Improving the effectiveness of the medical visit: A brief visit-structuring workshop changes patients' perceptions of primary care visits[☆]

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Abstract

Objective: To teach visit-structuring strategies to primary care clinicians with a 1.5-h experiential workshop and assess its effect on patient perceptions of their medical visits.

Methods: We developed and conducted a 90 min workshop for 75 clinicians from seven primary care clinics, and evaluated the effectiveness of the workshop by assessing changes in patients' ratings of visit qualities from 1 week prior ($n = 301$) to 1 week after ($n = 322$) the workshop. Patients rated their physicians' visit-structuring skills as well as satisfaction with their medical visits.

Results: Patients were highly satisfied with their visits both before and after the workshop. Post-workshop ratings of medical visits were more likely to indicate that all problems were addressed during the visit.

Conclusions: A brief workshop had a positive measurable effect on patients' perception of their medical visits. Future research should address the utility of patient rated assessments of visit characteristics.

Practice implications: Physicians' ability to establish and maintain a productive structure in primary care office visit is an important skill that can improve the quality of care, and some changes in physician visit-structuring behavior can be measured using patient perceptions.
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Keywords: Primary care visit-structuring; Agenda; Negotiation; Patient satisfaction; Physician–patient communication

1. Introduction

The primary care office visit is a complex interpersonal transaction. Patients often come to primary care visits with multiple problems [1–3] and with a specific agenda, which may different from the physicians' agenda [4–7]. Organizing and orchestrating multiple aspects of care and multiple patient problems has been noted as a key feature distinguishing primary care practice from specialty medical practice [8]. Regardless of the number of complaints or concerns the patient brings to the visit, the physician must establish the true concerns of the patient, which are not always the same as the patient's stated reasons for the visit or the factors that the physician is most concerned about [9–14].

An important aspect of this task is structuring the primary care visit effectively. Optimum office visit-structuring should include eliciting the full spectrum of patient concerns, and determining, in partnership with the patient, how these concerns should be addressed in the present visit and over the course of care [15–17]. We term these activities agenda-eliciting, agenda-negotiating and agenda-setting, respectively.

Physician skill at structuring the primary care visit is increasingly important as the needs of patients become more complex and the time available to provide care to them

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diminishes. However, physicians do not routinely structure the primary care visit beyond ascertaining the chief complaint and "diving in" to explore it. This common strategy can result in patients reporting more unaddressed needs and concerns [18,19], as well as having more issues left unaddressed that the physician considers medically important [20,21]. Late-arising or "oh by the way" concerns [1,22,23], are a particularly frustrating consequence of poor visit-structuring; they can prolong the visit and they are difficult to address when the physician is preparing to close the visit and may be distracted by time pressures.

Failing to effectively manage the primary care visit may also result in increased physician and patient dissatisfaction [19], lengthier visits [24], missed diagnoses [25], increased risk of malpractice [26], and discontinuation of care/ switching physicians [27]. Lower patient satisfaction is a particular concern because dissatisfied patients are less likely to comply with medical advice [28] and are more likely to switch physicians [29]. In sum, well-structured primary care visits can help to improve patient health, both directly and indirectly [21,22,30–32].

The goal of the present study was to assess the effectiveness of a visit-structuring workshop for primary care providers in relation to patient perceptions of and satisfaction with their primary care visits. Specifically, our objectives were to assess changes in agenda-eliciting, agenda-negotiating and agenda-setting activity following a brief workshop in visit-structuring, as well as assessing the relationship between visit-structuring activity and patient satisfaction with the index visit and with the provider.

The study was approved by the University of Utah Institutional Review Board, and by the Community Clinics Research Review Board.

2. Methods

2.1. Participants

Clinicians. Participating clinicians were 64 primary care providers at the seven University of Utah Community Clinics (54 physicians, 10 physicians' assistants) who attended a required in-service quality improvement workshop. *Patients.* Survey participants were 623 patients, over age 18 and fluent in English, at the University of Utah Community Clinics recruited during primary care outpatient visits. We collected surveys from 301 patients before the workshop and 322 patients following the workshop. Further demographic information is shown in Table 1.

2.2. Instrument

We developed a 30-item questionnaire which asked respondents to indicate the number of problems they had wanted to discuss during the "index visit" as well as the

Table 1
Demographic characteristics of pre and post-workshop patient groups

	Number (%)	
	Pretest	Post-test
Men	91 (30.2)	93 (28.9)
Women	174 (57.8)	175 (54.3)
Did not report gender	41 (13.6)	54 (16.8)
Ages 18–20	27 (9.1)	30 (9.3)
Ages 21–30	56 (18.6)	37 (11.5)
Ages 31–40	30 (10.0)	43 (13.4)
Ages 41–50	42 (14.0)	56 (17.4)
Ages 51–60	37 (12.3)	36 (11.2)
Ages 61–70	15 (5.0)	16 (5.0)
Ages 71–80	32 (10.6)	13 (9.6)
Did not report age	62 (20.6)	73 (22.7)
Seeing regular provider	199 (66.1)	184 (57.1)
Did not report	41 (13.6)	53 (16.5)

number actually addressed during the visit. Items also assessed perceptions of agenda-eliciting, agenda-setting, and agenda-negotiating behavior by the clinician, patient ratings of provider competence, and patient satisfaction with the visit. We calculated concerns not addressed during the visit by subtracting the number of problems the patient reported wanting to discuss from the number of problem the patient reported addressing during the visit. Items assessing agenda-related behaviors were dichotomous (yes/no). Perceptions of competence and satisfaction were scaled from 1 (definitely did) to 5 (definitely did not).

We conducted an exploratory factor analysis on the pretest data and a confirmatory factor analysis on the post-test data. The exploratory factor analysis was conducted using Muthen's CVM model for continuous and categorical dependent variables [35]. This technique is similar to principal axis factoring but allows for analysis of categorical variables by using polychoric correlations. The confirmatory factor analysis was conducted using structural equation modeling. Our analysis produced a two-factor solution. The two factors that emerged were: (1) an eight-item "satisfaction/eliciting" factor; (2) a four-item "visit-structuring" factor. Tables 2 and 3 show the items that comprised these factors. Although we were able to

Table 2
Change in patient perceptions of eliciting behavior and satisfaction with their provider

	Mean (±S.D.)		t (d.f.)
	Pretest	Post-test	
Eliciting/liking subscore	7.81 (1.75)	7.93 (2.00)	n.s.
Tried to learn all the issues	.99 (.09)	.98 (.14)	n.s.
Shared an understanding	1.11 (.38)	1.12 (.48)	n.s.
Listened	1.11 (.39)	1.07 (.38)	n.s.
Understood my problems	1.11 (.39)	1.12 (.38)	n.s.
Was capable	1.15 (.41)	1.14 (.51)	n.s.
Visit will help	1.28 (.65)	1.28 (.67)	n.s.
Satisfied with time	1.10 (.33)	1.15 (.45)	n.s.
Overall satisfaction	1.12 (.57)	1.14 (.41)	n.s.