Older Adults' Mental Health Function and Patient-Centered Care: Does the Presence of a Family Companion Help or Hinder Communication?

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BACKGROUND: Late-life mental health disorders are prevalent, costly, and commonly under-diagnosed and under-treated.

OBJECTIVE: To investigate whether family companion presence in routine primary care visits helps or hinders patient-centered processes among older adults with poor mental health function.

DESIGN AND PARTICIPANTS: Observational study of accompanied (n=80) and unaccompanied (n=310) primary care patients ages 65 and older.

MAIN MEASURES: Audio-taped medical visit communication, coded with the Roter Interactional Analysis System, and three process measures: visit duration (in minutes), patient/companion verbal activity, and a ratio of patient-centered communication, adjusted for patient age, gender, race, and physical function. Participants were stratified by SF-36 mental health subscale (MCS) using two approaches (1) standardized population midpoint to delineate "good" (50+) and "poor" health (< 50) and (2) clinically derived cut-points (<35; 35–49; 50+).

RESULTS: When patients with poor mental health were accompanied by a family companion, patient/companions provided less psychosocial information, physicians engaged in less question-asking and partnershipbuilding, and both patient/companions and physicians contributed more task-oriented, biomedical discussion. Accompanied patients with poor mental health were less likely to experience patient-centered communication relative to unaccompanied patients (aOR=0.21; 95% CI: 0.06, 0.68); no difference was observed for patients with good mental health (aOR=1.02; 95% CI: 0.46, 2.27). Verbal activity was comparable for accompanied patients/companions and unaccompanied patients in both mental health strata. Medical visits were 2.3 minutes longer when patients with good mental health were accompanied (b=2.31; p=0.006), but was comparable for patients with poor mental health (b=-0.37; p=0.827). Study findings were amplified in the lowest functioning mental health subgroup (MCS<35): medical visits were shorter, and communication was *least patient-centered* (p=0.019) when these patients were accompanied.

CONCLUSIONS: Older adults with poor mental health function may experience more communication challenges in the form of shorter visits and less patient-centered communication when a family companion is present.

KEY WORDS: patient–provider communication; visit companions; RIAS; primary care; mental health.

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INTRODUCTION

Defined as "care that is customized to the specific needs and circumstances of each individual," patient-centered care has been espoused as the ideal patient-provider paradigm,¹ and is prominent in health reform efforts such as the Patient-Centered Medical Home.^{2,3} Although conceptually relevant to all, the delivery of patient-centered care is more challenging for socioeconomically disadvantaged and medically complex older adults who are less proficient at conveying their concerns, less engaged in communication with their health care providers, and who may require more time than allotted in the current reimbursement paradigm.^{4,5} Innovative models of care have been developed to bridge patients' health literacy deficits and more effectively engage patients' participation in self management. Few efforts to date address the fact that nearly four in ten patientspatients who are disproportionately older, less literate, and in worse physical health-attend routine medical encounters with a family companion.⁶

Recognizing the high prevalence of patients' accompaniment to medical visits⁷ and consensus that "patient and family engagement" is a central priority in national health care quality deliberations,⁸ a better understanding of how family companions influence patient-centered processes and communication for vulnerable patients is of practical

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importance. Recent studies indicate that active engagement of a family companion in medical visits confers significant benefit in regard to patient engagement in treatment decisions⁹ and satisfaction with care.^{7,10} What remains unclear, however, is whether the presence of a family companion has favorable implications for patient-centered processes and communication during medical visits that involve discussion of a potentially stigmatizing condition.

Because impaired mental health is associated with relational and socio-cultural barriers,¹¹⁻¹³ the presence of a family companion during medical visits raises especially pressing questions in regard to patient autonomy, the exchange of information, and adequacy of deliberations regarding mental health needs. Although plausible that an accompanying family companion might improve diagnosis and treatment of mental conditions by prompting discussion of patients' symptoms and raising physician awareness,^{14,15} disclosure of symptoms and relevant dialogue might alternatively be suppressed in light of patient, family, or physician concerns regarding the presence of stigma, or for fear of jeopardizing patient privacy.^{15–17} The importance of eliciting patients' preferences and engaging their involvement in mental health treatment^{18,19} calls into question whether a talkative accompanying family member seeking to be helpful might inadvertently encourage patient passivity, thereby disengaging patients in their own care. Qualitative studies suggest family is highly relevant to ascertainment and treatment of mental health in primary care, but are conflicted regarding the relative benefit of their involvement.^{13,15,20}

Drawing from a large dataset of audio-taped primary care visits, this study is novel in using an empirical record of medical visit interactions to investigate how the presence of a family companion might influence medical visit communication for older adults with poor mental health. We investigate these questions by separately examining patient/ companion and physician contributions to medical dialogue as well as three summary indicators of visit processes (1) medical visit duration, (2) patient/companion verbal activity, and (3) patient-centered communication. As described in detail elsewhere, our conceptual framework considers the direct contribution of family companions to medical visit processes in light of a host of factors, including patients' mental and physical functioning.⁶ Based on our prior work, we expected that family companion presence would be more influential to medical visit processes for patients who were more vulnerable.^{6,7} However, given conflicted findings in the literature, we were unsure whether family companion presence would help or hinder patient-centered communication among older adults with poor mental health. Because late-life mental disorders are prevalent and costly, confer significant risk for a range of serious adverse health outcomes, and are commonly under-diagnosed and undertreated in primary care,²¹ findings from this study provide insight on a topic that is clinically relevant and of public health importance.

METHODS

Study Design and Data Collection

This retrospective secondary data analysis relies on a convenience sample of audio-taped primary care medical visits that was collected between August 1998 and July 2000. Physician practice sites included a medical group affiliated with an academic medical center in New Mexico, a private group practice in a Midwest suburb, and an inner city private group practice in the Midwest. Patients and their companions were approached in the waiting room prior to their visit. The scope of study was explained and patient and companion interest and eligibility were ascertained. Eligible patients were 65 years or older, identified a participating physician as their usual source of care, and were judged by the study research assistant as able to provide informed consent. After providing consent, patients and their companions were administered a short survey and the physician visit was audio-taped. Immediately after the visit a brief survey was administered. Characteristics of the overall study sample have been published.²² Based on a prior analysis and psychiatrist review of videotapes for several patients,9 two patients were excluded from our study sample for probable cognitive impairment. The sample for this study includes 390 patients of 37 physicians.

Categories of Communication and Physician Visit Processes

Recordings of medical visit dialogue were coded using the Roter Interaction Analysis System (RIAS), a widely used and well validated system for empirically describing medical visit communication.²³ The RIAS quantifies aspects of medical visit dialogue by assigning each complete thought to one of thirty-eight mutually exclusive communication categories. In this study we examine nine summary categories of communication. For each category, the unit of analysis was the proportion of visit statements contributed by the patient (and companion, if present), or physician. Three measures of visit processes were also examined:

- (1) Medical visit duration, expressed in minutes.^{4,5,24}
- (2) Patient/companion verbal activity, reflecting the proportion of total visit statements contributed by patient and companion (when relevant); the inverse of physician verbal dominance.^{25,26}
- (3) Patient-centered communication, constructed from established RIAS categories.^{23,25} This measure reflects the ratio of psychosocial and socio-emotional statements in relation to biomedical exchange. Higher values indicate more patient-centered interactions.

Survey Measures

Patient attributes included age, gender, race, living arrangement, and education. Item non-response was minimal; age was coded to the sample mean for two patients with missing survey responses. Health status was measured using the Physical Component Summary (PCS) and Mental Component Summary (MCS) of the Short Form 36-item Health Survey (SF-36), which was administered to respondents inperson immediately after the medical encounter.²⁷ *Accompaniment* refers to the presence of a companion during the medical visit as indicated by contribution to audio-taped dialogue and completion of a companion survey.

Analytic Approach

Older adults' mental health was initially examined using MCS cut-points that have been established as indicative of clinically relevant mental disorders (< 36), intermediate function (36-49), and above the standardized population mid-point (50+).^{28,29} Few participants met the lowest threshold cut-point, therefore, multivariate statistical analyses were performed using the standardized population mid-point (MCS=50) due to sample considerations. For the sake of simplicity, study participants are subsequently referred to as in either "poor" (MCS<50) or "good" (MCS=50+) mental health. Physician visit process measures were evaluated as both continuous and binary variables, dichotomized at the sample median. Operational decisions regarding these measures were guided by examination of scatterplot matrices, stratified descriptive analyses, and practical issues regarding interpretation of the underlying theoretical constructs.

Analyses were performed in SAS 9.1 with each patient and their recorded medical encounter as the unit of analysis. Patient attributes and medical visit processes were described for the aggregate study sample, as well as stratified by accompaniment status. Tests of statistical significance for differences between accompanied and unaccompanied patients were obtained from mixed models with a random effect to account for clustering at the physician practice site. Generalized estimating equations (GEE) were used to model the direction, magnitude, and statistical significance of relationships between mental health and accompaniment status with outcomes of interest that pertained to communication dynamics and summary visit process measures. GEE accounts for withinphysician clustering of patients and is able to accommodate unbalanced numbers of patients per physician.³⁰ An exchangeable correlation structure was assumed in our analyses.

Because mental and physical health function are related, study outcomes were evaluated using multivariate models that controlled for patients' physical health and sociodemographic characteristics. The relationship between patients' mental health and accompaniment was examined using logistic regression. A series of stratified linear regression models were constructed to evaluate the association between accompaniment and categories of communication for patients with poor and good mental health, separately. Regression coefficients from these models represent differences in the proportion of visit statements contributed by patients and companions together relative to unaccompanied patients for any given category of communication, or by physicians of accompanied versus unaccompanied patients, respectively. Lastly, linear (medical visit duration and patient/companion verbal activity) and logistic (patient-centered communication) regression were used to investigate differences in summary measures of visit processes by accompaniment status in models that were stratified by patients' mental health.

The current study was reviewed by the Johns Hopkins University Bloomberg School of Public Health Institutional Review Board and was deemed "not human subjects" research.

RESULTS

Characteristics of Study Sample by Accompaniment Status

In total, 80 (20.5%) of 390 study participants were accompanied to routine primary care visits by a family member or friend (Table 1). Accompanied patients were significantly older (77.8 vs. 73.1 years; p<0.001), more likely to live with others (75.0% vs. 60.0%; p=0.008) and to have less than high school education (41.3% vs. 24.8%; p<0.001) than their unaccompanied counterparts. Accompanied patients reported significantly worse physical health than unaccompanied patients (PCS=35.7 vs. 41.6; p< 0.001); mental health was comparable (MCS=52.0 vs. 52.6; p=0.951). Although not statistically significant, physician visits were longer (19.0 versus 16.6 minutes; p= 0.168) when patients were accompanied. When considered together, patient and companion verbal activity was comparable to unaccompanied patients (48.2% versus 46.8%; p=0.672); patient-centered communication was comparable in accompanied and unaccompanied patients' visits (1.22 versus 1.26, respectively; p=0.617).

Accompaniment

The relationship between patients' mental health and accompaniment was examined in bivariate and multivariate logistic regression models (Table 2). Relationships were generally consistent with stratified analyses presented in Table 1. Poor physical health was consistently associated with significantly greater likelihood of accompaniment. Poor mental health was not associated with accompaniment except in combination with poor physical health (adjusted odds ratio; aOR=2.55; 95% CI: 1.03, 6.31).

	Accompanied	Not Accompanied	Total	P-Value
Participant Attribute	80 (20.5%)	310 (79.5%)	390 (100.0%)	
Age, (mean; 95% CI)	77.8 (76.2, 79.4)	73.1 (72.5, 73.8)	74.1	< 0.0001
Female, No. (%)	58 (72.5%)	202 (65.2%)	260 (66.7%)	0.2155
White, No. (%)	65 (81.3%)	236 (76.1%)	301 (77.2%)	0.6852
Less than high school education, No. (%)	33 (41.3%)	77 (24.8%)	110 (28.2%)	0.0005
Lives with others, No. (%)	60 (75.0%)	186 (60.0%)	246 (63.1%)	0.0077
Health Status			~ /	
PCS (mean; 95% CI)*	35.7 (33.6, 37.8)	41.6 (40.4, 42.8)	40.4	< 0.0001
MCS (mean; 95% CI)†	52.0 (49.9, 54.0)	52.6 (51.5, 53.8)	52.5	0.9512
Medical Visit Process Measures (mean; 95% CI)				
Duration in minutes	19.0 (17.4, 20.7)	16.6 (15.7, 17.4)	17.1	0.1675
Patient and companion verbal activity	48.2% (46.3, 50.1)	46.8% (45.9, 47.8)	47.1%	0.6719
Patient-centered communication ratio	1.22 (1.08, 1.36)	1.26 (1.19, 1.32)	1.25	0.6166

Table 1. Characteristics of Study Participants and Medical Visit Processes by Accompaniment Status

*PCS=SF-36 physical component summary score

†MCS=SF-36 mental component summary score

Communication

Among patients with good mental health, patient and companion communication was comparable to that of unaccompanied patients (right panel of Table 3). With the exception of contributing less positive talk (b=-2.32; p=0.004), physician contribution to medical visit dialogue was comparable when patients with good mental health were accompanied by a family companion.

When patients with poor mental health were accompanied, they and their companions contributed significantly more orienting statements (b=3.38; p=0.006) and less psychosocial information (b=-5.94; p=0.004) compared to unaccompanied patients (Table 3, left panel). Physicians engaged in less question asking (b=-1.50; p=0.059) and partnership-building (b=-2.38; p<0.001), but contributed more orienting statements (b=2.51; p=0.025) when patients with poor mental health were accompanied.

Visit Processes

Medical visits among patients with good mental health were 2.3 minutes longer when accompanied (p=0.006); no difference in visit length was observed for accompanied (versus unaccompanied) patients with poor mental health

(b=-0.37; p=0.827; Table 4). Verbal activity of accompanied patients and companions was comparable to that of unaccompanied patients; differences were small and not statistically significant within either mental health strata. No difference in patient-centered communication was observed among accompanied (versus unaccompanied) patients with good mental health. However, patients with poor mental health were significantly less likely to experience high patient-centered communication when accompanied (aOR= 0.21; 95% CI: 0.06, 0.68).

Implications of Accompaniment for Clinically-Derived Mental Health Subgroups

Frequency tabulations for clinically-derived mental health subgroups provide additional insight regarding the implications of accompaniment to patient-centered processes and communication (Table 5). Patients within the lowest mental health subgroup were least likely to be accompanied (16.1% versus 24.7% and 19.6% respectively). When accompanied, their visits were 2.2 minutes *shorter* than their unaccompanied counterparts (18.8 minutes versus 21.0 minutes). Implications of accompaniment for patient/companion verbal activity did not vary substantially by mental health.

Table 2. Adjusted Odds Ratios: Accompaniment to Medica	Il Visits, Primary Care Patients Ages 65 and Older
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	OR (95% CI)	aOR (95% CI) ‡	aOR (95% CI) ‡	
Patient Attribute (%)	Bivariate Models	Model 1	Model 2	
Age	1.11 (1.07, 1.16)	1.11 (1.07, 1.15)	1.11 (1.07, 1.16)	
Female	1.44 (0.97, 2.13)	1.43 (0.89, 2.30)	1.40 (0.88, 2.24)	
White	1.32 (0.71, 2.46)	1.68 (0.85, 3.32)	1.70 (0.85, 3.38)	
Less than high school education	2.17 (1.30, 3.61)	2.15 (1.24, 3.72)	2.10 (1.20, 3.67)	
Lives with others	1.99 (1.24, 3.20)	3.05 (1.80, 5.19)	3.10 (1.81, 5.30)	
Worse physical functioning (PCS<40)*	2.28 (1.45, 3.59)	2.02 (1.27, 3.22)	2.28 (1.33, 3.90)	
Worse mental functioning (MCS<50) [†]	1.20 (0.67, 2.17)	1.20 (0.63, 2.29)	1.12 (0.57, 2.19)	
Worse physical and mental health (PCS<40 and MCS<50)*†	na	na	2.55 (1.03, 6.31)	

*PCS=SF-36 physical component summary score

†MCS=SF-36 mental component summary score

[‡]Model 1 presents results from main effects model with all variables entered simultaneously. Model 2 presents results from a model that includes all specified variables as well as the interaction of worse physical and mental health function

	Poor Mental Health Function (n=120)*		Good Mental Health Function (n=270)*		
	Patient and Companion	Physician	Patient and Companion	Physician	
Question Asking	Regression Coefficient (SE; P-Value)				
Accompanied, unadjusted	0.77 (0.58; 0.185)	-1.15(0.73; 0.114)	-0.03 (0.34; 0.926)	0.43 (0.65; 0.506)	
Accompanied, adjusted [†]	0.60 (0.57; 0.292)	-1.50(0.79; 0.059)	-0.15 (0.37; 0.688)	0.41 (0.64; 0.524)	
Biomedical Information Giving					
Accompanied, unadjusted	5.54 (2.23; 0.013)	2.01 (2.11; 0.339)	-0.23 (2.47; 0.926)	1.81 (1.32; 0.171)	
Accompanied, adjusted [†]	3.68 (1.98; 0.063)	3.01 (2.23; 0.177)	-1.22 (2.41; 0.611)	2.64 (1.47; 0.073)	
Psychosocial Information Giving		())		(),,	
Accompanied, unadjusted	-5.72(1.73; 0.001)	-1.52(0.57; 0.008)	1.31 (1.66: 0.427)	0.80 (0.82; 0.327)	
Accompanied, adjusted [†]	-5.94 (2.07; 0.004)	-1.00(0.64; 0.117)	1.20 (1.92; 0.530)	0.62 (0.93; 0.504)	
Emotional Responsiveness/Expression					
Accompanied, unadjusted	-1.03 (0.91; 0.256)	0.25 (1.07; 0.818)	-0.08(0.52; 0.871)	-0.44 (0.41; 0.286)	
Accompanied, adjusted [†]	-1.41(1.02; 0.165)	-0.39(1.03; 0.708)	-0.34 (0.56; 0.543)	-0.32(0.43; 0.461)	
Partnership Building		(,)	(,	()	
Accompanied, unadjusted	0.13 (0.54: 0.815)	-2.19(0.71; 0.002)	-0.22 (0.26; 0.395)	-0.54 (0.52; 0.295)	
Accompanied, adjusted [†]	0.20 (0.57; 0.721)	-2.38(0.73; 0.001)	-0.36(0.26; 0.160)	-0.76(0.57; 0.187)	
Positive Talk	, , , , , , , , , , , , , , , , , , , ,	(,,			
Accompanied, unadjusted	-0.52 (1.56; 0.738)	0.13 (1.03: 0.901)	0.43 (1.63: 0.792)	-1.37(0.71; 0.053)	
Accompanied, adjusted [†]	1.87 (1.72; 0.276)	-0.83 (0.91; 0.365)	1.57 (1.57; 0.316)	-2.32(0.80; 0.004)	
Social Talk		(,,		(,,	
Accompanied, unadjusted	0.52 (0.95: 0.585)	-0.24 (0.61; 0.695)	-0.32(0.76; 0.677)	-0.05(0.74; 0.948)	
Accompanied, adjusted [†]	0.08 (0.74; 0.911)	-0.44(0.65; 0.503)	0.06 (0.71; 0.935)	0.43 (0.69; 0.528)	
Negative Talk	, , , , , , , , , , , , , , , , , , , ,	(,)	(,)		
Accompanied, unadjusted	-0.31 (0.30; 0.306)	-0.07(0.20; 0.743)	0.00 (0.16; 0.976)	-0.11 (0.14; 0.442)	
Accompanied, adjusted†	-0.25(0.35; 0.476)	0.07 (0.19; 0.732)	-0.12 (0.18; 0.509)	-0.06(0.14; 0.695)	
Orientation			((, ,,)	
Accompanied, unadjusted	2.58 (1.22; 0.034)	1.97 (1.21; 0.103)	-0.72(0.36; 0.045)	-0.72(0.79; 0.365)	
Accompanied, adjusted [†]	3.38 (1.22; 0.006)	2.51 (1.12; 0.025)	-0.64 (0.36; 0.076)	-1.14(0.73; 0.119)	

Table 3. Categories of Medical Visit Communication, Stratified by Patients' Mental Health Status Patient/Companion and Physician Contributions in Accompanied (Versus Unaccompanied) Medical Visits

*"Poor" and "good" function on the basis of Short-Form 36 Mental Component Subscale (MCS) of <50 and 50+, respectively *Adjusted coefficients derived from models that controlled for patient age, gender, race, and physical health function

Patient-centered communication was comparable for accompanied and unaccompanied patients in the highest mental health subgroup but was incrementally less patientcentered with worse mental health. Accompanied patients in the lowest function subgroup experienced the least patientcentered communication (0.96 vs. 1.35; p=0.019).

Table 4. Composite Visit Process Measures, Stratified by Mental
Health Function Accompanied (Versus Unaccompanied) Primary
Care Visits Among Patients Ages 65 and Older

	Linear Regression Coefficient (Standard Error; P-Value)†				
	Poor Function (n=120)	Good Function (n=270)			
Medical Visit Duration (minutes)					
Accompanied, unadjusted	0.29 (1.23; 0.814)	2.41 (0.78; 0.002)			
Accompanied, adjusted *	-0.37(1.71; 0.827)	2.31 (0.84; 0.006)			
Patient and Companion Ve					
Accompanied, unadjusted	-0.60(1.43;0.673)	0.06 (1.24; 0.964)			
Accompanied, adjusted *	-0.85(1.53; 0.579)	-0.09(1.34; 0.949)			
I i j i j	Logistic Regression R				
High Patient-Centered Communication §					
Accompanied, unadjusted	0.23 (0.09, 0.55)	0.92 (0.43, 1.97)			
Accompanied, adjusted *	0.21 (0.06, 0.68)	1.02 (0.46, 2.27)			

*Adjusted coefficients derived from models that controlled for patient

age, gender, race, and physical health function *†*"Poor" and "good" function based on Short-Form 36 Mental Component Subscale (MCS) of <50 and 50+, respectively

Patient and companion verbal activity reflects the proportion of visit statements contributed by patient and companion together, relative to unaccompanied patients, alone

SHigh patient-centered communication reflects score higher than the sample median

DISCUSSION

Drawing from a large dataset of audio-taped primary care encounters, this study contributes to policy discussions that place "patient and family" at the center of health care quality.^{1,3} We identify an under-recognized contextual factor and establish its relevance to interpersonal processes that are central to the medical encounter. Among older

Table 5. Communication Differences Between Accompanied and Unaccompanied Primary Care Patients, Stratified by Clinically **Relevant Mental Health Cut-points**

	Short-Form 36 Mental Component Subscale				
	<35 (n=31)	35-49 (n=89)	50+ (n=270)		
Accompanied by family companion, n (%)	· /	22 (24.7%)	53 (19.6%)		
Physician Visit Duration			10 -		
Accompanied	18.8	20.3	18.5		
Unaccompanied	21.0	18.1	15.5		
Difference (p-value)	-2.2(0.729)	2.2 (0.556)	3.0(0.002)		
Patient and Companion Verbal Activity*					
Accompanied	50.7%	49.6%	47.4%		
Unaccompanied	50.0%	47.6%	46.1%		
Difference (p-value)	0.7% (0.950)	2.0% (0.900)	1.3% (0.964)		
Patient-Centered Communication †					
Accompanied	0.96	1.22	1.24		
Unaccompanied	1.35	1.46	1.18		
Difference (p-value)	-0.39(0.019)		0.06 (0.712)		

*Patient and companion verbal activity reflects the proportion of visit statements contributed by patient and companion together, relative to unaccompanied patients, alone

†Ratio of psychosocial and socioemotional talk to biomedical talk during the visit

adults with poor mental health, being accompanied by a family companion was associated with striking communication and medical visit process differences that are indicative of less patient-centered care. When patients with poor mental health were accompanied by a family companion, patients engaged in less psychosocial information giving, physicians engaged in less question-asking and partnership-building, and both patients and physicians contributed more task-oriented and biomedical discussion; dialogue that is indicative of less patient-centered communication. That the direction and magnitude of this finding was not only consistent, but amplified for accompanied patients whose MCS scores were indicative of clinically relevant mental disorders substantiates the validity of this finding. Collectively, results indicate that challenges associated with meeting older adults' mental health needs in primary care remain, and in fact may be more difficult in the presence of a family companion.

Recognizing that development of a therapeutic alliance, the exchange of information, and deliberation regarding treatment options are central functions of any medical encounter and that these processes require time,^{4,31} physician visit duration has been associated with higher quality patient-provider dialogue.^{24,31} Psychosocial aspects of medical dialogue such as provision of counseling, screening-based care, and discussion of mental health topics are implicated with longer discussions.^{4,32} That visit length was at best equivalent when older adults with poor mental health were accompanied to medical visits suggests that relevant mental health screening, counseling, and discussion was less likely, or more limited, than among their unaccompanied counterparts. This interpretation is supported by findings related to communication process measures that indicated less extensive psychosocial information was provided by accompanied patients with poor mental health. Elucidating the causes of these findings is beyond the scope of this study, although we surmise that stigma may be a factor given its established influence to mental health treatment.^{16,20,21}

Qualitative studies indicate family to be both sources of support and stress in mental health treatment. Older adults' families have been reported to commonly believe depression is "non-medical," and to result from dysfunctional family dynamics, or an inability to provide adequate care, 14,20,33 making it plausible that discussion by a physician might be perceived by families as a threat or personal failure. Patients state conflicted feelings of embarrassment, shame and concerns about family disappointment, but that family may help with treatment acceptance.²⁰ Studies of primary care *clinicians* acknowledge that family can be inhibiting, but can also benefit diagnosis and treatment.^{14,15} Patient and physician-reported perceptions of care do not correlate well with objective measures,³⁴ and this study augments qualitative research by providing insight from actual medical visit dialogue.

That patients with the most impaired mental health were least likely to be accompanied deviates from the preponderance of evidence that accompanied patients are more vulnerable across dimensions of age, education, chronic disease prevalence, physical functioning, and self-rated health.⁷ Although the association between social isolation and psychological distress is well established,³⁵ we are unaware of studies documenting the extension of this phenomenon to health care processes. Results contribute to knowledge regarding the causal pathway by which mental health disorders contribute to poor treatment adherence³⁶ in suggesting the absence of an engaged social network to assist with practical, informational, and emotional support.

Study findings should be interpreted in light of several limitations. Despite a relatively large sample, we could not perform extensive subgroup analyses for clinically derived mental health subgroups. Limited information was available regarding companions, their reasons for being present, and the consistency or nature of their involvement with the patient during the visit or in the community. Data were restricted to a single physician encounter. Importantly, this study did not assess the specific content of discussions; consequently we were not able to determine whether patients' mental health was a topic of conversation. Although within-clinic sampling involved recruitment of a convenience sample, it is reassuring that patients of 37 physicians were enrolled from 3 geographically distinct practices.

We are unable to dismiss the possibility that unmeasured differences in accompanied and unaccompanied patients' capacity to engage in medical visit communication may have contributed to observed differences in visit processes among patients with poor mental health. In particular, cognitive impairment may have influenced communication dynamics among accompanied patients.³⁷ This possible explanation raises additional concerns in light of pervasive deficiencies in the care of patients with dementia in primary care.^{38,39} More extensive information regarding cognition and sensory impairment would have contributed to our understanding of study results, but were not available.

In conclusion, findings from this study indicate that presence of a family companion is associated with less patient-centered communication among older adults with poor mental health. Although study results are consistent with robust evidence regarding the effects of mental health stigma,^{16,40} they call into question the notion that family involvement uniformly benefits health system responsiveness to patient needs and preferences.^{8,41,42} Our findings speak to the need for greater attention to primary care infrastructure to support delivery of mental health care,⁴³ as well as research to identify best practice strategies for integrating family in routine medical practice. New models of "inter-professionalism" which acknowledge family to the

shared decision-making environment,⁴⁴ explicit recognition of family in national health care quality deliberations,⁸ and growing evidence that family companions are commonly present and directly involved in medical visit dialogue⁶ make this a topic ripe for further inquiry.

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Conflict of Interest: Debra Roter is the author of the Roter Interaction Analysis System (RIAS) and holds the copyright for the system. Johns Hopkins University also has rights to enhancements of the system. Neither Debra Roter nor Johns Hopkins collect royalties for use of the system in research which is the current case. Debra Roter is owner of RIASWorks LLC, a company that provides RIAS coding services to clients. It may be possible that RIASWorks will benefit indirectly from dissemination of the current research.

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