, fully elicit patients' agendas, and let patients talk were more likely to deliver evidence-based mental health care.
- Improving care quality may require reimbursement for longer visits, coaching for physicians to fully elicit patients' agendas, and to listen more attentively.
- Routine assessment of mental health status should be reinforced.

For PHEs to be valuable to patients with mental health needs, evidence-based mental health discussion is required. **Figure 1** illustrates our hypothesis that 3 sets of predisposing physician and patient factors influence the quality of mental health discussion (MHD): evidence-based, perfunctory, or absent. The first group of factors consists of physician practice styles: how much time a physician usually provides in visits, a physician's openness to the patient's agenda, and a physician's verbal dominance. The second set of factors relates to patients' mental health status and if the patient is in an ongoing episode of care[22] for a mental health issue. The third factor relates to a patient's preparedness for the visit (ie, if a list has been prepared and brought to the visit for discussion with the physician). These tasks have also been shown to increase patient satisfaction and subsequent patient self-management.[10,12-15]

Using qualitative and quantitative research methods, we investigated whether PHEs offer patients an opportunity to discuss mental health with physicians. We also measured the quality of MHD based on its concordance with evidence-based practices by coding audio recordings and transcripts of PHEs (described later). We further sought to operationalize measures of physician communication styles that could be associated with the delivery of evidence-based MHD and are also potentially malleable.

METHODS

Study Sample and Data Sources

Patients with mental health needs were drawn from a sample of 484 participants, aged 50 years or older, in a study of preventive health discussions,[23] which took place at an integrated health delivery system in Detroit, Michigan, between February 2007 and June 2009. Patients completed a brief telephone survey at recruitment, containing the Patient Health Questionnaire-2 (PHQ-2)[24] and sociodemographic characteristics. Furthermore, each patient's visit was observed and audio recorded by a research assistant. Additional details of the study have been reported elsewhere.[21,23,25] The institutional review boards of relevant organizations approved the study. Informed consent of study participants conveyed that the study would examine patient–physician communication about preventive health issues. No specific mention of mental health focus was made.

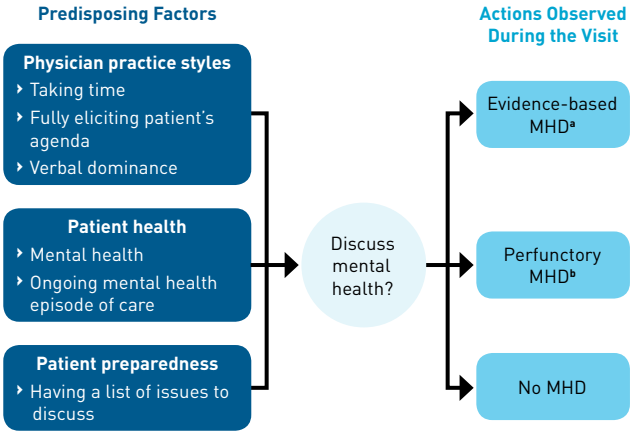
The sample for the current study consisted of 56 PCPs and 255 patients identified as likely in need of mental health care if they met any of the following criteria: 1) scored ≥2 on the PHQ-2,[24] 2) filled or were prescribed a psychotropic medication, 3) had a mental health diagnosis (*International Classification of Diseases (ICD)-9* codes 290, 293-302, 306-316) in the electronic health record (EHR), or 4) visited a behavioral health provider. The look back period was 12 months before the visit.

Coding of audio recordings of PHEs. Five researchers coded audio recordings and transcripts of the visits to capture topics within 7 major areas: biomedical (eg, high blood pressure), health behaviors (eg, smoking), mental health (eg, depression,), psychosocial (eg, family), physician–patient relationship (eg, physician availability), visit flow management (eg, agenda setting), and other (eg, small talk about weather). Topics were defined as issues that had at least 2 complete exchanges between patient and physician. The time spent on discussing each topic was also recorded for both the patient and the physician. This analytical approach has been described in detail and applied in previous research.[26] Studying a visit as a conversational event enabled us to understand the relative time spent on each topic by the patient and the physician, and if and how one person dominated the conversation.[26]

Scores from different raters were compared using intra-class correlations for numerical variables and percentage agreement for categorical variables. Intra-class correlations between raters and within the same rater ranged from 0.78 to 0.99.

Variables. The dependent variable was a 3-level variable for the quality of MHD. We defined MHD as any exchange about depression, general anxieties and worries, emotional distress, death,

FIGURE 1. Predisposing Physician and Patient Factors Influence What Happens in a Visit



MHD indicates mental health discussion.

[a]An evidence-based MHD is considered to be present if physician performed any guideline-concordant actions, including assessment and diagnosis, education and treatment, monitoring response to treatment, and treatment modification or intensification.

[b]Perfunctory MHDs are those that are limited to brief and close-ended questions by physicians unaccompanied by follow-up investigation even if there may be cues from patients that could warrant further exploration.

bereavement, grief, mourning, death of others, pain, suffering, concerns, and worries regarding one's own physical condition, tests, treatments, procedures, or other mood disorders.[6] Whether or not the MHD was evidence-based was determined by the degree of concordance with treatment guidelines,[27] including if the physician assessed the patient's mood using any item from the PHQ-9,[28] made a mental health diagnosis, prescribed psychotropic medication, made a referral to a mental health specialist, or made a plan for active surveillance of mental health symptoms (Figure 1). Perfunctory discussions (eg, "Any anxiety or depression?") followed immediately by a nonrelated statement or questions (eg, "Any vaginal spotting or bleeding?") were coded as non–evidence-based. The value of the outcome measure is 0 for no MHD, 1 for a perfunctory MHD, and 2 for an evidence-based MHD.

Key explanatory variables included both measures of physician practice style and patient characteristics. Physician practice style measures included visit length, eliciting patient agendas, and verbal dominance gathered from their visits with other study patients to form exogenous measures of these constructs to the index visit. Visit length was measured by the face-to-face interaction time in minutes between patients and physicians from other visits. Eliciting patient agenda was defined as the proportion of visits in which the physician attempted to fully identify the patient's agenda (5 on a scale of 1 to 5)[29]—there was unanimous agreement among the 5 coders for this variable. Verbal dominance was defined by the ratio of actual talk time by the physician divided by talk time by the patient. To account for physicians' proclivity to provide evidence-based services, we also included a count of evidence-based preventive services.[21]

Patient characteristics were obtained from the EHR, a pre-visit patient survey, and direct office visit observation. Patient health status included whether in an ongoing episode of care (EOC) for mental illness,[22] PHQ-2 score, and if the patient had brought a list of issues to discuss.

Analytic Approach

For the quantitative analysis, we specified a generalized ordered logit model with partial proportional odds for the 3-level ordinal dependent variable of evidence-based MHD. Our model constrained the odds ratios to be proportional across these 3 levels for all variables except PHQ-2 score. Tests of the proportional odds assumption indicated it was reasonable for the remaining variables. Three groups of explanatory variables were included in the model, as illustrated in Figure 1. The first group included physician practice style factors, as measured in the other visits to the same physician among the study sample: a) average visit length, b) percent of visits in which they fully elicited the patient's agenda, and c) verbal dominance.

The second group were patient factors: patient's mental health needs (ie, self-reported depressive symptoms in the PHQ-2),[24] anxiety (ie, self-reported anxiety attack in the previous 4 weeks), and whether the patient was in an ongoing episode of care for mental health.[22] The third related to patient activation level (ie, whether the patient brought a list of issues to discuss with the physician). Finally, we controlled for patient demographics (ie, age, sex, race/ethnicity, and education), comorbidity (Charlson Comorbidity Index score[30]), and the number of evidence-based services delivered in the visit.[23] Standard errors were clustered by physician. The statistical analyses were conducted using Stata 14 (STATA, College Station, Texas).

To provide some contextual information on how visits between physicians at different levels of verbal dominance might evolve differently, we selected a few visits with high versus low verbally dominant physicians seeing patients with similar PHQ-2 scores to examine the timing and quality of mental health discussion. We mapped the topics, sequentially, as they took place during the visit.

RESULTS

Visit, Patient, and Physician Characteristics

Table 1 summarizes the characteristics of the study sample: 255 patients likely in need of mental health care saw 53 physicians practicing in about 2 dozen primary care clinics. The majority of patients were white (66%) and female (63%), with an average age of 60. About 9% of patients reported having an anxiety attack in the 4

weeks prior to study recruitment, the average PHQ-2 score was 1.1 [standard deviation (SD) = 1.5], and 37% were in an ongoing episode of care for a mental health condition. Their Charlson Comorbidity Index scores averaged 0.8 (SD = 1.4); 11% of patients brought a written list. These did not vary by MHD levels.

The median visit length was 26 minutes (SD = 10.3). A third of visits (33%) contained no MHD, 33% had an evidence-based MHD, and 34% had a perfunctory MHD.

Among the physician factors, the average length of other nonindex visits was 27 minutes (SD = 8) and rose with the level of MHD, from absent to perfunctory to evidence-based: 25 (SD = 6), 28 (SD = 9), and 29 (SD = 8), respectively. The average percent of visits in which the physician fully elicited the patient's agenda in other nonindex visits was 25% and increased with the level of MHD, from absent to perfunctory to evidence-based: 19, 27, and 29, respectively. The average physician verbal dominance in other visits was 3.2 (SD = 2.2) and declined in visits with absent, perfunctory, and evidence-based MHD: 3.8 (SD = 2.8), 3.2 (SD = 2.1), and 2.6 (SD = 1.2), respectively. Finally, the average number of evidence-based services delivered was 2.9 (SD = 1.5) and increased with the level of MHD from absent to perfunctory to evidence-based: 2.7 (SD = 1.4), 2.8 (SD = 1.4), and 3.2 (SD = 1.6), respectively.

TABLE. Information on Patients, Physicians, and Visits, Occurrence of Mental Health Discussion and its Concordance With Evidence-Based Practice Guidelines

	All Patients	No MHD	With MHD		*P*
			Perfunctory	Evidence-Based	
Number of patients	255	85	87	83	
Median time of MHD initiation	4.9	N/A	6.3	3.3	.03
Patients					
Age, years: mean (SD)	59.6 (8.3)	61.7 (9.0)	58.5 (8.0)	58.6 (7.5)	.05
Male, %	36.9	52.9	34.5	22.9	<.001
Nonwhite, %	33.7	43.5	28.7	28.9	.05
High school/GED or higher, %	95.7	91.8	97.7	97.6	.07
PHQ-2 score, mean (SD)	1.1 (1.5)	1 (1.3)	0.6 (1.0)	1.8 (1.8)	<.001
In ongoing EOC,[a] %	37.3	29.4	39.1	43.4	.06
Anxiety attack in past 4 weeks, %	9.0	4.7	3.4	19.3	.01
CCI score, mean (SD)	0.8 (1.4)	0.8 (1.1)	0.9 (1.8)	0.8 (1.2)	.91
Brought written list to visit, %	10.6	8.2	8.0	15.7	.11
Physicians					
Number of physicians	53	36	43	36	
MD age, years: mean (SD)	49.4 (8.7)	51.3 (7.5)	50.2 (8.2)	51.8 (8.0)	.73
MD male, %	41.5	54.1	46.0	36.1	.05
MD family medicine, %	32.1	30.6	34.5	31.5	.94
Verbal dominance at other visits,[b] mean (SD)	3.2 (2.2)	3.8 (2.8)	3.2 (2.1)	2.6 (1.2)	<.01
Length of physician's other visits, mean (SD)	27.4 (7.8)	25.1 (6.4)	28.0 (8.6)	29.1 (7.6)	<.01
Outstanding agenda setting at other visits, %	25.1	19.4	27.1	28.9	.03
Number of evidence-based services delivered, mean (SD)	2.9 (1.5)	2.7 (1.4)	2.8 (1.4)	3.2 (1.6)	.01

CCI indicates Charlson Comorbidity Index; EOC, episode of care; GED, General Educational Development test; MHD, mental health discussion; N/A, not applicable; SD, standard deviation.
[a]Episode of care for mental illness.
[b]The ratio of average total physician talk time over average total patient talk time in other visits.

Mental Health as a Reason for Some Patients to Schedule a PHE

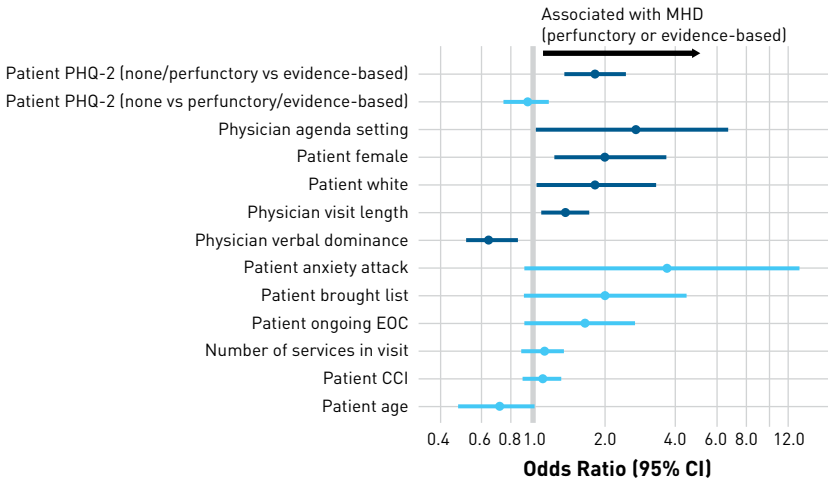
Over 50% of MHDs occurred within the first 5 minutes of visit initiation (median = 4.9; SD = 9.1). Ninety percent of them occurred within the first 19 minutes of the visit, which is 7 minutes fewer than the median visit length. The median time of MHD initiation was 6.3 minutes for perfunctory versus 3.3 minutes for evidence-based discussions (P <.05). Thus, evidence-based MHDs occurred 3 minutes earlier in the visit than perfunctory MHDs.

In addition to MHDs occurring in the first few minutes of the visit, the nature of the conversation also suggested that mental health might have been a reason that some patients scheduled a visit. For example, one patient said that she "might need kind of an antidepressant" 54 seconds into her visit. She then broke down in tears and told the doctor that her sister was recently diagnosed with lung cancer. Another patient started to cry before the physician closed the exam room door, saying, "And I knew as soon as I saw you I would start to cry." She stated that she was stressed out at work, "wake[s] up in the middle of the night, worry, worry, worry," and then said, at 1 minute 24 seconds, "And I want a happy pill. Is there such a thing?"

Factors Associated With the Quality of Mental Health Discussion

Figure 2 shows results from the proportional logistic model for the 3 levels of MHD. The model cumulates over adjacent levels of the 3-level MHD quality outcome variable to form odds ratios.

FIGURE 2. Factors Associated with Levels of Evidence-Based Practice of Mental Health Discussion From a Proportional Logistic Model[a,b]

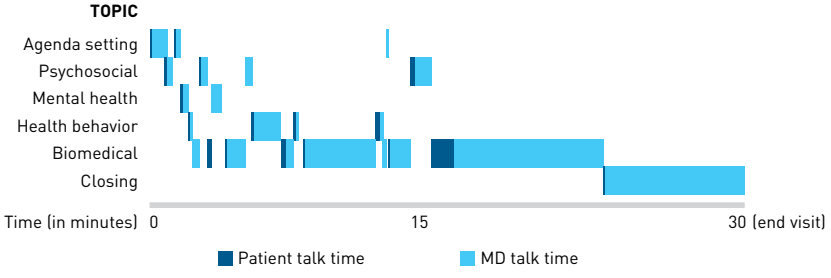


CCI indicates Charlson Comorbidity Index; EOC episode of care; MHD, mental health discussion; PHQ-2, Patient Health Questionnaire-2.

[a]Coefficients and 95% CIs are included for the proportional logit model for no MHD, perfunctory MHD, or evidence-based MHD. Odds are constrained to be proportional across these levels except for PHQ-2 score. Intervals that exclude 1 (the null value) are plotted in dark blue, otherwise in light blue.

[b]Values greater than 1 indicate variables associated with increased odds of mental health discussion (either perfunctory or evidence-based).

FIGURE 3. Conversation Flow in 1 Visit With a Physician With High Verbal Dominance



Our model assumes the odds ratios are the same for evidence-based MHD versus the combination of perfunctory MHD and no MHD, as they are for the combination of evidence-based MHD and perfunctory MHD versus no MHD. For ease of exposition, we state that each odds ratio is the proportional change in the odds of a "higher-quality visit" for each unit increase in the explanatory variable (scaled to SDs for the continuous variables: age, Charlson Comorbidity Index score, physician verbal dominance, visit length, and PHQ-2 score). For every SD increase in length of the physician's other visits (SD = 7.8), the odds of having a higher-quality visit was 1.4 times greater. Similarly, the odds of having a higher-quality visit were 2.7 times higher among physicians who fully identified their patients' agenda (5 on the original 1 to 5 scale) compared with any other level of agenda setting. Increased physician verbal dominance is associated with lower odds of a higher-quality visit. Female patients were twice as likely as males to receive a higher-quality visit. White patients' odds were 1.8 times higher than nonwhites' of receiving higher-quality visit. Higher PHQ-2 scores (SD = 1.5) were associated with 1.8 times higher odds of evidence-based MHD compared with the combined perfunctory and no MHD, but not with increased odds of having any MHD versus no MHD.

Mental Health Discussion and Physician Verbal Dominance

Below we describe 2 mental health discussions (one perfunctory, the other evidence-based) that exemplified physicians with different levels of verbal dominance.

Physician with high verbal dominance. Patient 1's PHQ-2 score was 4, indicating a high likelihood of depression. The patient had no other mental health diagnoses besides hyperkinetic syndrome in her childhood, recorded in the EHR. Physician A's verbal dominance score for other sample visits was 9.7 (almost 3 SDs above the mean), indicating a tendency for Physician A to have a more dominant communication style relative to other physicians in the study. (There were only 5 physicians whose verbal dominance score was 10 or higher.)

Figure 3 illustrates the conversation flow between Physician A and Patient 1. Each color represents the talk time spent by the participant for each instance: dark blue for patient and light blue for physician. The longest biomedical exchange contained topics encompassing shortness of breath, high blood pressure, and bone density. Patient 1 talked for 56 seconds during the 10-minute, 13 second exchange. For the mental health topic, the exchange between Physician A and Patient 1 was as follows: Physician A: "... and you were followed back in behavioral services, and you still see [name of psychiatrist]?" Patient 1: "Yes." Physician A: "Okay. Things are going well there?" Patient 1: "Yes. It's going okay." When Physician A asked the leading questions, "Things are going well there?" Patient 1 answered "It's going okay." "Okay" is a qualified statement and is not the same as "great," "excellent," or "fine." Conversation analysts have noted that "Okay" in response to an opening

exchange typically operates as an invitation for further discussion.[31] However, Physician A did not explore why Patient 1's response was only "Okay." Therefore, the discussion was considered perfunctory.

Physician with low verbal dominance. The verbal dominance score of Physician B from other visits was 1.24 (ie, she spoke only somewhat more than her patients in the other visits in this sample). Patient 2's PHQ-2 was 6, the highest score for PHQ-2. Physician B explored empathic opportunities,[32] asked 8 of the 9 PHQ-9 questions, diagnosed depression, prescribed Effexor, and made a referral for psychotherapy. Part of the discussion is as follows: Physician B: "And you know what? Sometimes as crappy as it feels that you're going through all these crappy feelings—" Patient 2: "Oh, this is awful." Physician B: "—you could kind of look at it as a gift. Like okay, now's your time. You have to do it. You have to deal with these things, you know?" Patient 2: "Right. Right."

DISCUSSION

Among patients likely needing mental health care, only one-third had evidence-based mental health discussions. Another third of the visits had perfunctory MHDs, leaving the remaining third of patients without any MHD. The significant effects of physician practice styles on presence and quality of an MHD deserve our attention.

Patients seeing physicians who spent more time with their other patients were more likely to have a higher-quality MHD. This finding echoes the observation that "slow medicine" can be more appropriate for serving patients with chronic conditions.[33] It is also consistent with previous research that suggests visits in which physicians who provided appropriate counseling or screening took 2.6 to 4.2 minutes longer than visits in which patients did not receive these services.[20] An analysis of 190 video-recorded visits in Europe also suggests that when both physician and patient considered psychosocial problems to be important, consultations lasted longer than those about biomedical problems only.[34] Nevertheless, some physicians are reluctant to deal with patients' complex agendas because they are "overly time consuming."[9]

As our population ages, the number of patients with chronic conditions is rising rapidly. Visit lengths should not be arbitrarily set without much tailoring to patients' individual needs.[35] Offering longer visits for patients with mental health needs would require either smaller caseloads or more staff to do pre-visit and postvisit services, or less frequent visits. Above all, evidence-based practices, such as using standardized mental health assessment tools and engaging patients in shared decision making, ought to be routine and not left to chance.

Efforts to improve quality of care should incorporate evidence beyond the simple association between visit length and quality of care. We need to examine potentially malleable physician communication behaviors and focus on their impact on quality of care. One of those behaviors is verbal dominance. Although it may be more expeditious to actively direct the conversation and maintain control, verbal dominance disempowers patients. Physicians who fear that addressing mental health issues is too time-consuming spend insufficient time addressing their patients' mental health.[36-38] Other physicians find that asking patients about their suffering and listening to their answers is gratifying and takes little additional time.[39] A study of patient clues and physician responses in primary care and surgery found that 76% of patient-initiated clues were emotional in nature, and visits in which physicians missed the opportunity to adequately address patients' emotional clues were actually longer than visits with a positive response.[40] Furthermore, treating mental illnesses can improve the course of comorbid medical illnesses.[41] The deficiencies in medical education regarding how to provide evidence-based mental health care should be addressed.

Given that one of the undisclosed agendas for patients scheduling a PHE was to discuss mental health topics, physicians could be more purposeful about eliciting, uncovering, and prioritizing the patient's agenda. As it is often the case that the most important issues affecting patients' well-being isn't always the first topic discussed in a visit, negotiating around time and topics to be discussed becomes critical.[42] Agenda setting is difficult; even in a sample of psychiatric encounters, the evidence showed that 2 of every 3 patients were not asked if they had any concerns to discuss.[43] Physicians fear that eliciting a complete agenda will be too time-consuming,[9] and many physicians also feel unprepared to handle mental health problems.[40] Fully eliciting patient concerns adds less than a minute to the visit, however, and teaching these agenda-setting skills requires as little as 3.5 hours to learn and implement.[43-45] Encouraging patients to fully voice their concerns, and preparing physicians to address difficult and potentially uncomfortable topics, can yield more effective consultations[9] and mental health discussions, as shown in this study.

The annual costs of PHEs exceeded $10 billion per year, similar to the annual costs of all lung cancer care in the United States.[46] Many individuals have called for eliminating annual physicals,[46-48] based on systematic reviews and meta-analyses showing no reduction in morbidity or mortality.[49] This study revealed that some patients came to their PHEs with mental health concerns, yet only one-third of patients likely needing mental health services had an evidence-based mental health discussion. Combined with findings of limited application of the 5As (assess, advise, agree, assist, and arrange) in colorectal cancer screening in PHEs,[23] this study contributes to the body of evidence that reveals suboptimal quality of care delivered in PHEs. Policy makers should revisit the ongoing challenges of asking primary care physicians, who often are not trained in evidence-based counseling approaches, to deliver this care under increasing time pressures. Doing this poorly is likely a waste of a scarce resource: physician time. We should consider means to offer support outside of the ambulatory encounters so that it is possible to extend the

office visit conversation—that often falls short—beyond the visit so that it approaches recommended counseling content.

Because the Affordable Care Act mandates one "free" PHE per person per year, it is important that PHEs be effective, including identifying patients with mental health needs. Improving the quality of PHEs may require reimbursement for longer visits, training, and rewards that enable physicians to more fully elicit patients' agendas and to listen more attentively. Without significant improvement in the quality of PHEs, eliminating them may do more to improving value in healthcare for the nation.[46]

Limitations

This study included older and privately insured patients in a single integrated delivery organization. The generalizability is not known. An additional limitation is the proxy measure of patient activation (ie, patient bringing a list of issues to the visit). We didn't have information regarding what topics were on the list. A more specific measure of patient activation related to mental health would have been helpful to understand if mental health was on patients' agendas. It would have been informative had we been able to document what was on patients' lists, as it would enable us to understand if there were competing demands for the time with physician. Lastly, the study did not address health literacy training of the physicians and the patients' ability to be highly verbal. Future research efforts should take account of these important factors.

CONCLUSIONS

The cup is one-third full, or two-thirds empty. PHEs could fill an important role for some patients to raise mental health concerns without directly stating that they are having these problems to the scheduling staff. Physicians should be on the look-out to uncover these potential issues and use the time to assess and evaluate mental health (a high-value service), rather than on performing extensive physical exams (low-value activities) during PHEs. Graduate medical education should spend at least as much time on training the next generation of physicians on how to ask open-ended questions, fully elicit patients' agendas, and listen attentively as on how to listen for heart murmurs.

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Source of Funding: National Institute of Mental Health (NIMH R01MH081098) and National Cancer Institute (NCI R01CA112379).

Author Disclosures: The authors report no relationship or financial interest with any entity that would pose a conflict of interest with the subject matter of this article.

Authorship Information: Concept and design (MT-S, JEL, TM, CW, LD, RF, AS); acquisition of data (MT-S, JEL, TM, AS, CS, CW); analysis and interpretation of data (MT-S, LH, TM, CS, CW, LD); drafting of the manuscript (MT-S, LH, JEL, AS, CW, LD, RF, CS); critical revision of the manuscript for important intellectual content (MT-S, LH, JEL, RF, AS, CS, CW); statistical analysis (MT-S, CW, LH); provision of patients or study materials (JEL); obtaining funding (MT-S, JEL, TM); administrative, technical, or logistic support (MT-S, JEL); and supervision (MT-S).

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REFERENCES

1. Wang PS, Demler O, Olfson M, Pincus HA, Wells KB, Kessler RC. Changing profiles of service sectors used for mental health care in the United States. *Am J Psychiatry.* 2006;163(7):1187-1198.

2. Unützer J, Schoenbaum M, Druss BG, Katon WJ. Transforming mental health care at the interface with general medicine: report for the President's Commission. *Psychiatr Serv.* 2006;57(1):37-47.

3. Mehrotra A, Zaslavsky AM, Ayanian JZ. Preventive health examinations and preventive gynecological examinations in the United States. *Arch Intern Med.* 2007;167(17):1876-1883.

4. Hunziker S, Schläpfer M, Langewitz W, et al. Open and hidden agendas of "asymptomatic" patients who request check-up exams. *BMC Fam Pract.* 2011;12:22.

5. Unutzer J, Katon WJ, Fan MY, et al. Long-term cost effects of collaborative care for late-life depression. *Am J Manag Care.* 2008;14(2):95-100.

6. Tai-Seale M, McGuire T, Colenda C, Rosen D, Cook MA. Two-minute mental health care for elderly patients: inside primary care visits. *J Am Geriatr Soc.* 2007;55(12):1903-1911.

7. Roter DL, Stewart M, Putnam SM, Lipkin M Jr, Stiles W, Inui TS. Communication patterns of primary care physicians. *JAMA.* 1997;277(4):350-356.

8. Marvel MK, Epstein RM, Flowers K, Beckman HB. Soliciting the patient's agenda: have we improved? *JAMA.* 1999;281(3):283-287.

9. Barry CA, Bradley CP, Britten N, Stevenson FA, Barber N. Patients' unvoiced agendas in general practice consultations: qualitative study. *BMJ.* 2000;320(7244):1246-1250.

10. Frankel RM, Stein T. Getting the most out of the clinical encounter: the Four Habits model. *The Permanente Journal.* 1999;3(3):79-88.

11. Stein T, Frankel RM, Krupat E. Enhancing clinician communication skills in a large healthcare organization: a longitudinal case study. *Patient Educ Couns.* 2005;58(1):4-12.

12. Mauksch LB, Dugdale DC, Dodson S, Epstein R. Relationship, communication, and efficiency in the medical encounter: creating a clinical model from a literature review. *Arch Intern Med.* 2008;168(13):1387-1395. doi: 10.1001/archinte.168.13.1387.

13. Stewart MA. Effective physician-patient communication and health outcomes: a review. *CMAJ: Canadian Medical Association Journal.* 1995;152(9):1423.

14. Beck RS, Daughtridge R, Sloane PD. Physician-patient communication in the primary care office: a systematic review. *J Am Board Fam Pract.* 2002;15(1):25-38.

15. Robinson JH, Callister LC, Berry JA, Dearing KA. Patient-centered care and adherence: definitions and applications to improve outcomes. *J Am Acad Nurse Pract.* 2008;20(12):600-607. doi: 10.1111/j.1745-7599.2008.00360.x.

16. Campbell SM, Hann M, Hacker J, et al. Identifying predictors of high quality care in English general practice: observational study. *BMJ.* 2001;323(7316):784-787.

17. Cape J. Consultation length, patient-estimated consultation length, and satisfaction with the consultation. *Br J Gen Pract.* 2002;52(485):1004-1006.

18. Pawlikowska T, Zhang W, Griffiths F, van Dalen J, van der Vleuten C. Verbal and non-verbal behavior of doctors and patients in primary care consultations—how this relates to patient enablement. *Patient Educ Couns.* 2012;86(1):70-76. doi: 10.1016/j.pec.2011.04.019.

19. Mast MS. Dominance and gender in the physician-patient interaction. *J Mens Health.* 2004;1(4):354-358. doi: 10.1016/j.jmhg.2004.10.013.

20. Tu K, Cauch-Dudek K, Chen Z. Comparison of primary care physician payment models in the management of hypertension. *Can Fam Physician.* 2009;55(7):719-727.

21. Shires DA, Stange KC, Divine G, et al. Prioritization of evidence-based preventive health services during periodic health examinations. *Am J Prev Med.* 2012;42(2):164-173. doi: 10.1016/j.amepre.2011.10.008.

22. Haas-Wilson D, Cheadle A, Scheffler R. Demand for mental health services: an episode of treatment approach. *Southern Economic Journal.* 1989;56(1):219-232.

23. Lafata JE, Cooper GS, Divine G, et al. Patient-physician colorectal cancer screening discussions: delivery of the 5A's in practice. *Am J Prev Med.* 2011;41(5):480-486. doi: 10.1016/j.amepre.2011.07.018.

24. Kroenke K, Spitzer RL, Williams JB. The Patient Health Questionaire-2: validity of a two-item depression screener. *Med Care.* 2003;4(11):1284-1292.

25. Wunderlich T, Cooper G, Divine G, et al. Inconsistencies in patient perceptions and observer ratings of shared decision making: the case of colorectal cancer screening. *Patient Educ Couns.* 2010;80(3):358-363. doi: 10.1016/j.pec.2010.06.034.

26. Tai-Seale M, McGuire TG, Zhang W. Time allocation in primary care office visits. *Health Serv Res.* 2007;42(5):1871-1894.

27. Wang PS, Berglund P, Kessler RC. Recent care of common mental disorders in the United States. *J Gen Intern Med.* 2000;15(5):284-292

28. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. *J Gen Intern Med.* 2001;16(9):606-613.

29. Krupat E, Frankel R, Stein T, Irish J. The Four Habits Coding Scheme: validation of an instrument to assess clinicians' communication behavior. *Patient Educ Couns.* 2006;62(1):38-45.

30. Charlson ME, Pompei P, Ales KL, MacKenzie CR. A new method of classifying prognostic comorbidity in longitudinal studies: development and validation. *J Chronic Dis.* 1987;40(5):373-383.

31. Sacks H, Jefferson G. *Lectures on Conversation.* Cambridge, UK: Blackwell Publishers; 1992.

32. Stone AL, Tai-Seale M, Stults CD, Luiz JM, Frankel RM. Three types of ambiguity in coding empathic interactions in primary care visits: implications for research and practice. *Patient Educ Couns.* 2012;89(1):63-68. doi: 10.1016/j.pec.2012.06.013.

33. Sweet V. Should a doctor be like a gardener? *The Wall Street Journal* website. http://blogs.wsj.com/speakeasy/2012/04/25/should-a-doctor-be-like-a-gardener/. Published April 25, 2012. Accessed September 6, 2015.

34. Deveugele M, Derese A, van den Brink-Muinen A, Bensing J, De Maeseneer J. Consultation length in general practice: cross sectional study in six European countries. *BMJ.* 2002;325(7362):472-478.

35. Frank RG, Zeckhauser RJ. Custom-made versus ready-to-wear treatments: behavioral propensities in physicians' choices. *J Health Econ.* 2007;26(6):1101-1127.

36. Callahan CM, Nienaber NA, Hendrie HC, Tierney WM. Depression of elderly outpatients: primary care physicians' attitudes and practice patterns. *J Gen Intern Med.* 1992;7(1):26-31.

37. Katon W. Collaborative care models for the treatment of depression. based on a presentation by Wayne Katon, MD. *Am J Manag Care.* 1999;5(suppl 13):S794-S800; discussion S800-S810.

38. Williamson P, Beitman BD, Katon W. Beliefs that foster physician avoidance of psychosocial aspects of health care. *J Fam Pract.* 1981;13(7):999-1003.

39. Cassell EJ. Diagnosing suffering: a perspective. *Ann Intern Med.* 1999;131(7):531-534.

40. Levinson W, Gorawara-Bhat R, Lamb J. A study of patient clues and physician responses in primary care and surgical settings. *JAMA.* 2000;284(8):1021-1027.

41. Insel TR, Charney DS. Research on major depression: strategies and priorities. *JAMA.* 2003;289(23):3167-3168.

42. Mauksch LB, Hillenburg L, Robins L. The establishing focus protocol: training for collaborative agenda setting and time management in the medical interview. *Fam Syst Health.* 2001;19(2):147-157.

43. Frankel RM, Salyers MP, Bonfils KA, Oles SK, Matthias MS. Agenda setting in psychiatric consultations: an exploratory study. *Psychiatr Rehabil J.* 2013;36(3):195-201. doi: 10.1037/prj0000004.

44. Stewart M, Brown JB, Weston WW. Patient-centred interviewing part III: five provocative questions. *Can Fam Physician.* 1989;35:159-161.

45. Rodriguez HP, Anastario MP, Frankel RM, et al. Can teaching agenda-setting skills to physicians improve clinical interaction quality? a controlled intervention. *BMC Med Educ.* 2008;8:3. doi: 10.1186/1472-6920-8-3.

46. Mehrotra A, Prochazka A. Improving value in health care—against the annual physical. *N Engl J Med.* 2015;373(16):1485-1487. doi: 10.1056/NEJMp1507485.

47. Rosenthal E. Let's (not) get physicals. *The New York Times* website. http://www.nytimes.com/2012/06/03/sunday-review/lets-not-get-physicals.html. Published June 2, 2012. Accessed June 8, 2012.

48. Emanuel EJ. Skip your annual physical. *The New York Times* website.. http://www.nytimes.com/2015/01/09/opinion/skip-your-annual-physical.html?_r=0. Published January 8, 2015. Accessed May 20, 2016.

49. Krogsbøll LT, Jørgensen KJ, Grønhøj Larsen C, Gøtzsche PC. General health checks in adults for reducing morbidity and mortality from disease: Cochrane systematic review and meta-analysis. *BMJ.* 2012;345:e7191. doi: 10.1136/bmj.e7191. ■

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