UC Davis

UC Davis Previously Published Works

Title

Expanding the Scope of the Visit: Which Patient-initiated Additional Concerns Receive Help?

Permalink

<https://escholarship.org/uc/item/20m7b5px>

Author

White, Anne Elizabeth Clark

Publication Date

2021-01-06

DOI

10.1080/10410236.2020.1856537

Peer reviewed

Expanding the Scope of the Visit: Which Patient-initiated Additional Concerns Receive Help?

Anne Elizabeth Clark White

To cite this article: Anne Elizabeth Clark White (2021): Expanding the Scope of the Visit: Which Patient-initiated Additional Concerns Receive Help?, Health Communication, DOI: [10.1080/10410236.2020.1856537](https://doi.org/10.1080/10410236.2020.1856537)

To link to this article: <https://doi.org/10.1080/10410236.2020.1856537>

Published online: 06 Jan 2021.

Submit your article to this journal [↗](#)

Article views: 3

View related articles [↗](#)

View Crossmark data [↗](#)

Expanding the Scope of the Visit: Which Patient-initiated Additional Concerns Receive Help?

Anne Elizabeth Clark White ^{a,b}

^aDepartment of Internal Medicine, University of California Davis; ^bUniversity of California Davis Center for Healthcare Policy and Research

ABSTRACT

This study examines patient-initiated additional concern presentations in general surgery visits to assess which factors contribute to them getting “helped.” Concern presentations were analyzed for a variety of design features (e.g., social action (inquiry vs. informing), *when* patients initiate during a visit, *how* patients fit topic to previous talk or activity) and contextual factors (e.g., concern falls inside or outside surgeon’s domain of expertise, chronic vs. acute concern-types, the history of the patient-physician relationship). This study uses a mixed-methods approach, combining case-level conversation analysis and aggregate-level statistical analysis. Data are video recordings of office visits from 2013–2015, with a longitudinal focus of following the same patients across time. In total, 62 patients spanning 175 visits were analyzed. 377 patient-initiated additional concerns were found, and 188 received help. Several factors were found to increase the likelihood of patients’ concerns getting helped such as designing the concern as an inquiry, raising the concern early in the visit, and mentioning the concern more than once. These findings can help guide patients on how to better design additional concerns presentations to receive help and can benefit physicians by identifying more subtle practices patients are already using to broach concerns to help reduce unnoticed or unhelped concerns.

Patients often have concerns that extend beyond the reason for the office visit (Heritage et al., 2007; Kaplan et al., 1995); however, initiating an additional concern is an imposing action (Amundsen et al., 2018) because it pressures physicians to switch focus from the activity-at-hand to deal with a new issue. Unlike 911 calls for help that are first screened by operators for their legitimacy (Heritage & Clayman, 2011), physicians themselves must filter and assess patients’ additional concern presentations as they unfold in real time. Just as there are limited resources to dispatch ambulances for every 911 request, physicians too have limited resources to address all patient concerns. Thus, patients must work to make *this* additional concern appear relevant for *this* physician at *this* particular moment.

Patient-initiated additional concerns are defined as medical problems (Byrne & Long, 1976; Robinson, 2003) that are *prima facie* unrelated to the main reason for the visit and are presented as new topics, raised by patients on their own initiative (i.e., *not* responsive to ‘Anything else I can help you with?’ solicitations), and are ongoing concerns. A concern is considered “helped” when physicians provide patients with a plan on what the next course of action should be. For instance, help can entail ordering a diagnostic test, providing a treatment recommendation, referring to another physician, confirming the course of treatment the patient is already underway with, or even dismissing the concern as not problematic. A key feature of help is that physicians go beyond just asking follow-up questions or examining the area of concern. “Unhelped” concerns are problematic because they can escalate patient anxiety,

impair treatment, necessitate additional medical visits, and damage physician-patient relationships (Heritage et al., 2007).

Since not all concerns get helped, this study’s first aim is to determine which factors increase or diminish a patient’s chances of receiving help for additional concerns by analyzing how and when patients initiate them. Second, this analysis will evaluate if (and how) patients strategically design additional concerns to more effectively receive help. Addressing these questions can inform research and educational efforts to identify strategies for conducting more thorough visits that could lead to improved patient care.

Data and methods

The data used are part of a longitudinal observational study of medical encounters from a rural Texas general surgery private practice (White, 2017), with all three surgeons participating in the study. All patients were asked to participate by the receptionist during check-in, and only patients who signed the written consent forms were enrolled. Once patients consented to participate, their subsequent visits were also recorded. The study’s exam room had a wall-mounted video camera, which allowed for filming with no additional person present. The University of California Los Angeles institutional review board approved this study, and names are changed to maintain anonymity. To control for the wide variety of reasons patients visit general surgeons, this study analyzes data from patients who underwent cholecystectomies (i.e., gallbladder removal),

hernia repairs, or colonoscopies *and* who had both pre- and post-operative visits recorded between June 2013–June 2015.

I first analyzed the data using the method of conversation analysis (CA), in which cases of a recurring interactional practice are analyzed for their sequential organization, design, and social action (Sidnell & Stivers, 2013). As a method, CA takes into account *what* was said, *how* it was designed, and who the participants are to one another in order to understand how social activities and social relationships are built and maintained on a turn-by-turn basis. CA is uniquely adept at analyzing data at the case-level of interaction.

I reviewed entire office visits to capture all instances of patient-initiated additional concerns and determined whether they were helped. I assessed each concern individually for a variety of variables, including which method patients used to initiate concerns and when in the visit they occurred (see White, 2018), together with further interactional and medically relevant variables. Table 1 lists and defines the variables additional concerns were coded for.

As individual cases, I first analyzed what was specific about *that* particular patient's presentation and type of concern that could influence the patient's chances of receiving help. Initial

hypotheses for how these variables influence patients' chances of receiving help were informed by this qualitative analysis on a subset of 10% of the visits.

Next, I used generalized linear mixed models (GLMM) (Baayen, 2008) to analyze the entire collection of additional concerns at the aggregate level. To assess which factors can increase or diminish a patient's chances of receiving help, Model A examined the associations between the variables (method of initiation, visit phase, treatment phase, physically evaluable, mention, concern type, surgeon domain, social action, mentions another physician, mentions another treatment plan, qualifier, degree of relationship) and the treatment outcome of being helped (Y/N). To evaluate if (and how) patients strategically design additional concerns to more effectively receive help, Model B examined the association between the variables (same as Model A minus social action) and the outcome of which social action patients designed the additional concern with (informing vs. inquiry). Both models included the fixed effects of age, gender, and race. Models were implemented in R (version 3.3.2) using the function `glmer` of the package `lme4` (Bates et al., 2015). The full statistical strategy for the models can be found in the Supplementary Materials.

Table 1. Variables coded.

Variables	Definition
Method of initiation	3 distinct techniques patients use to launch additional concerns (White, 2018).
Fitted-to-topic	Patient "fits" the concern to the current topic being discussed.
Fitted-to-activity	Patient "fits" the concern to the ongoing activity (e.g., knees being examined).
Disjunctive	Patient initiates the concern without linking the concern to the ongoing talk or activity.
Visit phase	An organizational structure to describe pre- and post-operative visits (White, 2018).
Pre-physical	All interaction before the physical examination.
Physical examination	All interaction during the physical examination.
Post-physical	All interaction after the physical examination.
Treatment phase	The patient's status relative to the surgery for their focal concern (e.g., colonoscopy).
Pre-operative	Office visits before surgery.
Post-operative	Office visits after surgery.
Physically evaluable (Y/N)	Can surgeons examine the concern during <i>this</i> visit (e.g., rashes)? Does the concern require more specialized tools or expertise to be examined (e.g., hearing loss)? Is the concern unable to be physically inspected (e.g., insomnia)?
Mention	Evaluating whether this is a novel or repeated topic for the patient and surgeon.
First	The very 1 st mention of a concern across <i>all</i> of the patient's recorded visits.
Subsequent	Any <i>n</i> th mention of the same concern across all of the patient's recorded visits.
Concern type	Evaluating the pervasiveness of the concern.
Acute	A recent concern that can be fleeting in nature and if properly treated can resolve itself relatively quickly with no long-term treatment (e.g., twisted ankle). If not discussed in today's visit, the concern may not be relevant for the next visit.
Chronic	A long-term concern that requires ongoing monitoring and treatment. The concern could be potentially discussed in today's visit or a future one (e.g., diabetes).
Surgeon domain	The surgeons in this study defined their scope of practice. They also advertise their 10 most frequent procedures on a poster outside their office entrance.
Inside	e.g., appendicitis, breast cancer, gallbladder disease, hernias, thyroid issues, colonoscopies, and endoscopies
Outside	e.g., diabetes monitoring, cardiovascular issues, chronic pain, and mental health
Social action	What speakers seek to accomplish in their turn-at-talk.
Informing	Patients <i>tell</i> their surgeon about their additional concern (e.g., with announcements, complaints, noticings, or stories).
Inquiry	Patients <i>ask</i> their surgeon about their additional concern (e.g., with requests for information or requests for action).
Mentions another physician (Y/N)	Patients may explicitly mention consulting another physician about their concern, or patients may mention activities (e.g., undergoing a diagnostic procedure, taking a prescription) that implicitly convey consulting another physician.
Mentions another treatment plan (Y/N)	Patients mention already trying a potential remedy for their additional concern (e.g., over-the counter medication, a prescription, a heating pad).
Qualifier	Descriptors patients use when discussing their additional concern.
Intensifying	Patients can attempt to ramp up the concern (e.g., 'It hurts a lot').
Diminishing	Patients can attempt to downplay the concern (e.g., 'Every now and then I can feel it').
None	Patients can present the concern neutrally (e.g., 'I've been having stomach pain').
Degree of relationship	Evaluating the relationship the patient and surgeon share.
1	The patient and surgeon are meeting for the first time (i.e., their very first visit).
2	They have an existing relationship that is relatively new or infrequent.
3	They have an established relationship (e.g., they have been through several procedures together, surgeon also cares for patient's family members).
4	They have an established relationship <i>and</i> they socialize outside the medical setting.

I coded all instances of additional concerns and a second observer coded a random sample of 15% of them. Our level of agreement measured using Cohen's Kappa (κ) was good (0.61–0.81) or very good (0.81–1.00) for all the following variables: method of initiation ($\kappa = 0.85$), concern type ($\kappa = 0.79$), social action ($\kappa = 0.86$), mentions another physician ($\kappa = 0.83$), mentions another treatment plan ($\kappa = 0.74$), qualifier ($\kappa = 0.77$), and helped ($\kappa = 0.83$) (Altman, 1990).

Qualitative analysis

In this section four cases are analyzed qualitatively using conversation analytic methods. These cases are representative of recurrent patterns found in the collection and were selected as illustrative examples of patient presentations of additional concerns and physician responses.

Example 1: Red shins

In Example (1) Mr. Hall is a 58-year old white patient and is being seen for a *pre-operative* visit for a cholecystectomy. He initiates an additional concern about his shins being red and inflamed during the *physical examination*. This is the *first* (and only time) Mr. Hall raises this concern in his 7 office visits recorded. Mr. Hall *fits* his concern to the *ongoing activity* of being examined and to Dr. Allen's physical proximity to his outstretched legs. Mr. Hall's shins can be *physically evaluated*, and the patient works to make his shins visible by lifting his jeans to expose his right shin (line 2).

This interaction occurs just as Dr. Allen helps the still-reclining Mr. Hall sit up (line 1).

By initiating this concern at this precise moment of the visit, the patient has seemingly chosen the most interactionally appropriate time to launch his additional concern since the contingencies for the surgeon to address this issue are low, and seemingly increases the prospect of Dr. Allen physically examining his shins, a vital step toward being helped. Mr. Hall's inflamed shins are an *acute* concern, and as he explains the redness in his shins is sporadic. It appears the patient does not want to miss this opportunity to seek help for an intermittent problem. Thus, he places pressure on *this* physician to help with *this* problem during *this* visit, even though this concern would not on its own warrant a surgical appointment and is considered *outside the general surgeon's domain*, which arguably may make it less likely to capture the surgeon's attention.

Mr. Hall launches a pre-pre (Schegloff, 2008), "I wanted to ask you." which sets up the forthcoming *inquiry*. The patient receives a go-ahead from Dr. Allen in line 3, "Uh huh,". After describing the nature of his symptoms, Mr. Hall produces an interrogatively-phrased inquiry, "Is there any certain thing that's causin' that," (line 10) which places him in an epistemically down-graded position vis-à-vis the surgeon (Heritage & Clayman, 2011) and launches an adjacency pair sequence that holds Dr. Allen accountable to provide a response (Schegloff, 2007; Stivers & Rossano, 2010). Although the question strongly invites response, it does not hold Dr. Allen accountable for giving concrete help. However, by creating a clear interactional

Example 1: Red shins

```

01  DOC:  Mokay. Let me get you to sit back up.
02  PAT:  I wanted to ask you.
03  DOC:  Uh huh,
04  (. )
05  PAT:  If you've looked at (.) how my shins get red sometimes,
06  DOC:  Uh huh,
07  PAT:  See like today it's red again (0.4) and two days from now you
08  may not hardly see any=
09  DOC:  =red at all.
10  PAT:  Is there any certain thing that's causin' that,
11  (1.0)

12  DOC:  .hh You know I don't know. I think- I think some of it is uhm
13  hh (.) maybe are you up on it more sometimes more than others
14  or is there any rhyme or reason...
    ((intervening talk omitted about patient's shins))
15  DOC:  Yeah. I'm not sure exactly. You might try- I have some at
16  home I bought it but I just don't have time to get into 'em
17  because I'm usually running late but to try to get uh knee
18  high support hose.
19  WIF:  Mm hmm,
20  DOC:  If you have time to get into those I'd be curious to see (.)
21  PAT:  If that helps.
```

Table 2. Coded variables by qualitative example.

	Ex 1: Red shins	Ex 2: Bad knee	Ex 3: Fluid build-up	Ex 4: Hernia
Method of initiation	Fitted-to-activity*	Fitted-to-activity	Disjunctive*	Fitted-to-topic
Visit phase	Physical*	Physical*	Pre-physical	Pre-physical*
Treatment phase	Pre-operative*	Post-operative	Pre-operative	Pre-operative*
Physically evaluable	Yes*	Yes*	Yes*	Yes*
Mention	First	First	First	First
Concern type	Acute*	Chronic	Acute*	Chronic
Surgeon domain	Outside	Outside	Outside	Inside*
Social action	Inquiry*	Informing	Inquiry*	Inquiry*
Mentions another physician	No*	Yes	No*	No
Mentions another treatment plan	No*	Yes	No*	No
Qualifier	No	No	Diminishing*	Diminishing
Degree of relationship	3*	3*	2	2

*qualitative assessment that this variable increases the patient's likelihood of receiving help for *this* specific case.

space in which Dr. Allen *could* provide help, the question may increase the likelihood for him to do so. Mr. Hall does not mention *seeing another physician* in regards to his red shins nor does he describe an *ongoing course of treatment* for them, both of which could add pressure for *this* physician to address this concern. Mr. Hall does not *qualify* his concern by intensifying or diminishing his concern. His statement that in “two days from now you might not hardly see any” (lines 7–8), does not downgrade the concern, but rather describes its episodic nature.

Additionally, since one major purpose of *pre-operative* visits are to identify possible reasons for *not* performing an upcoming procedure, if patients have other, more urgent concerns that need to be addressed first or describe conditions that could be barriers to surgery, this is the most opportune time to help them. Lastly, because Mr. Hall and Dr. Allen have an established sociomedical relationship (*level 3*) and Dr. Allen treats several members of the Hall family (who Dr. Allen asks about during this visit), I believe that Mr. Hall may hold his surgeon (and surgeons hold themselves) to a higher level of obligation to address all patient concerns.

In sum, Mr. Hall, much like any patient, faces the dilemma of figuring out when is the best opportunity to raise his additional concern. Table 2 summarizes the characteristics of Mr. Hall's presentation (and upcoming examples). Asterisks demarcate characteristics that I argue in *this* particular interaction work to *increase* the likelihood of it getting helped. Note, characteristics can operate differently in each case depending on the local context.

We now expand our focus to the surgeon's response. The surgeon's delivery of “help” is bolded in this and forthcoming examples.

After Mr. Hall inquires about the impetus of his inflammation (line 10), Dr. Allen first responds to the question with a non-answer response, “You know I don't know” (line 12) (Clayman, 2002; Stivers & Robinson, 2006). Dr. Allen is on his way to providing his best guess but then reformulates his conjecture to a follow-up question (lines 13–14). More discussion and follow-up questions continue, and ultimately the surgeon delivers a treatment recommendation in lines 17–18 to try wearing support hose. From the point of view of this study, the patient has now been helped. Indeed, Mr. Hall formulates it that way in his collaborative completion of the surgeon's utterance at line 21. He does not raise this concern again in any of his next six office visits.

Example 2: Bad knee

Example (2), Mr. Miller is an 82-year old white patient and is in to see Dr. Allen for a *post-operative* visit for an inguinal hernia repair and initiates the topic of a bad knee. He was not scheduled to see Dr. Allen for another month but was experiencing pain near his hernia incision site, so he scheduled an earlier appointment. He has a long-term (*level 3*) relationship with Dr. Allen spanning several procedures for over a decade. This is the *first* (and only) time the patient raises his bad knee concern across a total of five recoded visits. First mentions of concerns may be less likely to get helped than subsequent

Example 2: Bad knee

```
((patient slowly walking to table))
01 PAT: I-I just got a- (0.2) ((rubs right knee)) got an injection in
02 my knee,
03 (0.5) ((doctor places hands on patient's back for support))
04 DOC: °Okay ((doctor proceeds to help patient onto table))
05 (5.0) ((patient struggles to get on exam table))
06 PAT: Maybe that's not the best way ((patient moves his feet))
07 DOC: Yeah maybe turn- yeah there you go.
08 (1.0) ((doctor walks over to other side of patient))
```


mentions, since other tasks may supersede them in importance. If patients, however, pursue a concern and mention it repeatedly (either in the same visit or in following ones), these subsequent mentions may resonate more deeply with physicians. Not only have physicians had the opportunity to hear the concern multiple times, but they may also recognize these mentions as repeated attempts and feel more obligated to help.

Mr. Miller broaches the topic of his knee as he slowly maneuvers from the chair toward the exam table, *fitting* his presentation to the *activity* of walking. The lack of account for why his knee is bothering him and the patient's age rules out an acute injury. He designs his presentation as an *informing*, "I-I just got a- (0.2) got an injection in my knee," (line 1). Mr. Miller's presentation is both new news to Dr. Allen and an account for his slow movement.

Even though this informing places the topic of his bad knee on the interactional table as a possible topic to be addressed, it also runs the risk of being treated just as news and not as an implicit request for help. Furthermore, it is susceptible of getting overridden by the immediate project at hand – having his hernia incision site inspected for infection.

Mr. Miller's knee can be *physically evaluated*, and by telling Dr. Allen at the beginning of the *physical exam phase*, Mr. Miller opens up the largest opportunity window for it to be explored. Because it is a *chronic* concern and is *outside the general surgery domain*, I argue that Mr. Miller is less likely to receive help. Additionally, Mr. Miller's implicitly mentions *seeing another physician*, since he has received an injection as a *course of treatment*. The fact that he has already been helped by another physician (even though still suffering), seemingly decreases the chances of Dr. Allen providing help. Lastly, Mr. Miller does not *qualify* his concern (see Table 2 as a summary).

Now turning to the surgeon's response:

As evident from the transcript, even though the patient opens up the possibility of his bad knee as a potential topic for discussion, Dr. Allen treats it as an account for his slow movement, and is seemingly preoccupied with the task of assisting Mr. Hall onto the table. During the (0.5) delay in line 3, Dr. Allen repositions his hands on the patient's body to better assist him. Dr. Allen's quiet and delayed response "Okay." (line 4) acknowledges the patient's informing (Beach,

1993, 1995) but does not expand upon this topic. "Okay" also performs shift-implicative work to the activity of getting Mr. Miller from standing near the table to getting onto the table. The patient's bad knee does not get discussed again. Thus, while Dr. Allen acknowledges that he heard Mr. Miller's concern, no help is given, and this informing gets submerged by other matters at hand (see Table 2).

Example 3: Fluid build-up

In our next Example (3), Mr. Carter is a 68-year old white patient and is receiving the results of his colonoscopy and endoscopy procedure, but the broader context is that this is a *pre-operative* visit for a hernia repair. He is a newer patient of Dr. Allen's, and they have a *level 2* relationship. After a prolonged discussion about the cause of difficulty swallowing, Mr. Carter at line 4 abruptly launches a new, *disjunctive* topic with ".hh Anyway" (Park, 2010) about his back being swollen due to a recent orthopedic surgery, which is *outside the general surgeon's domain*. In fact, Mr. Carter actively works to display that he knows that this is not pertinent to today's visit and initiates his concern with a pre-sequence (line 7), which projects an upcoming delicate topic (Schegloff, 1980). Furthermore, Mr. Carter explicitly states that he could not find *another physician* to look at this area of concern (line 9), which appears as a plea for Dr. Allen to do so. Despite Mr. Carter's full display of knowing that what he is about to do next is not relevant for *this* visit and *this* type of physician, he launches his concern. Mr. Carter's fluid build-up is an *acute* concern caused by his recent surgery and is the *first* time he raises this concern (it is also the first visit with Dr. Allen since his back surgery).

This request to be examined is also heightened because they are not yet in the physical exam phase (they are *pre-physical*), and the physician is typically who leads the transition from one phase to the next. Through the course of his presentation, Mr. Carter stands up, lifts his shirt, and positions his body to make his back available to be examined. This move ramps up the interactional pressure for Dr. Allen to, at minimum, examine his back. At the end of his presentation Mr. Carter asks, "Should it be of concern," (line 19). This *inquiry* launches a conditionally relevant second pair part that holds Dr. Allen

Example 3: Fluid build-up

- 01 DOC: That's why I think it's just spasm is what you're having.
- 02 PAT: Once I'm past that I don't have any problems.
- 03 DOC: Right.
- 04 PAT: .hh Anyway, (.) You're a surgeon[t] ((reaches out and touches
- 05 doctor on the knee))
- 06 (1.0)
- 07 PAT: I want you to look at something= ((patient stands up))
- 08 DOC: =Sure.
- 09 PAT: Cause I couldn't get another (.) surgeon (.) to take a look.
- 10 DOC: Sure.
- 11 PAT: I had back surgery.
- 12 DOC: Okay,
- 13 PAT: And (0.4) the top, (.) I can't really look at this.
- 14 ((patient has stood up and lifts shirt))
- 15 DOC: Right ((looking at back))
- 16 PAT: There's a puffiness, (.) This is nice and smooth
- 17 DOC: Right.
- 18 PAT: This is a little puffy. I think there's some fluid behind it.
- 19 Should it be of concern,

20 (1.0) ((doctor looks at back))
 21 DOC: I:- there is fluid back there and I would sa:y (.) it's
 22 nothing to be worried about right now. I-I know in my ow:n
 23 (.) experience from doing operations back here that the fluid
 24 hangs around f- How long ago did you have this do:ne,
 25 PAT: This was do:ne ah:, (1.0) nearly a week ago today.
 26 DOC: A week ago. **Yeah I wouldn't worry about it at this point.** It
 27 looks pretty good for just being a week out. But you're
 28 right. You have about a (0.2) couple tablespoons worth of
 29 fluid in that. (.) wound. But I think you're- think you're
 30 alright.
 31 PAT: Okay. <Thank you=it'll be alright>
 32 DOC: It doesn't look infected...
 ((intervening talk in which patient complains about his back surgeon not wanting
 to look at it sooner than his scheduled follow-up))
 33 PAT: ...but by the same token I don't want to ignore it [if it's:
 34 DOC: [Absolutely.
 35 DOC: It looks fine. I do know in my own experience of excising
 36 like lymphomas and things in that area that that fluid will
 37 hang around for several months [before
 38 PAT: [And that's the only place
 39 where it's still really so:re.
 40 DOC: [Mkay.
 41 PAT: [And I was hoping that they'd take a little bit of incision
 42 and let the fluid out and then flatten out and I'd heal
 43 quicker.
 44 DOC: Yeah I think though that the danger is getting it infected if
 45 you open it up so- the-the best thing is unless-unless you're
 46 getting pushed to do something **I'd just leave- leave it**
 47 **alone.**
 48 PAT: Okay.
 49 DOC: [And see how it does
 50 PAT: [I appreciate that.
 51 DOC: You're most welcome. ((they shake hands))

accountable to provide a response (Schegloff, 2007; Stivers & Rossano, 2010). Mr. Carter explicitly states that he has been unsuccessful in getting another physician to look at his problem. This announced lack of success may increase the interactional pressure for Dr. Allen to help him. Mr. Carter does not mention any ongoing *course of treatment* that he is using to help decrease the puffiness in his back.

Mr. Carter *qualifies* his concern by diminishing it as “a little puffy” (line 18). On the one hand, downplaying his concern could work to lessen its severity and undercut his outwardly urgent desire for help. On the other hand, by not describing his swollen back in more extreme terms (Pomerantz, 1986; Robson et al., 2012), Mr. Carter does not set himself up for a disagreement about its severity. Instead, he leaves his back for the surgeon to assess. Arguably the downgrading of his concern, a form of troubles resistance (Jefferson, 2015), near the end of his presentation (coupled with his hedged “I think”) works to temper his insistence and already highly imposing actions. For this particular case, the diminishing qualifier seems to perform important interpersonal work and does not set the patient up to be refuted (for over-exaggerating the severity) and thus, contrary to normative expectation, increases the patient's chances of Dr. Allen helping him.

Turning to the surgeon's response:

As soon as Mr. Carter shows his back, Dr. Allen complies with the patient's request and examines his back. Dr. Allen confirms the patient's assessment that the puffiness exists and evaluates his back as normal for a post-operative condition. The amount of time since the operation becomes relevant to Dr. Allen's assessment as he is about to provide a normal duration for fluid to be expected. If Dr. Allen completes his turn and

provides a time reference after “the fluid hangs around for ...” (line 24), he runs the risk of providing a timeframe that is incongruent with the patient's experience. Thus, by cutting himself off on the word “for”, Dr. Allen avoids a potential temporal mismatch (Raymond & White, 2017). Dr. Allen then reformulates his turn to a question about when the surgery occurred, which now positions the patient as the interactant to provide the time reference and gives Dr. Allen a definitive marker to then assess as normal (as seen in lines 26–28).

While Dr. Allen aligns to Mr. Carter's request by examining and evaluating the area of concern as non-problematic, he validates the concern by acknowledging that Mr. Carter was correct in noticing the swelling. Because a patient's presentation of self is at stake when presenting a concern (Goffman, 1959, 1967), and perhaps even more so when presenting an additional concern that has diverted from the visit's normal course and the surgeon's domain, Dr. Allen's repeated confirmation of the presence of fluid helps to affirm the patient's perspective and judgment in raising the problem as a concern. Mr. Carter maintains his stance as a proactive patient when he explains that he does not want to ignore a problem (line 33) and suggests draining the liquid (lines 41–43). In response, Dr. Allen restates his position about leaving the area alone, which is a definitive plan of action and qualifies as helping, even though it might not be the help the patient wanted (see Table 2).

Example 4: Hernia

The final Example (4) is a case in which the additional concern falls *inside the domain of the general surgeon*. Ms. Franklin is

Example 4: Hernia

01 DOC: That's why we might have forgot those years. ((doctor scans patient's
02 chart trying to figure out when last scope was))
03 (1.0)
04 DOC: So back in two thousand six. Let's just see.
05 PAT: Okay. .h Do you remember now when I had that hernia too:, (.)
06 cause you did that surgery on my hernia,
07 DOC: Yes ma'am. (.) That was back in two thousand six. Yes ma'am. And
08 the hernia was- that was in- that twelve years ago. that was
09 two thousand o:ne,
10 PAT: O:kay
11 (2.0)
12 PAT: [Because it came back.
13 DOC: [(W)
14 DOC: It di:d
15 PAT: haha Yea:h
16 (0.2)
17 PAT: But I don't have no problem with it. It don't bother me.

18 DOC: How big is it?=we just fixed it with sutures. We didn't put mesh in
19 there huh, ((doctor is reading over her chart))
20 (3.0)
21 DOC: This might have been where it's at. We'll have to look and see.
22 (2.0)
23 DOC: .hh Alri:ght.
24 (2.0)
25 DOC: Have you been having any trouble with the bowels...

((Hernia discussion is resumed several minutes later during physical exam.
Patient makes pain noise when doctor palpates near her umbilicus.))

26 DOC: .hh Say that hernia's back a little bit?=
27 PAT: =Yeah. Like that. Ah: [Ah: ((pain noise))
28 DOC: [Okay.
29 (0.2)
30 DOC: I'm sorry. That's hurtin' you huh?
31 PAT: It's kinda tender right there. hh If you're pressing [on it.
32 DOC: [Is that
33 knot always there? [Does it go away if yo-
34 PAT: [Yeah.
35 (3.0) ((doctor continues to palpate))
36 DOC: (*I might want to ((mumbles))) ((doctor seems to be talking to
37 himself))
39 PAT: Eh: ((pain noise))
40 DOC: This hurts you huh?
41 PAT: Ah:
42 (0.2)
43 DOC: Mka:y.
44 (0.2)
45 DOC: .hhh **I may put a piece of mesh in the:re.** hh (0.5) .hh I may do an
46 operation where you can make a little incision here and here
47 we can go put a piece of mesh in there or a scree:n, (.) but we
48 need to think about that for yo- especially if it's getting a
49 little bit bigger where it's hurtin'. .hh If it gets too big then
50 we can't do it that way.
51 PAT: [Oh oka:y
52 DOC: [But with that screen in there we can get it in there sometimes
53 and take care of that before it's more of a problem.
54 (3.0) ((doctor moves on to palpate her underarms))

a 65-year old African American patient and is seeing Dr. Sosa for a colonoscopy consult. Near the beginning of the visit Ms. Franklin raises an additional concern about the reappearance of an umbilical hernia. This patient has a *level 2* relationship with Dr. Sosa, with infrequent visits spanning at least 12 years. Six years have passed since she last saw Dr. Sosa, and this is the *first* time the patient mentions this concern. Ms. Franklin's hernia is inferred to be an ongoing, *chronic* concern since there is no indication of an acute injury. By initiating this concern during the *pre-physical stage*, Ms. Franklin implicitly requests for her hernia to be looked at during the forthcoming physical exam. Additionally, this early initiation could indicate

that this is a pressing concern for her and increases her chances of receiving help. She *fits* this concern to the *topic* of previous procedures (including past colonoscopies) Dr. Sosa has performed on her. When Ms. Franklin mentions the hernia repair (line 5), Dr. Sosa continues to scan her chart and announces when the repair occurred (lines 8–9). Dr. Sosa may feel accountable to provide help for a concern that is not only in his domain of practice, but also because he was the surgeon who performed her first hernia repair.

The patient frames her presentation as an *inquiry*, as Ms. Franklin questions Dr. Sosa with an interrogative, “Do you remember ...” (line 05). Dr. Sosa initially treats this inquiry

as seeking information. He conforms to her “when” question with a confirmation token plus date (Fox & Thompson, 2010; Stivers, 2010). Ms. Franklin then provides an informing as the upshot with, “Because it came back” (line 12).

This is a *pre-operative* visit for a colonoscopy and endoscopy. Sometimes surgeons will conduct exploratory work on a possible hernia (depending on its position) while the patient is undergoing a colonoscopy, so it is to Ms. Franklin’s advantage to initiate this concern in her pre-operative visit, regardless if she was actually aware of this. Ms. Franklin’s hernia can be *physically evaluated* but not in her current seated position. Unlike Mr. Carter in Example (3), Ms. Franklin does not reposition herself to initiate being physically examined. Instead, she attends to this being the pre-physical phase of the visit, and while she’s initiating an additional concern, she tries not to disrupt the normal trajectory of the visit. This could be a potential weakness of the fitted-to-topic method – that it is too embedded in the ongoing talk that it risks not getting picked up as a new topic.

Ms. Franklin does not mention seeing *another physician*, and in fact directly implicates Dr. Sosa as *the* physician to address her concern to since he performed her previous hernia repair. She does not mention any current *course of treatment* she is using to help alleviate her symptoms. Ms. Franklin *qualifies* her concern with a downgrade, “But I don’t have no problem with it. It don’t bother me.” (line 17). While saying that her hernia is not bothersome may decrease the chances of Dr. Sosa recommending surgery, it would not necessarily diminish her chances of it being helped.

In contrast to Examples (1–3) in which the surgeon only addresses the concern in the adjacent turns, the topic of Ms. Franklin’s hernia gets discussed in all three phases of the visit. If we were to look just at the adjacent talk, it would appear that Dr. Sosa does not help Ms. Franklin. He asks a follow-up question but then moves on to the next history-taking question. Picking up from where the interaction left off in the pre-physical phase:

Because Ms. Franklin raises a physically evaluable concern while seated and in the midst of history taking, in order to fully evaluate her hernia Dr. Sosa would need to stop his current line of questioning and reposition Ms. Franklin. Instead, he acknowledges her concern with a confirmation check “It di:d” (line 14) and with a follow-up question about its size (line 18). However, Dr. Sosa does not leave an opportunity space for Ms. Franklin to reply because he rushes into his next turn-at-talk (Ford & Thompson, 1996) as he finally finds his notes on her previous hernia repair. He reads the dates aloud and muses, “We didn’t put mesh in there huh,” (line 14). Ms. Franklin does not respond to this declarative statement plus tag. She is not in the epistemic position to know what this mesh is or if it was ever used, and given that fact, may not even recognize Dr. Sosa’s utterance as a question at all (Heritage, 2012). Dr. Sosa then states that this concern will be dealt with in the future (note the future tense), “We’ll have to look and see.” (line 21), does a shift implicative “Alri:ght.” (line 23) and continues with his history taking questions. It is not until several minutes later during the physical exam phase that the topic of the hernia resumes (Example 4). As Dr. Sosa palpates her abdomen, Ms. Franklin lets out

a groan. Dr. Sosa connects the patient’s response cry to her hernia concern. Dr. Sosa retopicalizes this with a declaratively formatted request for confirmation, “Say that hernia’s back a little bit?” (line 26). He continues to press her abdomen and delivers a treatment recommendation for another hernia repair (lines 45–53).

Ms. Franklin accepts the treatment recommendation “Oh oka:y.” (line 51), and Dr. Sosa continues with his head-to-toe examination. At this point, this concern has been helped since the patient has been provided a definitive plan (see Table 2).

The hernia topic emerges once more during the post-physical stage (excerpt not shown) as Dr. Sosa explains how his nurse will call Ms. Franklin to schedule her colonoscopy and endoscopy. He does not explicitly reference that the nurse will also schedule her hernia repair. This visit took place in early September, and in late September Dr. Gupta performed the colonoscopy and endoscopy while Dr. Sosa was out of town. In her post-operative visit with Dr. Gupta to review those results, it is evident from the interaction that a hernia repair had not yet been scheduled or discussed further. Ms. Franklin again initiates her concern about her hernia. While this is the first time Dr. Gupta hears about it, Ms. Franklin refers to her hernia with the demonstrative “that hernia” (visit and excerpt not shown) and relays that Dr. Sosa has already told her that it should be operated on. Dr. Gupta consults her chart to review Dr. Sosa’s documentation, examines her, and concurs that a hernia repair is needed. Ultimately, Dr. Gupta repairs her hernia in December.

Ms. Franklin provides a good example of the limits of looking at a single visit to capture the full trajectory of a medical concern. Even though Ms. Franklin was helped in her initial pre-operative visit with Dr. Sosa according to the working definition of what counts as helped for this study, it was not until her follow-up visit with Dr. Gupta that this help gets transformed into action. As we move to discuss the statistical models and their results, I want to stress that looking at physician-patient interactions both as single case analyses across time and at the aggregate level is the most reliable way to understand the trajectory of a concern and of physician-patient relationships. Moreover, it is evident that characteristics can operate differently once they are embedded in specific contexts. For instance, in Example 1 Mr. Hall fitted his red shin concern to the activity of being examined and this initiation method seemed advantageous to receiving help. In contrast, when Mr. Miller (Ex 2) fitted his bad knee concern to the activity of walking, his concern appeared to get submerged by the joint project of getting him onto the exam table. Hence, aggregate level analysis is useful to see if there are larger patterns to be found, while keeping in mind that both micro- and macro-perspectives have their own analytical strengths and weaknesses.

Descriptive results and hypotheses

In these data, the mean patient age was 63 years (range 23–89). Patients were 44% female, 89% Caucasian, 6% African American,

Table 3. Distribution of additional concerns by variable.

Method of initiation	
Fitted-to-topic	66.31
Fitted-to-activity	13.53
Disjunctive	20.16*
Visit phase	
Pre-physical	60.21*
Physical examination	25.46*
Post-physical	14.32
Treatment phase	
Pre-operative	59.95*
Post-operative	40.05
Physically evaluable	
Yes	41.64*
No	58.36
Mention	
First	76.66
Subsequent	23.34*
Concern type	
Acute	17.77*
Chronic	82.23
Surgeon domain	
Inside	30.24*
Outside	69.76
Social action	
Informing	71.62
Inquiry	28.38*
Mentions another physician	
Yes	43.77
No	56.23*
Mentions another treatment plan	
Yes	31.03
No	68.97*
Qualifier	
Intensifying	11.94*
Diminishing	10.34
None	77.72
Degree of relationship	
1	14.59
2	30.77
3	37.93
4	16.71*
Patient age, mean (SD)	
	63.33 (10.40)
Race	
Black	3.18
Latino	3.98
White	92.84
Gender	
Female	45.89
Male	54.11

n = 377, data are given as percentages unless indicated

*initial hypothesis that this variable increases the patient's likelihood of receiving help

and 5% Latino. Visits ranged from 10 minutes to 1.5 hours. A total of 377 patient-initiated additional concerns were identified across 175 visits and almost half were helped (n = 188). Table 3 shows the distribution of coded variables and indicates my initial hypothesis of how each variable affects the patient's chances of being helped. These hypotheses were informed by the qualitative analysis. Table 4 shows the percentage of patients' additional concerns that received help and the percentage of additional concerns designed with the inquiry social action by variable.

I hypothesize that *how* and *when* a patient presents an additional concern, the *nature* of the concern, and the surgeon-patient relationship *history* can affect patients' chances of receiving help.

Table 4. Distribution of additional concerns that received help or were designed as an inquiry according to specific levels of each variable.

	Received help (n = 188)	Designed as an inquiry (n = 107)
Method of initiation		
Fitted to topic	43.20	21.20
Fitted to activity	52.94	23.50
Disjunctive	69.74	55.26
Visit phase		
Pre-physical	49.34	26.87
Physical examination	43.75	23.96
Post-physical	62.96	42.59
Treatment phase		
Pre-operative	46.90	24.34
Post-operative	54.30	34.45
Physically evaluable		
Yes	50.96	24.84
No	49.09	30.91
Mention		
First	49.48	29.41
Subsequent	51.14	25.00
Concern type		
Acute	65.67	40.30
Chronic	46.45	25.81
Surgeon domain		
Inside	78.95	37.72
Outside	37.26	24.33
Social action		
Informing	32.96	N/A
Inquiry	92.52	N/A
Mentions another physician		
Yes	40.61	14.55
No	57.08	39.15
Mentions another treatment plan		
Yes	33.33	13.68
No	57.31	35.00
Qualifier		
Intensifying	44.44	17.78
Diminishing	48.72	20.51
None	50.85	31.06
Degree of relationship		
1	25.45	5.45
2	54.31	30.17
3	51.05	28.67
4	60.32	44.44
Patient age, mean (SD)		
	64.01 (10.56)	65.00 (9.12)
Race		
Black	66.67	33.33
Latino	53.33	33.33
White	49.14	28.00
Gender		
Female	50.29	30.61
Male	49.51	26.47
Surgeon		
Dr. Allen	50.16	28.39
Dr. Gupta	41.17	29.41
Dr. Sosa	57.69	26.92

data are given as percentages unless indicated

In regard to *how* a patient presents an additional concern, my initial hypothesis is that using the disjunctive method to initiate, designing it as an inquiry, qualifying the concern with an intensifier, pursuing the concern with subsequent mentions, and not mentioning discussing this concern with another physician or already having a treatment plan to treat the concern will increase the patient's likelihood of receiving help.

In terms of *when* the patient initiates the additional concern, my initial hypothesis is that doing so early in the patient's course of treatment (i.e., pre-operatively) and early in the visit (either during the pre-physical or the physical exam phase of the visit) will increase the likelihood of help.

As for the *nature* of the concern, if the additional concern is acute, physically evaluable, and falls inside the surgeon's domain will increase the likelihood of help. Lastly, the more established of a relationship the surgeon and patient have, I hypothesize the more obligated the surgeon will feel to help the patient. At times, as seen in the qualitative analysis above, the case-specific circumstances may make a variable operate differently across cases, and the analysis of how that instance of a variable comes to bear on the interaction may not align with my initial hypothesis.

Statistical results

Model A assesses which factors affect the likelihood that a patient's additional concern will be helped.

Results of Model A (Table 5) revealed that patients were 56 times more likely to receive help for additional concerns designed as an inquiry vs. an informing ($Z = 7.07, p < .001$), 3 times more likely to receive help for subsequent mentions vs. first mentions ($Z = 2.55, p < .05$), 5 times more likely to receive help for acute vs. chronic additional concerns ($Z = 3.06, p < .01$), and 4 times more likely to receive help when the additional concern was raised during the pre-physical phase ($Z = 2.37, p < .05$) vs. the physical exam phase.

I found two significant two-way interactions (see Supplementary Materials) between surgeon domain and a) the method of initiation and b) and the impact of using a qualifier. The two-way interaction between surgeon domain and the method of initiation revealed that when the additional concern was inside the surgeon domain the odds of the patient receiving help were 64 times larger when the additional concern was presented as fitted-to-the-activity ($Z = 2.65, p < .01$) and 11 times larger when the additional concern was presented as fitted-to-the-topic ($Z = 2.02, p < .05$) than the odds of the patient receiving help for additional concerns presented as disjunctive. On the other hand, if the additional concern was outside the surgeon domain, the odds of the patient receiving help for additional concerns presented as fitted-to-topic were 6 times smaller than the odds of the patient receiving help for additional concerns presented as disjunctive ($Z = -3.37, p < .001$) while there was no difference between additional concerns presented as fitted-to-activity vs. disjunctive.

Lastly, the impact of including a qualifier (or not) in the additional concern's formulation was heavily conditioned on whether it was inside or outside the surgeon domain. If the patient tried to intensify an additional concern that was inside the surgeon's domain, then this actually did not work to the patient's advantage of getting helped. Surprisingly, patients drastically increased their likelihood of receiving help (for inside additional concerns) when they diminished additional concerns ($Z = 2.48, p < .05$) or did not use a qualifier in comparison ($Z = 2.63, p < .01$). For outside domain additional concerns, using qualifiers did not show significance.

Model B (Table 6) investigates which factors affect the likelihood that patients design additional concerns as inquiries or informings. The social action variable was chosen as the best proxy for measuring patients' sense of entitlement for initiating

Table 5. Model A results helped = 1, not helped = 0.

Test category	Odds ratio	Estimate	Std. error	Z value	P value
Intercept	0.371	-0.990	1.592	-0.622	0.534
Interaction: Surgeon domain*Method of initiation (Disjunctive as reference)					
Inside*Fitted-to-topic	11.341	2.428	1.202	2.021	0.043**
Inside*Fitted-to-activity	64.014	4.159	1.570	2.648	0.008***
Outside*Fitted-to-topic	0.159	-1.836	0.545	-3.371	<0.001****
Outside*Fitted-to-activity	0.475	-0.744	0.818	-0.910	0.363
Interaction: Surgeon domain*Mentions another treatment plan					
Inside*Yes	0.226	-1.486	0.849	-1.751	0.080*
Outside*Yes	0.473	-0.750	0.509	-1.472	0.141
Interaction: Surgeon domain*Qualifier (Intensifying as reference)					
Inside*Diminishing	41.364	3.722	1.503	2.477	0.013**
Inside*None	19.213	2.956	1.126	2.625	0.009***
Outside*Diminishing	0.173	-1.753	0.993	-1.766	0.077*
Outside*None	0.470	-0.755	0.598	-1.263	0.207
Visit phase (Physical examination as reference)					
Pre-physical	4.109	1.413	0.597	2.366	0.018**
Post-physical	2.554	0.937	0.690	1.358	0.174
Treatment phase: Pre-operative	0.864	-0.146	0.415	-0.352	0.725
Physically evaluable: Yes	1.099	0.095	0.390	0.243	0.808
Mention: Subsequent	2.971	1.089	0.427	2.549	0.011**
Concern type: Acute	4.922	1.594	0.520	3.062	0.002***
Social action: Inquiry	56.115	4.027	0.570	7.068	<0.001****
Mentions another physician: Yes	3.365	1.213	0.466	2.605	0.009***
Degree of relationship	1.356	0.305	0.254	1.201	0.230
Age	1.116	0.110	0.230	0.477	0.633
Race (Black as reference)					
Latino	0.442	-0.816	1.635	-0.499	0.617
White	0.552	-0.593	1.281	-0.463	0.643
Male	1.320	0.278	0.496	0.561	0.575

$p < 0.10^*$ $p < 0.05^{**}$ $p < 0.01^{***}$ $p < 0.001^{****}$

Table 6. Model B results inquiry = 1, informing = 0.

Test category	Odds ratio	Estimate	Std. error	Z value	P value
Intercept	22.490	0.912	1.177	0.775	0.438
Method of initiation (Disjunctive as reference)					
Fitted-to-topic	0.267	−1.320	0.351	−3.754	<0.001***
Fitted-to-activity	0.316	−1.152	0.603	−1.909	0.056*
Visit phase (Physical examination as reference)					
Pre-physical	1.310	0.270	0.476	0.568	0.570
Post-physical	1.626	0.486	0.549	0.885	0.376
Treatment phase: Pre-operative	0.641	−0.445	0.327	−1.364	0.173
Physically evaluable: Yes	0.687	−0.376	0.346	−1.086	0.278
Mention: Subsequent	1.036	0.036	0.361	0.099	0.921
Concern type: Acute	1.497	0.403	0.386	1.046	0.296
Surgeon domain: Inside	1.914	0.649	0.316	2.053	0.040**
Mentions other physician: Yes	0.457	−0.783	0.370	−2.118	0.034**
Mentions another treatment plan: Yes	0.399	−0.918	0.418	−2.197	0.028**
Qualifier (Intensifying as reference)					
Diminishing	1.347	0.298	0.656	0.454	0.650
None	2.074	0.729	0.484	1.506	0.132
Degree of relationship	1.629	0.488	0.202	2.420	0.016**
Age	1.315	0.273	0.188	1.459	0.145
Race (Black as reference)					
Latino	0.408	−0.896	1.271	−0.705	0.481
White	0.352	−1.044	0.902	−1.158	0.247
Male	0.632	−0.459	0.378	−1.215	0.224

$p < 0.10^*$ $p < 0.05^{**}$ $p < 0.01^{***}$ $p < 0.001^{****}$

additional concerns and how accountable they hold surgeons to provide help (high entitlement = inquiries, low entitlement = informings) (Curl & Drew, 2008).

Patients were 2 times more likely to use an inquiry for an inside domain additional concern than for an outside domain concern ($Z = 2.05$, $p < .05$). There was a significant effect of the degree of relationship in that the more established the relationship, the more likely the patient was to design the concern as an inquiry ($Z = 2.42$, $p < .05$). Fitted-to-topic initiations were 4 times less likely to be designed as inquiries than disjunctive initiations ($Z = -3.75$, $p < .001$), while fitted-to-activity initiations showed a strong trend toward significance in that these initiations were 3 times less likely to be designed as inquiries when compared to disjunctive initiations ($Z = -1.91$, $p = .056$). In other words, disjunctive initiations were more likely to be designed as inquiries than the fitted methods. Mentioning another physician made it 2 times less likely for patients to use the inquiry design ($Z = -2.12$, $p < .05$) than those that did not, which was similar to mentioning already having a treatment plan which made it 3 times less likely to design the concern as an inquiry ($Z = -2.02$, $p < .05$) than for those that did not. All other predictors were not significant.

Discussion

For our first aim, not all characteristics identified in the qualitative investigations showed the predicted effect on the statistical likelihood of an additional concern of being helped. Before discussing the unexpected findings, let's first review the concordant findings. To begin, designing the additional concern as an inquiry had the largest interactional effect whether the patient received help. This finding supports the sequential organization of talk that holds recipients of questions accountable to provide a response (Schegloff, 2007; Stivers & Rossano, 2010). Statistical analysis also aligned with

initial predictions that subsequent mentions, acute concerns, and concerns raised early in the visit were more likely to get helped. While these surgery patients were found to more frequently initiate concerns earlier in the visit (White, 2018), this indeed was also the more effective time to do so. This finding also aligns with intervention research to get physicians to solicit additional concerns from patients early in the visit (Robinson et al., 2016). The finding that acute concerns were more likely to receive help in one sense paints the positive picture that surgeons are dealing with issues in a timely fashion (e.g., they are willing to look at a patient's sore throat), but also speaks to the difficulty of patients receiving help for chronic concerns physicians might not always have the tools to provide care for (e.g., chronic pain). Future work is needed to explore chronic concern presentations specifically (and perhaps across specialties) in order to address this growing realm of patient care.

Turning to the unexpected findings – patients who used intensifying qualifiers actually never increased their chances for receiving help. Surprisingly, patients who diminished inside domain concerns were more likely to receive help. Surgeons appeared to reward this non-catastrophizing and troubles-resistant behavior (Heritage & Robinson, 2006). On the other hand, for concerns outside the surgeon's domain, diminishing qualifiers seemed to push the concern too far from the surgeon's radar and reduced their chances of receiving help. Lastly, the initiation method also depended on the relevance to the surgeon's practice. The fitted methods (both to topic and activity) were more successful in being helped for inside domain concerns, and the disjunctive method was better suited for outside domain concerns. Thus, patients need to take into account if *this* concern is relevant for *this* physician when considering how to best present additional concerns.

For our second aim, to evaluate if (and how) patients strategically design concerns to more effectively receive help, we assessed whether patients operated with a folk understanding of social action and perhaps ramped-up their chances of receiving help for concerns that were unlikely to get helped (e.g., outside domain concerns) by designing them as inquiries. The analysis revealed patients did *not* appear to manipulate their chances for receiving help, but instead matched their level of entitlement for initiating additional concerns to the same level of accountability they held their surgeon to for responding to their concern – high patient entitlement paired with a high level of surgeon accountability to respond, and low patient entitlement paired with a low level of surgeon accountability to respond. Thus, informings were more commonly found in contexts where patients displayed lower expectations for receiving help (e.g., outside surgeon domain, already having a treatment plan). While in contrast, patients used inquiries when they expected help (e.g., inside surgeon domain concerns).

Further evidence for entitlement matching accountability was found in the measurement for how established the patient–surgeon relationship was. The more established the relationship, the more likely it was for the concern to be designed as an inquiry, which suggests patients expect more from physicians they know better. Although Model A showed no significant effect of surgeons helping long-term patients at a different rate than first time patients, Model B revealed that patients' behavior is affected by how well they know their surgeon. These findings pertaining to patient–physician relationships perhaps can have import for research on continuity of care.

Conclusion

This study demonstrates the importance of a longitudinal data collection. Patients and surgeons do not have one-off encounters, and tracking how they discuss a particular concern across multiple visits provides a more nuanced and accurate analysis of the interactional practices involved. While guidelines from the National Institutes of Health already recommend that patients prepare a written list of concerns prior to their visit (an act that only one patient did in this collection), this suggestion does not address best practices for how patients should raise concerns triggered from the interaction itself. Just as walking through the grocery store evokes needs that one forgot about when making the list at home, being in front of a physician, talking about certain topics, or having one's body examined can elicit concerns that patients themselves might not have realized they wanted to discuss until that moment. As this study shows, how and when patients initiate a concern can affect how surgeons respond and whether they receive help. The outcome of receiving help for additional concerns may be consequential for patients' and physicians' long-term relationships. Patients can assess the type of care they receive in that moment in time, which can later affect how they conduct themselves in future visits. This study can benefit physicians by identifying the subtle practices patients are already using to broach concerns to help

reduce unhelped concerns and to enhance long-term relationship with patients.

Acknowledgments

I am very appreciative of the patients and surgeons who participated in this study. Without their willingness, and the clinic staff's assistance, this study would not have been possible. I am also very thankful to John Heritage, Tanya Stivers, Jack Katz, Mimi Tarn, Federico Rossano, Lisa Chiang, and the reviewers for their invaluable comments and support.

Funding

I am supported by Health Resources and Services Administration grant [T32HP30037] through the Quality, Safety, and Comparative Effectiveness Research Training (QSCERT-PC) Program.

ORCID

Anne Elizabeth Clark White <http://orcid.org/0000-0001-6574-2812>

References

- Altman, D. G. (1990). *Practical statistics for medical research*. CRC Press. <https://doi.org/10.1201/9780429258589>
- Amundsen, A., Nordøy, T., Lingen, K. E., Sørli, T., & Bergvik, S. (2018). Is patient behavior during consultation associated with shared decision-making? A study of patients' questions, cues and concerns in relation to observed shared decision-making in a cancer outpatient clinic. *Patient Education and Counseling*, 101(3), 399–405. <https://doi.org/10.1016/j.pec.2017.10.001>
- Baayen, R. H. (2008). *Analyzing linguistic data: A practical introduction to statistics using R*. Cambridge University Press.
- Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, 67(1), 1–48. <https://doi.org/http://dx.doi.org/10.18637/jss.v067.i01>
- Beach, W. A. (1993). Transitional regularities for casual “okay” usages. *Journal of Pragmatics*, 19(4), 325–352. [https://doi.org/10.1016/0378-2166\(93\)90092-4](https://doi.org/10.1016/0378-2166(93)90092-4)
- Beach, W. A. (1995). Preserving and constraining options: “Okays” and “official” priorities in medical interviews. In G. H. Morris & R. J. Chenail (Eds.), *The talk of the clinic: Explorations in the analysis of medical and therapeutic discourse* (pp. 259–289). Routledge.
- Byrne, P. S., & Long, B. E. (1976). *Doctors talking to patients: A study of the verbal behavior of general practitioners consulting in their surgeries*. Her Majesty's Stationary Office.
- Clayman, S. E. (2002). Sequence and solidarity. In S. R. Thye & E. J. Lawler (Eds.), *Group cohesion, trust and solidarity* (Vol. 19, pp. 229–253). Emerald Group Publishing Limited.
- Curl, T. S., & Drew, P. (2008). Contingency and action: A comparison of two forms of requesting. *Research on Language & Social Interaction*, 41(2), 129–153. <https://doi.org/10.1080/08351810802028613>
- Ford, C. E., & Thompson, S. A. (1996). Interactional units in conversation: Syntactic, intonational, and pragmatic resources for the management of turns. In E. Ochs, E. A. Schegloff, & S. A. Thompson (Eds.), *Interaction and Grammar* (pp. 134–184). Cambridge University Press. <https://doi.org/10.1017/cbo9780511620874.003>
- Fox, B. A., & Thompson, S. A. (2010). Responses to wh-questions in English conversation. *Research on Language & Social Interaction*, 43(2), 133–156. <https://doi.org/10.1080/08351811003751680>
- Goffman, E. (1959). *The presentation of self in everyday life*. Doubleday.
- Goffman, E. (1967). *Interaction ritual: Essays in face to face behavior*. Doubleday.

- Heritage, J., & Robinson, J. D. (2006). Accounting for the visit: Giving reasons for seeking medical care. In J. Heritage & D. Maynard (Eds.), *Communication in medical care: Interactions between primary care physicians and patients* (pp. 48–85). Cambridge University Press.
- Heritage, J. (2012). The epistemic engine: Sequence organization and territories of knowledge. *Research on Language and Social Interaction*, 45(1), 30–52. <https://doi.org/10.1080/08351813.2012.646685>
- Heritage, J., & Clayman, S. (2011). *Talk in action: Interactions, identities, and institutions*. John Wiley & Sons.
- Heritage, J., Robinson, J. D., Elliott, M. N., Beckett, M., & Wilkes, M. (2007). Reducing patients' unmet concerns in primary care: The difference one word can make. *Journal of General Internal Medicine*, 22(10), 1429–1433. <https://doi.org/10.1007/s11606-007-0279-0>
- Jefferson, G. (2015). *Talking about troubles in conversation*. Oxford University Press.
- Kaplan, S. H., Gandek, B., Greenfield, S., Rogers, W., & Ware, J. E. (1995). Patient and visit characteristics related to physicians' participatory decision-making style: Results from the medical outcomes study. *Medical Care*, 33(12), 1176–1187. <https://doi.org/10.1097/00005650-199512000-00002>
- Park, I. (2010). Marking an impasse: The use of anyway as a sequence-closing device. *Journal of Pragmatics*, 42(12), 3283–3299. <https://doi.org/10.1016/j.pragma.2010.06.002>
- Pomerantz, A. (1986). Extreme case formulations: A way of legitimizing claims. *Human Studies*, 9(2–3), 219–229. <https://doi.org/10.1007/BF00148128>
- Raymond, C. W., & White, A. E. C. (2017). Time reference in the service of social action. *Social Psychology Quarterly*, 80(2), 109–131. <https://doi.org/10.1177/0190272516689468>
- Robinson, J. D. (2003). An interactional structure of medical activities during acute visits and its implications for patients' participation. *Health Communication*, 15(1), 27–59. https://doi.org/10.1207/s15327027hc1501_2
- Robinson, J. D., Tate, A., & Heritage, J. (2016). Agenda-setting revisited: When and how do primary-care physicians solicit patients' additional concerns? *Patient Education and Counseling*, 99(5), 718–723. <https://doi.org/10.1016/j.pec.2016.12.009>
- Robson, C., Drew, P., Walker, T., & Reuber, M. (2012). Catastrophising and normalising in patient's accounts of their seizure experiences. *Seizure*, 21(10), 795–801. <https://doi.org/10.1016/j.seizure.2012.09.007>
- Schegloff, E. A. (1980). Preliminaries to preliminaries: "Can I ask you a question?" *Sociological Inquiry*, 50(3–4), 104–152. <https://doi.org/10.1111/j.1475-682x.1980.tb00018.x>
- Schegloff, E. A. (2007). *Sequence organization in interaction: A primer in conversation analysis volume 1*. Cambridge University Press.
- Schegloff, E. A. (2008, December). *Prolegomena to the analysis of action(s) in talk-in-interaction [Invited talk]*. Max Planck Institute for Psycholinguistics.
- Sidnell, J., & Stivers, T. (2013). *The handbook of conversation analysis*. John Wiley & Sons.
- Stivers, T. (2010). An overview of the question–response system in American English conversation. *Journal of Pragmatics*, 42(10), 2772–2781. <https://doi.org/10.1016/j.pragma.2010.04.011>
- Stivers, T., & Robinson, J. D. (2006). A preference for progressivity in interaction. *Language in Society*, 35(3), 367–392. <https://doi.org/10.1017/S0047404506060179>
- Stivers, T., & Rossano, F. (2010). Mobilizing response. *Research on Language and Social Interaction*, 43(1), 3–31. <https://doi.org/10.1080/08351810903471258>
- White, A. E. C. (2017). *Additional concern initiations in general surgery visits: A longitudinal analysis of doctor-patient communication* [Doctoral dissertation] University of California Los Angeles. <https://escholarship.org/uc/item/450010j2>
- White, A. E. C. (2018). Patient-initiated additional concerns in general surgery visits. *Patient Education and Counseling*, 101(12), 2219–2225. <https://doi.org/10.1016/j.pec.2018.08.012>