The Conditional Legitimacy of Behavior Change Advice in Primary Care

Clara Bergen [a] *

[a] City University of London, Division of Health Services Research and Management

1 Myddelton St, Clerkenwell, London, EC1R 1UB, United Kingdom

* Corresponding author. *Email Address*: clara.bergen@city.ac.uk *Phone*: +44 207 040 5909

Abstract

This study asks whether and when patients treat their doctors as having the right to give behavior change advice. Drawing on 171 primary care consultations video-recorded in the U.S. between 2014 and 2016, this study uses Conversation Analysis to examine physicians' behavior change advice following a patient's disclosure of medically problematic behavior such as physical inactivity. The basis on which the physician provides this advice is associated with clear regularities in patient response. Physicians may produce *treatment-implicative advice* that is unambiguously framed as a treatment plan for a specific health issue such as rising blood pressure. Alternatively, physicians may produce advice that is not overtly framed as treatment. This *plain advice* appeals to a model of care based in medical surveillance and prevention - a physician should not need to account for advising a patient to reduce risk factors. Though all advice is clinically relevant for preventing or controlling medical conditions, treatment-implicative advice is interactionally rooted in a physician's authority to treat illness. Patients show a strong social-interactional preference for treatment-implicative advice, even accepting 'behavior change' treatment recommendations at a higher rate than pharmaceutical treatment recommendations. In contrast, patients are highly resistant towards plain behavior change advice. This study explores the implications of advice formats for understanding modern orientations towards surveillance medicine in the age of preventive care.

Keywords

United States, Advice, Behavior Change, Primary Care, Doctor-Patient Communication, Conversation Analysis, Surveillance Medicine, Preventive Care

Introduction

Preventive health is reshaping the landscape of primary care through best practices including promotion of healthy lifestyle behaviors, in particular for individuals with existing chronic conditions (USPSTF 2019). Increasing promotion of preventive care agendas is also visible within physician organizations (Schocken et al 2008), through changes in the organizational structures of healthcare centers and healthcare systems (e.g., Kanter 2013), new government regulations and the restructuring of insurance benefits (Internal Revenue Service 2013). These shifts constitute a complex web of higher-up promotion, institutionalization and standardization of surveillance medicine (Armstrong 1995) in the name of preventive care.

As changes in policy and best-practice are laid out above, battles are waged below. Lines are drawn each time a physician makes a bid to supervise or direct a patient's home health behaviors; lines are erased and redrawn each time a patient resists a physician's advice and accounts for that resistance. This study examines the role of surveillance medicine and how it is related to treatment in the age of preventive care. Specifically, this study asks whether and when individuals treat primary care providers as having the right to supervise and enforce behavior change, and what is treated as a legitimate basis for this authority.

Background

There is more public awareness than ever before about the health impacts of diet, exercise, smoking, and other behaviors (Mosca et al 2010) and public interest in adopting a health-conscious lifestyle is rising steeply among younger generations (Oliver Wyman 2017; Conrad 1994). One in three Americans follows a diet or eating plan (IFIC 2018) while one in

two Americans are actively trying to lose weight (Martin et al. 2018). The global wellness market is growing almost twice as fast as the global economy (Global Wellness Institute 2017).

At the same time, most Americans receive conflicting health information, with over half of adults doubting the nutritional choices they make (IFIC 2017). In the United States, healthcare professionals are the only source for nutritional information that adults both rely on and trust, while all other sources – including health-focused websites, government agencies and scientific studies – either aren't trusted or aren't routinely accessed (IFIC 2018).

Yet, medical practitioners perceive significant social-interactional barriers to addressing health behaviors in routine healthcare consultations, including perceived patient resistance to treatment and low motivation to change (Jansink et al 2010; Lambe & Collins 2010). Despite a growing literature demonstrating the utility of lifestyle counseling in addressing such barriers (see Wanyonyi et al 2011 for review), these interventions are not widely used in primary care consultations (Noordman et al 2013). In fact, most consultations don't involve counseling at all - lifestyle counseling occurs in only one in three primary care consultations in the United States (Russell & Roter 1993). When these discussions do occur, they are not distributed evenly across all patient groups and are largely directed towards older men with more education (Russell & Roter 1993; Noordman, Verhaak & van Dulmen 2010).

This suggests that there are additional layers to the social reality of talking about health behaviors in the clinical setting. Notably, research has traditionally failed to differentiate the extent to which patient resistance to behavior change advice is related to *making these changes* versus resistance towards this flavor of *institutional control and intervention*. This paper argues that one of these layers is situated in modern patients' orientations towards the *conditional legitimacy* of surveillance medicine, as observed through the microanalysis of behavior change advice in the routine primary care setting.

Healthcare organizations have increasingly moved to supervise everyday behaviors in service of promoting preventive health agendas (e.g., Kanter 2013), while physicians have also claimed increasing rights to supervise all aspects of a person's behavior that may relate to health. Sociologists have used the term *surveillance medicine* to describe this tendency to treat a person's body as a set of risk factors (Armstrong, 1995). While medicalization "turns the moral into the medical" as personal traits and circumstances are re-defined as medical conditions (Conrad 2007), surveillance medicine turns "health into the moral" as everyday behaviors are re-defined as medical risk factors (Conrad 1992, 1987). As people come to *live with illness* rather than *die from disease*, their lives are increasingly folded into the medical domain.

There is evidence at an organizational level that lay interests transform the landscape of medicalization and can promote medicalization of certain social and behavioral concerns (Conrad & Schneider 1980). This suggests medicalization is a social process rather than a fully top-down process (Strong 1979). However, studies examining how individuals respond to physicians' attempts to supervise lifestyle behaviors – the social process of surveillance medicine – are more limited.

The field of Conversation Analysis recognizes a micro-level moral order that is "cut from the same cloth as other forms of moral reasoning" (Stivers, Mondada & Steensig 2011) and suggests that moral calibrations are continually made in social interaction. Through this lens, a microanalysis of physician attempts to supervise patients' health behaviors reveals the state of modern surveillance medicine and patient orientations towards medical advice that is (or isn't) framed as treatment of disease. In the field of conversation analysis, advice-giving has been established as a fraught business across professional settings as diverse as HIV/AIDS pre-test counseling sessions (Kinnell & Maynard 1996) to first-time mothers' well checks (Heritage & Sefi 1992).

Across these studies, deontic and epistemic authority play a central role. Epistemic authority can be conceptualized as a person's rights to assert primary knowledge relative to another person on the basis of experience or social identity (Heritage 2012; Heritage & Raymond 2005; Pomerantz 1984). Deontic authority can be conceptualized as one person's rights to direct or determine another person's future actions (Stevanovic & Peräkylä 2012; Stevanovic 2013). When patients and physicians assert and resist these forms of authority, they reveal the moral orders of interactions in healthcare.

Social actions such as requests and directives communicate a speaker's orientation towards relative deontic authority (Stevanovic & Peräkylä 2012) which can be positioned at various strengths along a gradient (Stevanovic 2013). For example, how a physician presents treatment options (e.g. assertion "I'm going to start you on a new medication" versus option listing "we could start you on a new medication or just increase your current dosage") establishes a deontic gradient (Toerien, Shaw & Reuber 2013; Stivers et al 2018). Beyond first actions (e.g. advising, directing) that can communicate a deontic gradient, responses to these actions can resist, negotiate, or accept the gradient. It has even been argued that deontic authority "is not primarily about someone *claiming* authority, but it is about others *accepting* someone as an authority" though actions such as immediate acceptance of proposals and directives (Stevanovic 2013, p. 20). A deontic gradient between two individuals is also not static but rather highly dependent on context, to the extent that individuals' relative ownership of the overarching interactional project (e.g. describing symptoms, prescribing medication) can organize deontic authority (Rossi 2012).

Similarly, an epistemic gradient between two individuals is dependent on interactional context (Heritage 2012). The role of epistemic authority, or rights to knowledge, in physician-patient communication has been studied extensively by conversation analysts (Maynard & Frankel 2006; Lindström & Wetherall 2015; Landmark, Gulbrandsen & Svennevig 2015;

Lindström & Karlsson 2016). Where patients claim primary rights to knowledge of the illness experience, physicians typically claim primary rights to knowledge of diagnosis and prescribing (Heritage 2006, Heritage & Robinson 2006, Peräkylä 1998, 2002). However, as with deontic authority, epistemic authority is not static. Rather, it is achieved and managed through social interaction. For example, physicians treat themselves as accountable for making the evidential basis of their diagnoses apparent to patients (Peräkylä 1998). Peräkylä showed that physicians and patients don't treat doctors as having unconditional epistemic authority over diagnosis. Instead doctors' epistemic authority is embedded in the ability to make the basis of that authority transparent to patients when giving a diagnosis. Deontic authority is also partially *based in* epistemic authority. For example, once a physician has examined and diagnosed a patient, their deontic authority to direct that patient to take medication is partially based in an epistemic authority over best-practice treatment of that disease.

This study holds a magnifying glass to physician-patient conversations to uncover regularities in patients' orientations towards physicians' conditional deontic authority to advise behavior change. A slow process of normalization and institutionalization of surveillance medicine has been underway for decades (Schneider 1978). As such, the question is one of modern boundaries – which aspects of surveillance medicine do patients accept in routine primary care, and which do they resist?

1.3 Data

Conversation Analysis contributes to a body of scholarship on video-recorded doctor-patient interaction and the interactional achievements of healthcare consultations; for example, establishing the validity of patient concerns (Heritage & Robinson, 2006), the (in)adequacy of pharmaceutical treatments (Bergen et al, 2017), and the patient's body as an object of clinical inquiry (Heath, 2006). Data collection followed conventional procedures for Conversation Analytic work, including collecting video and audio recordings for the healthcare consultations

in full. A camera was set up in the examination room and no researcher was present during the consultation. All data were obtained under the proper IRB Permissions and informed consent was obtained from all participants.

Routine primary care constitutes the vast majority of most patient interactions with the American healthcare system, and it is where most routine preventive healthcare is provided (Rui & Okeyde 2016). Internal medicine and family practice physicians and their adult patients were eligible to participate in this study. The dataset consists of 171 video recordings of primary care consultations, collected between 2014 and 2016. The data include recordings of 12 internal medicine or family practice physicians across seven practices in four cities within one major urban county in the United States. Adult patients were recruited from the waiting room on the day of filming and were eligible to participate in the study if they were attending a pre-scheduled appointment with a participating primary care physician. While the large majority of patients discussed at least one chronic health concern during their consultation, patients with acute concerns only were also included.

Nine female and three male physicians ranged in age from 28 to 66 and identified as Asian (7), Black (2), Hispanic (1), and non-Hispanic white (2). 76 consultations were filmed at practices that provide care in low-income communities of color, with median household income of $18,000-28,000 and non-Hispanic white population 2-7% in the immediate local area of the practice. 95 consultations were filmed at practices that provide care in high-income white communities, with median household income $118,000-156,000 and non-Hispanic white population 58-83%.

This study presents a detailed analysis of physician advice following patient reports of ‘medically problematic’ behavior in the clinical encounter. Rather than relying on a preestablished list of ‘problematic’ behaviors, this study identified reports of patient behavior where there is evidence of consensus between doctor and patient that the disclosed behavior

would be considered problematic in some way. Evidence of this consensus must be present either immediately before, during, or shortly after the disclosure turn. Patient-side evidence included, among other things, accounts, minimizations, qualifications, hesitancy or delay, orientation towards future change, negative assessments, and agreement with physicians' negative assessments. Physician-side evidence included, among other things, recommendations for behavior change, orientation towards an alternative behavior as 'better', negative assessments, and agreement with patients' negative assessments. Bergen and Stivers (2013) show that patients orient to these reports as *disclosures of medical misdeeds* – defining the act of disclosure as "seeking care by revealing personally significant information that exposes the bearer to the risk of rejection or negative judgement." (Saiki & Lobo, 2011).

In some extracts, there is not an immediate patient orientation towards the disclosed behavior as problematic. However, in all cases, consensus was evident shortly after the disclosure if not during. For example, a patient might provide a one-word response to a physician's inquiry about exercise. However, upon physician acknowledgement of the behavior, the patient might display an orientation to the behavior as problematic. Instances in which a patient framed their behavior as non-problematic (see Halkowski 2012) or resisted implication that their behavior was medically problematic (see Pilnick & Coleman 2003) were not included in the collection.

Patients disclosed behaviors ranging from eating too much Halloween candy, to smoking cigarettes, to stopping medications for heart palpitations triggering hospitalization. The most common disclosed behaviors were physical inactivity and medically problematic diet (e.g., high salt or high sugar.) Disclosures can be patient-initiated or prompted by physician questions. I examine a wide range of cases, with an understanding that the potential risks or outcomes of the behavior will shape a physician's response while at the same time observing significant commonalities between a seemingly wide range of disclosures.

This study is based on a primary collection of 48 instances in which, following a patient's disclosure of a medically problematic behavior, a physician advises the patient to change the behavior (e.g. adjusting their diet, exercise or smoking habits). I use the term "behavior-change advice" to refer to all directives, requests, suggestions, assertions, pronouncements and other explicit bids for behavior change that reference the disclosed behavior. Cases I-IV illustrate some of the forms that such behavior-change advice can take. For instance, an upgraded imperative is used in Case I.

```
Case I - Cigarettes
1  Doc:  You really should quit.
```

In Case II, the physician provides a personalized and upgraded suggestion.

```
Case II – Alcohol
1  Doc:  So .hh uhm I would definitely
2        try to cut that back.
```

In Case III, the advice is formatted as a request for information, but carries the force of a request for action.

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Case III – Water
1  Doc:  Can you force yourself
2        to drink?
```

Finally, in Case IV, the physician's advice is a mitigated non-personal suggestion.

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Case IV - Medication
1  Doc:  ((nod)) Probably be a good
2        idea to take i:t,
```

A constitutive feature of the collection is that the physician explicitly directs the patient to make a change related to the disclosed behavior. Advice not related to the disclosure was not included. Similarly, the collection does not include instances in which a physician only *implicitly* advises behavior change, for example through a negative assessment of the disclosed behavior (e.g., Oh that's not so good). Besides considerations of form, behavior-change advice also occurs in different positions in the consultation. Behavior-change advice from all phases of the visit are included in the collection so long as they reference a specific behavior disclosed

earlier in the consultation. Finally, physicians occasionally advise behavior change multiple times. Because these seem to be working to secure patient acceptance of the advice, all instances of advice are included in the collection.

1.4 Analysis

Following the disclosure of a medically problematic health behavior, such as lack of exercise or smoking, a physician's next turn will be hearable as responsive to that admission. Physicians respond in a variety of ways to patient disclosure, from accepting or normalizing the patient's behavior, to negatively assessing the behavior or advising behavior change. Advising behavior change, however, can be a socially hazardous move. This study examines physicians' behavior change advice and patients' response to this advice.

I show that patients treat a physician's deontic authority to supervise their lifestyle as conditional and dependent on the approach the physician takes to advising behavior change. The extent to which patients grant physicians this authority or resist their agenda is interactionally dependent. Relying on aspects of both position and formulation of advice, I distinguish two forms of behavior change advice: a) advice that is unambiguously framed as a treatment for a medical condition (treatment-implicative advice), and b) advice that is not overtly linked to a medical condition and framed as treatment (plain advice). Plain advice may be clinically rooted in treating illness, but it is not presented in this way to the patient. The first section of analysis identifies key differences between treatment-implicative and plain behavior change advice. The next section examines rates of patient acceptance when physicians do versus don't frame behavior change advice as a treatment for a medical condition. The final section of analysis provides a more detailed qualitative analysis of patient responses, including an examination of instances in which physician advice is reformulated.

Differentiating Treatment-Implicative Advice and Plain Advice

Case 1 provides an example of treatment-implicative behavior change advice. In this case, a patient discloses not exercising and his physician advises that he exercise. As the transcript opens, the physician is formulating a treatment plan for the patient's hypertension. The behavior-change advice occurs at lines 67-69.

```
Case 1
1  Doc:  I think we need to add one more,
2        ((referring to medication))
3  Pat:  I (.) think (.) that's fine.
4  Doc:  .hh U:::m. And then I th^ink
5        tha:t if m- if next time we're
6        still not at a good- where we
7        wa:nt, .hh I'm gonna send you
8        to cardiology,
9  Pat:  Okay.
10 Doc:  A- And just make sure we're not
11       missing something else.
12       (0.5)
13 Doc:  that's going on.
14 Pat:  Okay, cause like- um: I'm okay
15       taking whatever medications
16       [they are?
17 Doc:  [Mhm?
18 Pat:  I don't- (1.0) I changed my diet
19       significantly: over the last
20       year,
         ... ((discuss patient's diet,
         doctor assesses positively))
51 Pat:  The thing that I: (.) haven't
52       been able to do: is my ah w-
53       workout routine has just gotten
54       (0.3) disappeared essentially
55       [at this point?
56 Doc:  [Oh::. okay.
57 Pat:  And I used to be like (0.8)
58       beyond extremely active, for
59       [most of my life? So I don't know
60 Doc:  [Mmmm.
61 Pat:  if that's a con[tributing factor,
62 Doc:                 [Yes?
63 Doc:  Mm hmm?
64 Pat:  So it's.
65 Doc:  Yeah I mean your weight is fi:ne,
66       You're totally at a normal
67       weight,=But definitely exercise,
68       and being: conditioned? is gonna-
69       is gonna help you.
70 Pat:  Okay,
```

Across lines 1-17, doctor and patient participate in a project of establishing a treatment plan for high blood pressure. The patient then begins to describe recent changes to his diet (lines 18-20) which the physician assesses positively (transcript not shown). The patient then builds a contrastive disclosure, admitting that he has not been exercising (lines 51-55). He states that he does not know whether his lack of exercise is a "contributing factor" to his high blood pressure (lines 59/61), displaying a recognition of the physician's epistemic authority over etiology and treatment of high blood pressure. In response, the physician advises that the patient exercise.

The advice at lines 67-69 for "exercise and being: conditioned" is formulated as an assertion-type treatment recommendation (see Stivers et al 2018). The physician states that exercise "is gonna help you" (line 68-69), which in this context is hearable as *help you improve your blood pressure*. She even preempts a potential (mis)understanding of the advice as relating to the patient's weight or general health by prefacing it with the statement that the patient is "totally at a normal weight" (lines 65-67). By providing the advice within the context of treating and identifying the etiology of the high blood pressure, prefacing the advice and citing a health outcome, the physician produces advice (lines 65-69) that is unambiguously framed as *treatment* for the patient's under-controlled high blood pressure. Across this turn, the physician's deontic authority to advise exercise is based on an epistemic authority over treatment of high blood pressure. At line 70, the patient immediately accepts the advice with "Okay" (Stivers 2005, 2006). Doctor and patient then go on to discuss options for where and how the patient could begin exercising (transcript not shown).

Case 2 provides another example of treatment-implicative advice in a different health context. A young mother has come to the consultation wearing exercise attire. She presents with an acute issue – nipple pain. The physician diagnoses a yeast infection (transcript not shown). The physician's advice occurs at lines 20-27

Case 2

```
1  Doc:  Yeah I would treat that for
2        yeast. Cause the nipple .hh
3  Pat:  Oh [okay.
4  Doc:     [um can get moist.=The other
5        is just to open to air.
6        (0.8)
7  Pat:  O:[:kay.
8  Doc:    [Cause yeast can't gro:w (.) in
9        oxygen. So it could be in the
10       bra: it's ti:ght, or after
11       sweating:,
12 Pat:  Oh from (0.4) working o::ut.=
13 Doc:  =Ri:ght. I don't know if you keep
14       the same bra: for a long time? or
15       do you usually just go shower
16       after:,
17 Pat:  Uh:m (.) not immediately,
18       sometimes I have to go run get my
19       kids [and then come ho:me, so,
20 Doc:       [Ri:ght. Like a while,=So
21       ideally you would change out of
22       anything wet.
23 Pat:  Oh: Okay. Okay.
24 Doc:  Or air. [You know. So if you're
25 Pat:          [O::h=okay,
26 Doc:  home later in the day maybe you
27       you can go without a bra:?
19 Pat:  Oh:.
```

The physician first recommends treating the patient for yeast infection (lines 1-2), which the patient accepts (line 3). The physician builds her talk at lines 4-5 as a part of a list, expanding the project of establishing a treatment plan for the yeast infection. She builds *opening the infected area to air* as a relevant step to addressing the yeast infection, then explicitly attributes a source of infection to wearing a tight and sweaty sports bra (lines 9-11). The patient's change of state tokens at lines 3, 12 and 23 display an orientation towards the physician's epistemic primacy over etiology and treatment of her symptoms (Heritage 1984).

The physician can see that the patient is wearing exercise attire, but she nonetheless solicits disclosure at lines 13-16. The patient reports that she doesn't change immediately after exercising (lines 17-19). Though the patient may not have previously known that this could cause a yeast infection, she accounts for her behavior, thereby displaying recognition of the behavior as problematic. The physician then recommends the patient change out of her wet athletic clothes immediately after exercising and go without a bra at home (lines 20-22/24/26-

27). By building the advice into the project of treating the yeast infection and identifying the behavior as a potential cause of the yeast infection, the doctor provides behavior-change advice that is recognizable as treatment-implicative. Again, her deontic authority rests on an epistemic primacy over the etiology and treatment of yeast infection. The patient immediately accepts the physician's advice at lines 23 and 25.

Case 1 and Case 2 have a number of differences. The disclosure in Case 2 is associated with fewer long-term health risks (continuing to wear athletic clothes after exercising versus not exercising), and the health issue cited is acute (treating a yeast infection versus chronic high blood pressure). In Case 2, it is only *after* the physician establishes the potential patient behavior as a contributing factor that the physician solicits patient disclosure and advises behavior change. In Case 1, the patient initiates the disclosure without physician prompting. Nonetheless, in both cases the physician links the patient's behavior to the health issue and recommends behavior change on the basis of treating that health issue. In both instances the patient immediately accepts the advice.

Although presenting behavior change advice as treatment for a medical condition is common, physicians also provide behavior change advice that is not framed as treatment (i.e., plain advice). However, patients frequently reject advice that is formulated this way. Like Case 1, the physician in Case 3 advises that the patient begin exercising after the patient – who has been diagnosed with diabetes and has recent lab results showing high LDL cholesterol – discloses not doing so. Unlike Cases 1-2, the physician in Case 3 does not explicitly draw a connection between these health issues and her behavior-change advice at lines 48-51.

Case 3

Doc: Okay. ((closes chart)) So we
[have to-
Pat: [How my sugar level and thing
like that.
Doc: ((nod)) Your sugars:, ((opens
chart))
Pat: It's oka:y?
(1.0)
Pat: I like to keep check on that.
Doc: Yes your sugars are oka:y?
((closes chart, stands up))
Pat: Mm hmm.
Doc: Mm hmm.
Doc: .hhh Yeah so how's your diet.
... ((discuss diet, physician
recommends smaller meals))
Doc: So are you (.) um exercising?
Pat: No:.
Doc: Okay.
Pat: Lazy.
Doc: Ye(h)h ((laughs))
Pat: ((laughs))
Doc: **But I think- I know it's co:ld**
right now but maybe you can
increase the walks: during the
da:[y?=
Pat: [((shakes head))
Doc: =Do you- are you working?
Pat: No. Can't walk,
Doc: You can't walk,
Pat: Due to my knee. I have bad knee.
Doc: O:::h=Okay. And [then-
Pat: [And when I walk,
Ohy. Painful.

Prior to line 1, the physician has just finished reviewing the patient's labs (transcript not shown) and the patient asks how her blood sugar has been. The physician gives a no-problem response, reporting that it's "oka:y" (line 10). The physician then closes the chart, stands up, and places the chart on the counter. In this context, the physician's next inquiry is set apart from what came prior. The physician's turn at line 14 ("Yeah so how's your diet.") is *not presented within* a broader project of establishing a treatment plan for the patient's blood sugars or any other condition. The practitioner also does not present diet as linked to any health issue. Instead, her question is formulated as a standard health checkup history-taking question.. The physician recommends the patient eat smaller meals and more vegetables (transcript not shown), and then moves on to another standard history-taking question – whether the patient is exercising (line 41).

The patient discloses that she is not exercising and self-deprecatingly accounts for this with her comment that she's "lazy" (lines 42/45). The physician's behavior change advice follows at lines 48-51, where she acknowledges an alternative candidate account for the patient's lack of exercise (the weather) and suggests that the patient do more walking during the day. Though the advice is provided in the context of a routine check-up for a patient with multiple chronic conditions, it is not presented as a treatment for a particular chronic condition; exercise is not linked to a specific health problem and the suggestion to exercise is not linked to a specific health outcome. The basis of the advice does not lie within treatment but rather with promoting a change in behavior more generally. The physician's recommendation asserts deontic authority to determine the patient's exercise habits without reference to any specific treatment plan, and therefore cannot be based within an epistemic authority over best-practice treatment for a specific condition. The patient's response here is very different from the patient responses from Cases 1 and 2. She immediately rejects the advice (line 52) and provides a

blocking account, asserting her own epistemic primacy over her personal health experience by informing the physician that she "can't walk" due to pain in her knee (lines 54/56/58-59).

Although it may seem intuitive that behavior-change advice that is closely linked to a health condition (e.g., hygienic practices and yeast infection) would be more likely to be framed as treatment, this is not the case. Instances of plain advice range from advising adhering to medication regimens to following up with specialists to reducing alcohol consumption when there's been a diagnosis of liver disease. Furthermore, in every instance in which a physician advises behavior change in these data, that advice *could have* been linked in some way to a problematic health outcome (e.g., rising blood sugars), symptom (e.g., feeling dehydrated), or diagnosis (e.g., pre-diabetes). However, physicians often don't *present* their advice as a treatment for a specific symptom or diagnosis, as we saw in Case 3.

In another instance, the physician in Case 4 advises the patient to adhere to his hypertension medication without formulating the behavior-change as treatment for his hypertension. The patient has booked an appointment to discuss a shoulder injury. The physician and patient greet each other (transcript not shown), and the physician begins to read the chart and notes that he hasn't seen the patient in two years (line 3). This patient was previously diagnosed with hypertension. The behavior-change advice occurs at lines 49-50.

Case 4

Doc: Wo:w. (.) Yea:h.
(1.5)
Doc: >I guess I< haven't seen you in two years.
(2.0)
Doc: Ri:ght? ((gaze to patient))
Pat: Been two years,
Doc: ((gaze to chart)) .hhhh khh khh ((coughs)) According to this:: it was: ah September two thousand thirteen:. .hhh
(2.0)
Doc: And you're: (0.2) on:: (2.0) This ri:ght ankle, your- Hypertension::, (1.8) So:: you:'ve bee:n (.) out of your ((gaze to pat)) blood pressure medicines ((gaze to chart)) for that (0.3) long,
(0.8)
Pat: No. ((head shake))
(3.0)
Doc: ((head shake))|(2.0)
Doc: I didn:'t (0.5) see any refills,=S:o you're g- how're you getting ((gaze to patient)) refills.
Pat: My wife just ca:lls CVS and they re fill 'em. .hhh
(0.4)
Doc: ((writes in chart)) Ohkay.
Pat: .hhhhh hhh ((loud sigh)) / (1.5)
Doc: Have you been takin' em recently:, or you been ((gaze to patient)) missin'. (0.3) m[issin' some of em.
Pat: [I've been missing em.
Doc: ((writes in chart)) Okay.
Pat: .hhhh off and on,
(0.3)
Pat: I've been (0.5) dealing with other issues.
(5.0)
Doc: You still have em?
Pat: .hhh Yeah.=[hhh
Doc: =[Okay. Alright.
(0.5)
Doc: .hhh khh khhh ((coughs)) ((gaze to patient)) **Well I would suggest that you <take em,>**
(1.0)
Pat: ((nod)) Yeah. [(I know.)
Doc: [Otherwise you'll have other problems. that ahm:, may not be reversible.
Pat: ((small nod)) °Yeah.°
Doc: ((writes in chart)) / (12.0)

At lines 15-19 the physician asks if the patient has run out of his blood pressure medications. Although the patient denies this at line 21, the physician provides evidence that the patient has in fact run out, citing the chart (lines 24-27) which shows that the patient did not attend the required follow-up consultation and was not given medication refills. Thus, the physician's repeated disclosure solicitations are hearable as stemming from the dates listed in the chart – not the patient's actual blood pressure readings. At lines 33-36 the physician continues to pursue patient disclosure, re-formulating his question to ask whether the patient has been missing his medications. The patient provides a mitigated disclosure of medication nonadherence (lines 37/39).

At lines 49-50, the physician turns around, looks directly at the patient, and informs the patient that *he would suggest* he take his prescribed medications. The physician builds his advice as a reminder for the patient to do something he already knows he should be doing – in other words, he builds his advice as a correction of a problem. Despite the physician advising medication adherence (something closely tied to a medical condition), the physician does not *frame* behavior-change as a treatment plan for the patient's hypertension, for example by describing how medication nonadherence may have impacted the patient's blood pressure or explicitly linking medication adherence to improved blood pressure.

While we might not expect patients to discriminate between forms of advice framing given that the connection to hypertension seems obvious, this is not what we see. In Case 4, the physician asserts a deontic authority to enforce compliance with medically advisable behaviors, as opposed to a deontic authority to establish a treatment plan (Cases 1 and 2). Like other patients receiving advice where behavior change is not overtly tied to a specific health outcome, the patient in Case 4 is resistant. He does not respond to the advice for a full second, then provides minimal agreement and a display of prior knowledge "Yeah. I know." (line 52) – two indicators of disaffiliation and disalignment in social interaction (Stivers, Mondada &

Steensig 2011; Stivers 2008). The physician then goes on to justify his advice by citing the risks of continuing to *not* take the medication (lines 53-55). Notably, the physician does not frame the advice as a treatment recommendation for the patient's hypertension here either – instead, he simply cites the vague future potential of "other problems". The patient very quietly agrees and twelve seconds of silence follow, demonstrating continued disaffiliation and disalignment.

Having provided some evidence that patients distinguish between these two forms of behavior change advice, I next ask whether there are regularities in patients' responses to these two types of advice across the dataset as a whole.

Overview of Patient Responses to Behavior Change Advice

These data indicate that *establishing a treatment regimen* is treated as a unique context in which physicians have additional deontic authority to advise behavior change, grounded in an epistemic authority over best-practice treatment of health conditions. This section of analysis asks whether the rate of patient acceptance varies across instances of treatment-implicative advice (N=25) versus plain advice (N=23).

Consistent with the coding schemas developed in Stivers & Barnes (2018) and used in Bergen et al (2018), I draw on Stivers' (2005, 2006) definition of treatment acceptance to identify cases in which the patient immediately accepts physician advice. Patient acceptance (e.g., *okay*, *alright*, *I will*) is distinct from agreement (*yeah*), acknowledgement (*mmm*), and displays of prior knowledge (*I know*), which are understood as passive resistance in the treatment recommendation context (Stivers 2005, 2006).

The rate of immediate patient acceptance of treatment-implicative advice is considerably higher at 72% versus 17% for plain advice (p-value ≤ 0.001, fisher's exact test two-tailed). This suggests that patients find it problematic to be told what to do when this advice

is not framed as an intervention to treat a medical condition (e.g., hypertension), medical concern (e.g., rising blood pressure) or symptom (e.g., pain in legs) and are thus more resistant.

Turning to patient acceptance of treatment recommendations more broadly, we can see that the rate of patient acceptance of treatment-implicative advice is even higher than the rate of patient acceptance of pharmaceutical treatment (results from Bergen et al 2018, in which the same coding schema was used). American patients are most likely to immediately accept behavioral interventions (72%), followed by prescription interventions (43%), and they are least likely to immediately accept over-the-counter interventions (31%). Moreover, the rate of immediate acceptance of behavior change advice with no treatment formulation is lower than that for all three types of treatment formulations (17%). Previous studies have shown that primary care providers see patients as resistant towards lifestyle counselling (Lambe & Collins 2010). The findings presented here indicate that while US patients may be largely resistant towards plain behavior change advice, they are in fact less resistant towards behavioral treatment recommendations than pharmaceutical treatment recommendations.

I have shown how patients respond to treatment-implicative and plain advice and documented the robustness of this pattern. I propose an account for this difference: treatment-implicative behavior change advice is grounded in a physician's interactionally established deontic and epistemic authority over the treatment of disease, whereas plain behavior change advice appeals to general health promotion and a medical surveillance model. Socio-interactionally, the basis for the physician's deontic authority here is contentious. In the next section of analysis, I pursue this account further in an effort to better understand what underlies patients' differential uptake.

Patient Orientations towards the Basis of Deontic Authority

I argue that patients' differential uptake of behavior-change advice has little to do with the content of the advice being given (e.g., exercise versus medication adherence) but instead

depends on the implied deontic basis for the behavior-change recommendation. Although all recommendations for behavior-change in these data are clinically rooted in avoiding or controlling medical issues such as diabetes, hypertension, or high cholesterol, making this link *explicit* indicates to patients why they should follow the advice. In these instances, physicians' deontic authority over determining the patient's lifestyle is rooted in an interactionally established epistemic authority over best-practice treatment of disease. Plain advice leaves physicians' deontic authority to be based on an unsecured authority to promote healthy and adherent behaviors more generally. To back these claims, I next turn to a detailed microanalysis of instances of patient resistance.

The patient in Case 5 has high cholesterol, hypertension and diabetes, and experiences pain and weakness in her legs. Earlier in the consultation the patient disclosed not taking her cholesterol medication or potassium supplements. The physician finishes reviewing the patient's chart at lines 1/4. The physician's first round of behavior-change advice occurs at lines 7/9-10.

Case 5A

Doc: Oh you just had a phys[ical.
Pat: [I jus had
a phys[ical:.
Doc: [Okay.
(2.0)
Doc: Alright, .hh So: um We have
[to- hh **You have to take your**
Pat: [So-
Doc: **medicines. every da:y.**
Tha[t's important,
Pat: [And le:ave the e:ggs alo:ne,
[and but I don't bother with
Doc: [Yes.
Pat: e:gg, or cheese, anything.
Doc: Ok[ay. And fri:ed food.
Pat: [I'll take my potassium.
Doc: **Take your potassium, and take**
your cholesterol medicine.
Pat: Ye::h. ((very quiet))
Doc: **Okay? .h And umm:**
(1.8)
Doc: **Yeah you should be taking all of**
your medicines every day.
Pat: ((slow nod)) | (1.0)
Doc: **Oka::y?**
Pat: I- I ta:ke my blood pressure
medicine,
Doc: Ah huh,
Pat: But that [cholesterol-
Doc: [Do you have a pi:ll
[box? How come you don't- .hh
Pat: [((laughs)) Ye::s, I ha:ve.

Doc: How come you don't like the cholesterol medicine.
(1.5)
Pat: You know why:, [Superstitious. I
Doc: [Why.
Pat: listen to people say- You take tha::t, it will damage your li:ver::, and your ki:dney: and that's why I- ((laughs))
Doc: Ah. But [if you don't-
Pat: [>You know.< Telling the truth.
Doc: Okay, But if you don't take it. [It's gonna do more damage.
Pat: [Mm.
Doc: Because you have your blood vessel like thi:s? ((gesture)) And then the cholesterol builds and builds and builds and then your blood vessels ((gesture)) get clogged.
Pat: Mhm. ((nod))
Doc: And that leads to heart attack, chest pa:in, problems with your legs,
Pat: Mhm,
Doc: Um numbness: weakness:, Problems with the blood flow.
Pat: I will take it.
Doc: Oka:y, [Yeah. So it's worse to
Pat: [Mhmm,
Doc: not take the medicines.
Pat: Okay.=
Doc: =**We really need to get that under control**.
Pat: I will. I wi:ll, ((nod))

Following the closing of the earlier sequence (line 4) (Schegloff 2007) the physician directs the patient to take her prescribed medications every day (lines 7/9) and emphasizes the importance of medication adherence (line 10). As we saw in Case 4, although the physician is advising medication adherence, she does not frame adherence as a medical treatment. The advice appeals to a project of promoting healthy choices – one should take their medications "every da:y". The patient orients to this in her response, listing another behavior change recommendation the physician made earlier in the consultation, to "le:ave the e:ggs alo:ne" (line 11). She emphasizes that this is something she already does (line 12/14), thereby presenting herself as someone who does make healthy choices. She then commits to taking her potassium supplements (line 16).

The physician specifically directs the patient to take her cholesterol medication at line 17-18. Again, the physician does not build her advice into a project of treating *high cholesterol* but rather appeals to a project of promoting medication adherence. Following a minimal, quiet agreement the physician pursues acceptance three times (lines 20/22-23/25). At lines 26-27, the patient actively resists the advice, emphasizing that she is adherent to her blood pressure medication. She then indicates some trouble with the cholesterol medications (line 29). At lines 30-31/33-34, the physician alters her approach and asks the patient why she doesn't like the cholesterol medication.

The patient answers that she has heard the medication can damage the liver and kidneys (lines 36/38-41). Instead of addressing the patient's concerns directly by providing information about side effects, the physician explains what untreated high cholesterol does to the body (lines 45-46/48-53). She lists the impacts cholesterol buildup can have on the body in lay terms (lines 55-57/59-60) including the "problems with your legs". In effect, the physician explains what the cholesterol medication is treating, thereby giving medication adherence *treatment relevance*. Instead of appealing to a project of promoting healthy choices, as we saw at lines 7-

25, here, the physician appeals to the project of justifying her advice as part of a treatment plan. The patient first commits to behavior change at line 61. The physician's behavior change advice ("We really need to get that under control") is formulated as an assertion-type treatment recommendation (Stivers & Barnes 2018). Her claim to deontic authority to advise medication adherence is based on her epistemic authority over treatment of high cholesterol. The patient immediately accepts, repeating her commitment to behavior change twice (line 68).

A detailed microanalysis of instances in which we can see a shift from patient resistance to acceptance, such as Case 5, provides further evidence that patients orient to *constructions of behavior-change advice as treatment* as interactionally distinct from promoting 'heathy' or 'adherent' behavior more generally. Further support for this claim can be found by examining cases in which the position or the formulation of the advice indicates a treatment recommendation, but not both. These cases help to reveal that patients are not simply distinguishing between advice that references versus doesn't reference a health condition, but that deontic authority to make requests for behavior change must be recognizable as *grounded within in a project of treatment*. Here we turn to Case 6.

As Case 6 opens, the physician is in the middle of filing in the patient's chart, including sections on family health history and preventive health screenings. At line 1, the physician offers to give the patient a mammogram referral, and the patient agrees. The physician then turns back to look at the chart and requests confirmation that the patient has never smoked (line 4). The quit-smoking advice occurs at line 26-27.

Case 6

Doc: Yeah but I'll- I'll give it to
you so that you have it.
Pat: Yea:h.
Doc: You've never smoked at all.
right,
(1.5)
Pat: .hhh Ahh: no that's not true:.
Doc: Oh you did smoke in the past,
... ((discuss how much patient
smoked and currently smokes))
Doc: Okay.=So it's just a:: (.) very
uhm (0.5) small amount.
Pat: Yea::h.
Doc: Some day- (.) Okay.
(2.0) ((doctor typing))
Doc: **You really should quit. with your
osteoporosis the way it is?**
Pat: I know:. You told [me la:st time.
Doc: [Ye:h.
Pat: I to:ld you I do last time, and
you said You have to work on
that,=
Doc: =Yeah:.
(6.0) ((doctor typing))

The physician-initiated disclosure and subsequent talk about smoking is hearable as stemming from routine history-taking and the process of filling in the chart (lines 3-6). Once the physician has established how much the patient currently smokes (transcript not shown), she requests confirmation that it is a small amount (line 21-22) and types the patient's information into the chart (line 25). Up to this point, there is no indication that the physician is pursuing the project of establishing a treatment plan. In other words, the position in which the advice takes place is not one of treatment relevance, but rather routine history-taking. At line 26, the physician provides her behavior-change advice "You really should quit." She then immediately cites the patient's osteoporosis as a *reason to comply* with her advice. Though the physician invokes the patient's diagnosis of osteoporosis here, it is not recognizable as part of a larger project of establishing a treatment plan for the patient's osteoporosis and therefore is hearable as a post-hoc justification for the advice.

The patient responds with immediate resistance. Importantly, her resistance reveals her understanding of the advice as another reminder to quit smoking rather than a recommendation of a behavioral intervention to address her osteoporosis. She doesn't dispute the validity of the physician's advice, but resists being *reminded to quit* (line 28).

Further evidence that patients are more receptive to behavior change advice when it is recognizable as a treatment recommendation is that they mayrequest clarification of whether advice is meant to address a health condition. For instance, in Case 7, the patient is receiving antibiotic treatment for her first urinary tract infection (UTI). The physician has taken a urine test to determine whether the current antibiotic regimen is best choice for this infection. The behavior-change advice occurs at lines 37-38/40.

Case 7

Doc: We'll follow it up
[an:d .hh and take care of that
Pat: [Okay.
Doc: so that's not a problem.=But
you're feeling fine, [.hh Do you
Pat: [Yeah,
Doc: think it was like not
drinking enough water::?
[Or do you think it wa:[:s
Pat: [.hh Well I- [Honestly
I don't drink enough [water.
Doc: [Okay.
Pat: I- I know that for a fa[ct.
Doc: [Yeah.
... ((discuss drinking coffee))
Doc: [Yeah. Yeah. .hh See I don't
like water myse:lf? so I'll do:
like I'll- I'll put like a
green tea bag really lightly: in
just (.) cold, .h
Pat: Yeah.
Doc: Or like Crystal Li[:ght? Or like
Pat: [Yeah.
Doc: I'll do something to it to make
it- cause I don't like water
[either. ((shrug))
Pat: [Yeah. ((laughs))
Doc: **So: But you gotta.=It's good for**
your [body and especially now
Pat: [Yeah.
Doc: **that you've had a [UTI?**
Pat: [Yeah. ((nod))
(0.8)
Doc: So [um:
Pat: [So my- So that would be the-
the best way to
Doc: Yea:h.
Pat: prevent it ri:ght,
Doc: Yeah yeah.

The physician asks whether the patient thinks “not drinking enough water::” could have caused the UTI (lines 5/7-8) and the patient discloses that she doesn’t drink enough water (lines 10-11/13). The physician then talks about how coffee can affect hydration (transcript not shown) and describes what she does to help make drinking water easier for her (lines 25-29/31/33-35). The patient agrees and laughs (lines 30/32/36).

At line 37, the physician advises behavior change with “you gotta”. The advice is clearly placed within a larger project of establishing hydration as a preventive treatment for recurrence of the UTI. However, the account that follows the advice is based on the promotion of wellness “It’s good for your body”. The doctor then invokes the UTI before reformulating a directive for the patient to drink more water. Because of the formulation of the turn, it is unclear whether the basis of the physician’s advice lies in the promotion of healthy behavior generally (“It’s good for your body”) or whether it lies in behavior change being a viable treatment to prevent recurrence (“now that you’ve had a UTI?”).

The patient agrees with but does not accept the physician’s advice (line 41), then requests clarification of whether the advice was given as a *treatment recommendation for prevention of UTI recurrence*. ‘So’ prefaced turns such as these pursue an agenda that was already ‘on the speaker’s mind’ across the prior turns at talk (Bolden, 2009). This request for confirmation provides further evidence that the relevance of the advice to *establishing a treatment plan* for the UTI is meaningful to the patient. The physician confirms at lines 44-45/47.

This case provides evidence that patients orient to the *project* of establishing a treatment plan as a unique context in which it is non-problematic for physicians to advise behavior change and for patients to pursue behavior change advice. Further evidence for this claim can be found across the dataset. When physicians frame behavior change advice as a treatment plan, they remain well within the bounds of what is broadly considered the physician’s realm of deontic

authority within medical institutions – treatment of disease. For example, returning to Case 1, the patient similarly pursues treatment-implicative behavior change advice shortly after the physician initiates treatment negotiation (lines 51-55). He even goes so far as to explicitly ask the doctor if his lack of exercise could be a contributing factor to his high blood pressure (lines 56-61). Thus, patients appear open to behavior change advice that they understand is directly linked to ongoing health conditions and will even actively seek this link if it is not forthcoming.

However, when physicians produce plain behavior change advice, without an overt link to a diagnosis, their deontic authority is based on an unsecured authority to promote healthy and adherent behaviors more generally. This appeals to a medical surveillance model in which the patient's disclosed behavior is treated as a risk factor and there is no explicit link to the patient's symptoms, health status or reason for visiting the doctor. Patients do not just resist the physician's advice in this context, but also resist the *activity* of supervising on the basis of promoting healthy behavior alone. Case 4 provides an example in which the patient resists everything from the physician's solicitation of disclosure to his behavior-change advice. Case 3 provides an example in which the patient not only resists, but blocks the physician's advice trajectory.

This paper explores the modern patient's resistance to *plain behavior-change advice* in the primary care consultation. It also reveals physicians' reliance on such advice – almost half of all instances of behavior change advice are formulated as plain advice (N=23 of 48). Although all advice in this collection is *clinically* rooted in avoiding or controlling medical conditions, building the advice as a treatment recommendation provides a further basis for the physician to claim the authority to advise behavior change. Patients show a strong social-interactional preference for *treatment-implicative advice*, even accepting 'behavior change' treatment recommendations at a higher rate than pharmaceutical treatment recommendations.

Conclusions

This paper demonstrates that patients do not uphold one consistent stance on a physician's right to advise behavior change. Rather, the extent to which patients treat physicians' behavior change advice as acceptable is largely determined by the way in which the physician frames the advice. Specifically, with *treatment-implicative advice* that is framed as a treatment recommendation, the physician's deontic authority to enforce lifestyle change is rooted in an epistemic and institutional authority over illness management. In contrast, with *plain advice* that is *not* explicitly framed as a treatment, the physician's deontic authority is based on an unsecured authority to promote healthy and adherent behaviors more generally. While patients typically accept the former, they tend to resist the latter.

Moreover, what underlies the differences in uptake has little to do with the type of behavior change recommended or how closely related health behavior and health condition are objectively. Although all recommendations for behavior-change in these data could have been framed as an intervention to address medical conditions such as diabetes, test results such as high blood sugars, or symptoms such as headache, making this link visible to patients indicates the deontic basis on which the advice is built. This reveals a form of surveillance medicine broadly resisted by modern patients in the primary care setting. Patients do not treat physicians as having an unconditional authority (see Peräkylä 1998) to promote behavior change. Instead, a physician's authority to advise behavior change is interactionally achieved by making the deontic basis of the advice apparent to patients.

However, there is also evidence that primary care physicians are less likely than patients to orient to this form of surveillance medicine as problematic. For example, almost half of physicians' behavior change advice is framed as plain advice. This difference in patient and physician orientations to health behaviors may reflect a standard in which physicians assert the authority to implement a medical surveillance model based in health promotion and a

preventive care agenda – frequently taking the stance that a physician does not need to account for their decision to advise a patient to follow a healthy lifestyle – but modern patients are not yet fully onboard with this model of care.

The majority of people in the US doubt their nutritional choices and health behaviors (IFIC 2018). They both trust and rely on lifestyle advice when it comes from medical professionals (IFIC 2018). Despite this, physicians perceive patient resistance to lifestyle advice broadly (Lambe & Collins 2010). This study provides one account for this discrepancy. Patients *are* broadly receptive to behavior-change advice, but only when it is formulated as a treatment plan for a health condition. Their resistance is not in fact towards *behavior-change advice* generally, but rather towards *plain behavior-change advice* that is not overtly framed as a treatment for a medical condition or symptom.

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