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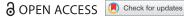
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# Preliminaries to Treatment Recommendations in UK Primary Care: A Vehicle for **Shared Decision Making?**

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#### **ABSTRACT**

This paper focuses on a recurrent practice observed in UK primary care data - how physicians use prerecommendations: action sequences that when initiated post-diagnosis are recognisably preliminary to the drug treatment recommendations that they contingently project. Data are drawn from recorded primary care consultations collected in England. Pre-recommendations consist of physician requests for information about prior medicines such as, What've you tried taking? or Have you taken anything so far? Patient responses subsequently shape the first part of the base treatment recommendation pair. These preliminaries can help physicians manage potential obstacles to patient acceptance: by avoiding prescribing something a patient is already taking, or has tried and found to be ineffective, and by accommodating concerns such as side effects or practical barriers to acceptance. Pre-recommendations are a strategy for convincing/persuading whilst allowing physicians to avoid making an ill-fitted recommendation that might be resisted or rejected as unwanted or unnecessary.

Byrne and Long (1976) described the treatment phase of the UK primary care medical encounter thus:

This phase may well be a long verbal set of instructions to take certain pills and do certain things, or it may be a completely non-verbal, instant tearing-off of a sheet of paper from the prescription pad with the terse message, "Take this to the chemist". (p. 27).

Although these days a flurry of typing followed by the sound of the printer whirring into action before a prescription is signed and handed to the patient might be more familiar, little else has changed. The majority of patients still attend primary care for the purpose of obtaining some kind of medical intervention, and physicians still recommend medical treatments in a range of ways (cf. Stivers et al., 2017).

Medicines are the commonest treatment used by physicians to help maintain health, prevent illness, manage chronic conditions, and treat disease. In 2016, 1.10 billion prescriptions were dispensed in the community in England (NHS Digital, 2017). However, evidence has suggested that medicines use in the UK is sub-optimal. This has resulted in policy campaigns oriented towards improving outcomes by ensuring that the right patients get the right choice of medicine, at the right time, thereby avoiding unnecessary medicines, reducing waste, and improving medicines safety and adherence to treatment (Royal Pharmaceutical Society, 2013).

Understanding how new medicines get started may provide some insight into optimising their use. For example, despite non-adherence often being cast as sitting squarely within the patient's domain, some studies have explored potential associations between adherence and what happens during the medical visit itself. For instance, patients' responses to physicians' directives have been found to be a predictor of adherence to medical advice (Carter, Beach, Inui, Kirscht, & Prodzinsky, 1986; West, 1990). And physician communication practices have also been shown to play an important role in supporting adherence (Tarn et al., 2006).

Facilitating patient involvement in decisions to prescribe is held as a cornerstone of good medical practice in UK policy guidance (NICE, 2009). Yet how involved are patients in treatment decision making? Before adherence is even an issue, physicians and patients must arrive at a decision about what treatment, if any, might be necessary. It is known from previous research that acceptance is the normative response to a drug treatment recommendation and that physicians will pursue this when it is not forthcoming (Stivers, 2005). This paper considers the advance work that UK physicians can do in environments where they might reasonably anticipate a need to proceed with caution, to help ensure an optimal outcome (i.e. that the right recommendation for this patient might be favourably received).

Patients are not tabulae rasae; they come with experiential knowledge of a range of medical conditions, over-thecounter (OTC) and prescribed drug treatments, plus knowledge from other sources that inform their beliefs and preferences. In the context of UK primary care, there are a number of immediate obstacles to patient acceptance that a less cautious approach to prescribing (i.e. with little patient involvement) might encounter.

*Redundancy*: In (1), the physician has recommended a treatment the patient is already taking:

```
(1)
        0503801
1 DOC:
        I would suggest that you just have
        plenty of fluids, (0.4) u:m,
2
        take some pain relief, (0.3) u:m,
3
        (0.4) something like Nurofen,
4
5
        (0.4) and <u>a</u>lternate it with
        Paracetamol is quite (.) \underline{\mathbf{u}} seful as a
        (.) pain control.
         ((7 lines not shown))
         Cos=I have been taking (0.6) um, (0.6)
14 PAT:
         Nurofen?
```

Efficacy: In (2), the physician has recommended a treatment the patient has previously tried and found to be ineffective.

```
(2)
         09141301
1 DOC:
         If ↑you had a sort'ov you know
         a: u:::h u:h a: sort'ov stocking on
3
         there (.) >d'you think that w'd< or a
         little ba:n[dage on there,
5 PAT:
                     [We::11.
6 DOC:
         d'you think that w'd make it better or
         worse.
8 PAT:
         Well I've ↑got stockings, I've tried
         them,
10 DOC:
         Yeah.
         They didn't do any go:od.
11 PAT:
```

Aversion: In (3), the physician has recommended a treatment, and in response the patient expresses aversion to taking 'tablets'. Aversion can include medicines in general, a particular class of medicines (e.g. painkillers), or medicines associated with negative personal experiences or social stigma (e.g. antidepressants).

```
(3) 02010602
1 DOC: An we ↑mentioned la:st time about usi:
2    ng uhm some the equivalent of
3    Viagra,
4 PAT: Yeah=I know you told me before_
5 DOC: Ye:ah. .h D'you want to try ↑that?
6    (0.7)
7 PAT: Not really_ >I don't want to go on
8    tablets all the time<.</pre>
```

Potential for harm: In (4), the physician has recommended a medicine that the patient expresses concern about in terms of possible side effects. Other examples include recommending medicines that patients may be allergic to, or that would exacerbate, or be contraindicated with regard to other current medications or conditions (e.g. non-steroidal anti-inflammatories and asthma).

```
(4) 05060901
1 DOC: >So what I'm gonna do is I'm gonna
2    prescribe you< some co-codamol
3    >which has got< codeine and paracetamol
4    in it for the pain_
5    (0.3)
6 PAT: Will that hurt me?
7 DOC: ↑Shouldn't do?</pre>
```

Affordability: In (5), the physician has recommended a treatment, the patient implies that he is not currently able to afford.

```
(5)
         02022007
1 DOC:
         >An if< you: would like to: try some
2
        medication to help with that pain
3
         tuh s:ort'ov relax that bowel .hh
4
        uhm an stop the spasm you're
5
        welcome to try that.
        How much are the prescriptions
7
         for [the:
8 DOC:
             [.Hh the prescriptions you:
9
        are at the moment ehm .h >they're
         [about seven sixty I think
11 PAT:
         [°Okay.°
12 DOC:
         >unless it has gone up< [recently.
13 PAT:
                                  [I ↑I'll give
         that a miss for now I think.
14
```

Patients may not always disclose such obstacles, particularly in the face of a treatment recommendation from their physician where acceptance is the normative response. This paper takes on the task of exploring physician practices designed to manage potential obstacles to prescribing; the contexts in which they might be employed; and any subsequent effect these practices may have on how a treatment recommendation was ultimately delivered and received.

The analysis here draws on Sacks' (1992) original notion of 'pre-structures': "an 'expansion' of some pair sequence, where that pair gets a 'pre-sequence' before it' (p. 685), and their relationship to interactional preferences and cultural norms (also see Schegloff, 1980, 2007). For example, prior work on pre-announcements, pre-invitations, and pre-requests has demonstrated how pre-sequences can be directed to minimising the possibility of dispreferred outcomes; that the news to be told is already known, the invitation to be issued will be declined, or the request cannot be fulfilled. It is the pre-sequence itself that does the work to test the water and establish the conditions for proceeding (or not). Schegloff (2007) argues that interactants: "display an orientation in them to a base adjacency pair which may subsequently develop" (p. 28), and identifies 'go-aheads', 'blocks', and 'hedges' as different possible classes of response.

A go-ahead advances the prospective base sequence, a block can discourage the prospective base, and a hedge can delay progress contingent on further information. See (6) below for an example of a pre-invitation sequence in ordinary conversation that is recognisably preliminary, for the interactants, to the delivery of a next action.

```
(6)
     JG CN:1 (Terasaki, 2004, p.195)
1 A:
     Whatcha doin'.
2 B:
     Not much.
3 A: Y'wanna drink?
```

The enquiry at line 1 enables A to 'test the water' before launching an invitation (here done at line 3). The invitation is thus contingent on receiving a go-ahead response from B, which is present in line 2.

This paper investigates the use of pre-sequences in a different context: (i) how physician enquiries about prior medications post-diagnosis projects for the patient the contingent possibility that a treatment recommendation is forthcoming; and (ii) how the patient's responding turn can either encourage or discourage progressivity, inevitably shaping the recommendation proper.

### Data and method

The UK primary care data meeting the inclusion criteria for the wider study (cf. Stivers & Barnes, 2017) were drawn from two existing datasets of recorded consultations. Dataset 1 was collected between 2004 and 2005 across two boroughs of a large urban area in the South of England, yielding 506 audiorecorded patient consultations with 13 primary care physicians from five general practices (see Wheat, Barnes, & Byng, 2015). Dataset 2 was collected between 2014 and 2015 across a large city in the West of England and its surrounding areas, yielding 327 video-recorded patient consultations with 23 primary care physicians from 12 general practices (see Jepson et al., 2017). Appropriate ethical approvals were obtained from Local National Health Service Research Ethics Committees.

In dataset 1, 263 randomly selected recordings were screened resulting in 127 cases of physician-initiated recommendations for new drug treatments. In dataset 2, all 327 consultations were screened, resulting in a further 266 cases. For a total of 393 cases, additional coding for the presence or the absence of pre-recommendation sequences was developed and applied. Note that 15% (n = 57) of cases featured pre-sequences. In the extracts presented below, physician enquiries are represented in boldface type, and treatment recommendation turns are indicated by an arrow.

#### **Analysis**

### Physician enquiries about prior medicines: Pre-diagnosis

Pre-sequences are not the only means for gathering information about prior medication use. Patients often volunteer information about medicines they have already taken or tried, and whether they have been effective whilst establishing the reason for the visit. Additionally, in the subsequent information-gathering phase, physicians often ask patients for information about prior medication use. In (7), the patient, who is new to the practice, has presented with unexplained pain down her right side. As part of his information-gathering activity, the physician has just asked if she is taking any regular medications and then directs her to lie down on the examination couch. Just prior to commencing his physical examination at line 1, he then asks, "Have you been taking >anything< for the ↑pain o:r\_". The information request is formatted as a polar question, pushed towards a 'no' by the inclusion of the negatively valenced item "anything" (Heritage, Robinson, Elliott, Beckett, & Wilkes, 2007). However, arguably the addition of the stretched turn-final "o:r" (Lindström, 1997) mitigates that push. The patient's response first goes towards the apparently aimed-for 'No', and is subsequently reversed. She then extends and qualifies her response across lines 3-6. This expanded response allows the patient to assert her epistemic authority and extend the terms of the question to name the OTC medication she has tried, but also the fact that it was not effective. The physician registers the response at line 7, and at line 9 his "Okay" heralds a shift to begin a next activity (Beach, 1995; Schegloff, 2007) - the physical examination.

```
(7)
        01010101
1 DOC:
        Have you been taking >anything< for
2
         the *pain o:r
3 PAT:
        No: (.) I < well yeah I tried to take
4
        uh:mibuprofen=>butit
5
         didn't go< anywhere near the
6
         [pa:in,[so:uh:m_
7 DOC:
         [Noh
                 [M:m]
         (1.0)
9 DOC:
         °0[kay.°
10 PAT:
           [°O::h Go:d aw::h° ((Getting up on
         the examining couch))
         (0.5)
12
13 PAT:
         [↑A(h)uh huh
14 DOC:
         [So >if yo:u< (.) ↑pop these legs down
15
         the:re,
         ((180 lines not shown))
195DOC: I I c'n give you something something
196
         a bit stronger than
197
         ibuprofen if that's::=
         =Ple:ase.
```

It is not until 180 lines later, after delivering an uncertain diagnosis, and advising the patient to continue her exercise routine, the physician recommends a prescription-only antiinflammatory medicine. At line 195, formulating an offer for, "something a bit stronger than ibuprofen," he displays an orientation and sensitivity to the information solicited earlier at lines 3-6, in particular the fact that the patient has tried an

<sup>&</sup>lt;sup>1</sup>Whilst restricting the pre-s coding to cases fitting our original inclusion criteria enabled us to track any effect on the choice of recommending action and patient uptake, it ruled out other contexts where pre-s were observed including cases where: (a) a block resulted in no recommendation being issued; (b) the recommendations were for no change to a current regimen, dosage changes, or non-drug treatments; (c) contingent recommendations; and (d) recommendations initiated by patients.

OTC anti-inflammatory, 'ibuprofen', that she has found to be ineffective ("it didn't go< anywhere near the pa:in").

Physician enquiries about prior medication use were common in the sample. Extract 7 illustrates how, when launched *pre-diagnosis*, they are treated as self-contained adjacency pairs, and not oriented to by physicians or patients as preliminary to a treatment recommendation. However, as shown above, physicians would sometimes display sensitivity to these prior informings *post-diagnosis* in the design of later treatment recommendations. Robinson (2003) has argued that the structural organization of medical activity shapes physicians' and patients' communicative behavior. Both parties understand that "doctors cannot effectively treat problems that they have not yet diagnosed, and thus the activity of treatment is contingent upon that of diagnosis" (p. 31).

Next it will be demonstrated how the overall structure of the consultation provides a resource allowing physician requests for information about prior medicines *post-diagnosis* to be heard as projecting a treatment recommendation. The examples illustrate how patients were able to recognize these enquiries as preliminary to a treatment recommendation and how physicians were able to navigate two of the obstacles/preconditions to successfully prescribing described previously: redundancy and efficacy. Later, two further obstacles: aversion and the potential for harm will be addressed.

## Physician enquiries about prior medicines: Post-diagnosis

In this section, the focus is on how patients treat enquiries about medication usage delivered *post-diagnosis* as preliminary to a treatment recommendation. Specifically, it is argued that through the use of responses that either promote or inhibit prescribing, patients not only answer the question, but commonly provide additional information orienting to a candidate treatment. Moreover, where minimal responses are provided, physicians often pursue information that may further inform a prescription decision.

Consider (8) where the patient presents with a torn shoulder ligament from an injury sustained three months ago, complaining of a persistent lack of mobility. The physician has just examined her and recommended that she has an additional scan. His enquiry at line 2, "have you had any anti-inflammatories," is immediately recalibrated as " = are you taking ibuprofen > or anything like that\_<"; the redesign shifting its specificity (drug class to drug name) (Lerner, Bolden, Mandelbaum, & Hepburn, 2012), lexicon ("had" to "take"), grammatical aspect ("have you had" to "are you taking"), and polarity (no- to a yes-preferring). The turn final or-phrase, "or anything like that," a catch-all device keeping response options open (McCarthy & Carter, 2006).

```
(8)      05060501
1 DOC:      The:: other thing that we need to do
2      (0.7) have you had any
3      anti-inflammatories=are you taking
4      ibuprofen
5      [ >or anything like that < ]</pre>
```

```
[((Head nod))(Jus)[
6 PAT:
                                   doesn't
                                              ]
7 PAT:
                             [((Head shake
8
          touch it.
          °Okay.° . Thh have we prescribed you
9 DOC:
          anything stronger_
10
11 PAT:
          ((Three lateral head shakes))
12 > DOC:
          .h I ↑wonder whether we should give
13
          you some stronger anti-
          [inflammatories. To try and settle
14
15 PAT:
          [((Nodding))
16 DOC:
          [down any inflammation that is
17 PAT:
          [((Nodding))
18 DOC:
          the:re, .thh u::hr (1.4) >the other
          thing we c'd do w'd be to give
19
20
          you some stronger< painkillers
```

As suggested earlier, the location of this enquiry makes it recognisably projective of an upcoming treatment recommendation contingent on the response to the enquiry. That the patient hears the question as implicating future treatment is visible insofar as she not only answers the question negatively but at line 6, asserts something unasked for - the inefficacy of the medication. This suggests that the patient understands the physician as asking about anti-inflammatories as part of a decision process with respect to treatment. The patient's expanded 'go-ahead' response is registered as adequate by the physician at line 9 with "Okay," but then a follow-up enquiry is launched, "have we prescribed you anything stronger." This second preliminary continues to project that the patient's response will affect a prescribing decision. At line 11, the patient denies this proposition with multiple lateral head shakes, her non-vocal display (Goodwin, 1980) leaving the way clear for the physician to tentatively propose some stronger anti-inflammatories and painkillers. The formulation of the recommending turn shaped by the prior responses.

In (9), again, the patient hears the information request as implicating future treatment. This time an expanded clausal response is provided (Thompson, Fox, & Couper-Kuhlen, 2015) volunteering detailed information about lack of efficacy when that was beyond the agenda of the physician's question. The patient has presented with a sudden onset acute headache. After taking a detailed history, the physician checks her blood pressure and rules that out as a contributory factor. Although there is some uncertainty around the aetiology of the headache, it is clear that the most pressing need is symptom relief. At line 1, he launches the pre-sequence with, "What've you tried taking," his enquiry presupposing that the patient has already attempted self-medicating. Following a delay, at line 3, the patient answers more than the question (Stivers & Heritage, 2001), providing the name of an OTC painkiller, but then expanding her turn to detail her regimen. She ends with a complaint that despite her best efforts at pain control, "nothing is \tambel{moving}," a clear 'go-ahead' for remedial action.

```
(9) 0102401
1 DOC: What've you tried taking.
```

```
(0.6)
3 PAT:
         I've taken er Co-↑dyamol for=it,
4
         I've taken (1.3) (for for this). I
5
         ↑didn't take, I took two this morning
         when I got=up .hhh at six, I
6
7
         took two at ten. I've taken four=
         already it's: nothing is ↑moving.
8
9 DOC:
         Co-dydramol.
10 PAT:
         Yes::.
         (0.4)
11
12 DOC:
         °Okay.°
13
         (3.1)
14 DOC:
         °°(T)uh(t)uh(t)uhtuh:::°°
15
         (2.2) ((Begins typing))
16>DOC:
         ↑Okay I'll give=you something
17
         slightly stronger.
18 PAT:
         ↑Oka::y.
```

After reconfirming the drug name at line 9, the physician acknowledges this information and following some consideration delivers a tailored pronouncement at line 16 on pretty firm grounds, i.e. knowing the patient is not averse to taking something for the pain, and that what she has taken has hitherto been insufficient. Whilst the "Okay" preface indicates forward movement (Beach, 1995), the location and design of the recommending turn indexes the prior enquiry as having been preliminary. Moreover, the formulation, "something slightly stronger," is clearly shaped by the patient's prior response.

In (10), the patient is waiting to have a gallbladder operation. She has complained of constant pain that is making her lifting duties as a full-time carer difficult. The physician examines her and diagnoses that the source of her pain may actually be musculoskeletal rather than from her gallbladder. Contrastingly, in this example, it is the physician who raises the issue of efficacy, suggesting that this was indeed part of the agenda and her move towards building a responsive treatment recommendation. At line 1, the physician launches a No-preferring request for information, "Have you †tri:ed an: y (0.5) other treatments\_ local things: (1.0) ↓anti-inflammatory things:". As in (8), the increasing specificity, plus the concurrent activity of scanning the on-screen medication history, amplifies the action.

```
(10)
         10170101
1 DOC:
         Have you ↑tri:ed an:y (0.5) other
         treatments
2
            local things:
                             (1.0)
3
4
         [((Gestures towards abdomen))
5
         ↓anti [inflammatory things:
6
               [((Leans towards screen))
7
         (0.4)
8 PAT:
         What (0.5) I ↑did `av it in my back to
9
         start [with=I was
10 DOC:
               [M:m
         using like a cream [y'know, anti-
11PAT:
12DOC:
                             [↑M:m
         flamma[t'ry cream.
13 PAT:
```

```
14DOC:
                [>Was that< helpful?
         (0.6)
15
         [ W'll not
16 PAT:
                             ] really.
17 PAT:
         [((Lateral shake))]
       =[No: it d(h) idn't do a lot ↑to it_
18
19 DOC:
         [£Not particularly £ .hhh (0.3)
20
         °er° because you got the indigestion
21
         history I think (0.3) giving
         you <tablets:> that are anti-inflam
22
         mat'ry we might just trigger off
23
         more [indigestion. < So . hhh it's
24>
25 PAT:
              [((Head nod))
26 DOC:
         ↑prob'ly worth trying an anti-
27 DOC:
         inflammatory cream
         [again on this area that's so:re,
28
29 DOC:
         [((Gestures across abdomen))
30 PAT:
         [Ye:ah
         [((Head nod))
31 PAT:
32 DOC:
         an see if that reduces the pai:n.
```

At line 8, the patient responds with a 'transformative answer', adjusting the agenda of the question to report selfmedicating with an anti-inflammatory cream but applied to her back (Stivers & Hayashi, 2010). As in (8), the physician launches a follow-up enquiry at line 14, this time concerning efficacy. Following a negative response from the patient at line 16, prefatory talk ruling out anti-inflammatory tablets by foregrounding the potential for harm at lines 20-24 gives ground for the physician's suggestion that the patient try the cream again, but this time on her abdomen. Again, the placement of the recommending turn post-diagnosis indexes the prior request as having been preliminary, its formulation shaped by the prior response.

So far it has been established that enquiries about prior medicines done post-diagnosis can function as preliminary to a base treatment recommendation. These pre-sequences provide information that can allow physicians to avoid prescribing medicines the patient may have already been taking, or had tried and found to be ineffective (redundancy and efficacy). Through the position of the physician's enquiry, an upcoming treatment recommendation can be, to some extent, projected. The patient's response foreshadows what problems or obstacles, if any, the physician will need to consider. It is thereby recognisably consequential for, and inevitably shapes, how the base treatment recommendation proper is delivered.

As reviewed above, in everyday conversation, the way that interactants respond to preliminaries typically shapes whether or not the projected next action appears at all. In this context, the same pattern might be expected: that physicians employ preliminary sequences to avoid making recommendations that will be resisted or even rejected. Yet this is not completely in line with what was observed. Physicians do, as shown in this section, formulate treatment recommendations in ways that are sensitive to the patient's responses to preliminary enquiries. However, the next section documents that physicians do not necessarily abandon their recommendations in the face of potential resistance. How patients respond to preliminaries to foreground obstacles such as aversion to

medicines and concerns over potential for harm, and how physicians use these responses to press on with a recommendation will now be reviewed.

## Avoiding resistance: Reported side effects and aversion to medicines

Out of a total sample of 393 UK recommendations for new drug treatments, only 15% (n = 57) of cases featured pre-sequences. This distribution suggests that pre-sequences are being initiated 'for cause'. Yet contrary to what studies of pre-sequences in everyday conversation might predict, when pre-recommendations receive a discouraging response from patients, the projected base sequence was seldom abandoned. In this sample, when a presequence was present, it was virtually equally likely to receive an initial block (52%) as a go-ahead (48%) response from patients, suggesting that blocks do not canonically lead to an abandonment of the base recommendation. In this section, it is argued that physicians rely on pre-sequences not only to identify obstacles to acceptance but also to inform their recommendation in order to avoid resistance. Thus, pre-sequences are not only reflective of a cautious entry into the recommendation, they are also resources to achieve the completion of the recommendation sequence.

In (11) unlike the cases seen so far, the physician is asking how the patient is getting on with a recently prescribed medicine rather than screening for what the patient may have tried at home, or may have been prescribed on a prior occasion. The physician launches his enquiry at line 1 with a WH-question "What are the pa:in" which is abandoned midturn for a more constraining yes-preferred polar question design, "Are the painkillers helping?" A 1.5 second delay and the patient's 'well-preface' at line 4 heralds an expanded response aligned against the polarity of the question (Heritage, 2015), indexing some difficulty in responding.

```
05061302
(11)
         What are the pa:in_ <Are the
1 DOC:
         pain killers helping?
3
         (1.5)
4 PAT:
         We: 11, the painkillers I stopped
5
         taking, because they were causing
6
         me so: many troubles in my stomach,
7
         (0.3)
8 DOC:
         >Were the:y?<
9 PAT:
         >They were affectin' < eh I'm sure it
10
         was the painkillers were
         affecting my stomach?
         (0.7)
12
13 DOC:
         'Kay.
14 PAT:
         U:hm (1.0) an they didn't they
15
         th- th- the few days I was
16
         takin' em, (.) they weren't (.) they
17
         weren't doin' anything at
18
         ↑all.
         °'Kay.°
19 DOC:
20 PAT:
         An she did sa:y if they don't wo:rk
         (0.3) [come ] straight back.
21
22 DOC:
                [Yeah.]
```

```
23>DOC:
         Yep .thh [So the other] thing we've
24 PAT:
                    [ (
                                ) ]
         got then is u:hm (1.7) so the
25 DOC:
26
         if they're upsetting you so that you
27
         can't take them .hhp'raps a
28
         combination of taking jus some
29
         paracetamol (.) an then you could
30
         either ha:ve .hh a gel to rub in to
         your back?
31
32 PAT:
         Yeah.
33
         (0.4)
34 DOC:
         An if you're getting ne:rve pains or
35
         shooting pains
36
         [down your legs: .hh] the::n .h we
37 PAT:
         [Tha:s that's yeah ]
38 DOC:
         could †think about giving
39
         you:: (1.3) a medication that helps
         with (.) the ne:rve sens[ation.
40
41 PAT:
                                   [Yeah.
```

Across lines 9-11 and 14-18, the patient presents two obstacles: side effects, "they were causing me so: many troubles in my stomach"; and inefficacy, "the few days I was takin' em, (.) they weren't (.) they weren't doin' anything at \all.' The responses clearly foreshadow the need for a different treatment plan. However, still working on prescribing a painkiller, at lines 23-31, the physician duly takes into consideration the patient's response by proposing that he uses Paracetamol (a simple analgesic) and anti-inflammatory gel (containing a lower dose of the same painkiller). So this is responsive, on the one hand, but persistent, on the other hand. The prefatory inferential "so", plus "the other thing we've got then" are, respectively, backward and forward looking, indexing that the recommending turn is contingent on the prior, neatly circumventing the obstacles described and progressing to sequence completion.

A second illustration of how physicians balance responsiveness to preliminary enquiries whilst side-stepping patient resistance is shown in Extract 12. The physician has just examined the patient's hands and diagnosed a form of arthritic disease. In line 1, the physician launches a presequence with her enquiry, "Have \tag{you \tag{TRIED} any painkille:rs > or anti-inflammatories > so: fa::r," a polar question that gets a well-prefaced response at line 4 from the patient, foregrounding its non-straightforwardness (Schegloff & Lerner, 2009): "(We:ll) to be honest I do:n't really take table: ts." At line 19, the patient goes on to express some doubt over the effectiveness of OTC medicines.

```
(12)
         11191001
1 DOC:
         E:::HM * Have * you * TRIED any pain
         kille:rs >or anti-inflammatories<
3
4 PAT:
         = (We:11) to be honest I do:n't really
         take table:ts,
         ((13 lines not shown))
19 PAT:
         They reckon that all medicine's the
20
         ↑sa::me according to that
         medical doc↑tor? On the telly? You
```

```
22
         medical doc↑tor? On the telly? You
23
         You see ↑i::t?
         [I didn't, no:, ↑I ↑mean ↑not a:ll
24 DOC:
25 PAT:
         [(According,)
26 DOC:
         medicines aren't
27 DOC:
         the [sa:me so, Huh
28 PAT:
              [I MEA:N over the counter medi
29 PAT:
          [cines.
30 DOC:
         [Oh yea:h,
31 PAT:
         Yeah.
32>DOC:
         Well I ↑think when it comes to over
         the counter medicines for
33
         THI::S:: I think you should try some
34
35
         i:buprofe:n unless you have
         >any problems< with it. If you'd
36
37
         RATHER not [take it as a-
38 PAT:
                    [As long as there's
39
         co-not co:deine because I don't like
40
         [codeine (makes me feel sick).
         [.Tck No: >it's got no codeine in
41 DOC:
         it<. So I:buprofen on its OW::n. .Hh
43
         So you can EI: ther take it as
44
         a ta:blet or if you don't want to do
         that you c'd use it as a GE::L
45
46
         to rub in your ha::nds.
         I wou: ld [like to do some-
48 DOC:
49 PAT:
                   [I ↑hav::e got some gel at
         ↑h:ome [(°I think°),
51 DOC:
                 [Have YOU::, [Okay,
52 PAT:
                              [√Yea:::h,-
```

Critical in this case is that the physician makes use of the patient's response to overcome her general aversion to taking medicines and persist with a recommendation arguing that the only legitimate reason for not taking it would be "problems" with it. At line 32, the physician's well-prefaced recommendation pushes back with an opposing 'my side' perspectival shift (Heritage, 2015), "I think you should try some i:buprofe:n unless you have >any problems< with it", indirectly reducing the status of aversion as an obstacle to care compared to medical "problems" such as side effects or contraindications. At line 36 she orients to the patient's reported aversion, "If you'd RATHER not take it as a," and at line 45 puts forward an alternative, "you c'd use it as a GE::L to rub in your ha::nds," however the patient ultimately resists the alternative recommendation on the grounds of redundancy.

Patient aversion to medicines also included negative personal experiences with specific drugs. In (13), the first anniversary of the suicide of a close family member along with other stressful life events has prompted a period of upset for the patient. Amongst other information gathering, the physician has established that she is not taking any medications currently. At line 1, she launches a pre-sequence, inviting the patient's perspective, "I just wonder what you thought about sort'ov an antidepressant medication." As talk about treatment is already underway, this preliminary 'feeling out' proffers the candidate prescription, whilst avoiding moving straight to a recommendation 'proper'. It is immediately met with a 1 second gap followed by a hedged response at line 5 indicating trouble in responding, 'It depends what it is'.

```
(13)
         06090703
1 DOC:
         An I just wonder about what you thought
         about sort'ov an
2
         antidepressant medication.
         (1.0)
5 PAT:
         .Hhh It depe:nds what it is.
6
         Uh I've had antidepressants before.
7
         (0.6) I've has uh:m.snhh the only
8
         ones I won't take (0.6) I think
9
         (0.5) it's: Se:rtrali:ne.
10 DOC:
        Ri:qht.
11 PAT:
        I think. (0.6) I can't remember
        be cos' thas the ones I took (.)
         an overdose with. . Hh an I refu::se to
13
         take 'em again.
       ((10 lines not shown))
25 DOC:
         Did you (.) did it ↑help be↑fore
26
         obviously you took the
27
         o(h) verdose so you weren't feeling
28
         that great [on it < but .hhh did
29 PAT:
                     [Uhuh
30 DOC:
         it help you at=a::ll
          [o:r h- how long had=you
31
32 PAT:
          [((Lateral head shake))
33 PAT:
         N:o? I've had (0.4)
34
         think three or four lots of .hh anti
35
         depressants. An not one 'as (.)
         I could say (0.6) has helped me. >or
36
37
         not< kind 'ov
38 DOC:
         Rightharpoonup:ght. .hh >an the other thing is
39
         that they never help (.) well
         not never but .h
40
41 PAT:
         ((Coughs))
         with depression symptoms (0.5)
42 DOC:
         they're <u>le</u>ss likely to help on their
43
         own aren't they. [You have to sort'ov
45 PAT:
                           [Yeah.
46 DOC:
         do the different things
47>DOC:
         alongside an=.Hh uhm I m'n (.) we
48
         could try another one if you
         like,
49
50 PAT:
         I m'n I don't mind
         U:hm .tk
51 DOC:
52 PAT:
         giving one a g:o.
```

The patient expands her response expressing aversion to one particular antidepressant – Sertraline – stemming from a previous suicide attempt. At line 25, the physician enquires about efficacy, and at lines 32-37, the patient responds with a turn-initial lateral head shake, expanding her turn to inform

the physician that she has tried three or four different anti-depressants and none of them has helped. The physician counters this at line 38, by adding a caveat post hoc, that anti-depressants are less likely to help on their own. She extends a cautious proposal at line 47 for a different antidepressant, "we could try another one if you like" which the patient reluctantly accepts across lines 50 and 52, "I don't mind giving one a g.o." In a similar manner to (11) and (12), the physician uses the patient's response as a resource, this time to overcome her aversion to antidepressants, to persist with a treatment recommendation.

Recall that in over half the sample, the use of presequences resulted in the delivery of a drug treatment recommendation even in cases with no clear 'go-ahead' response. It has been demonstrated that physicians were able to circumvent potential obstacles to care by adjusting recommendations to be overtly oriented and sensitive to patients' circumstances. However, progression to a treatment recommendation in the face of patient resistance was not always accomplished. Two final examples will now be shown where although patient resistance to a candidate treatment is 'successful', in that a here-and-now recommendation is not made, instead of abandoning the projected action, physicians persist by exploiting the 'would-have-been' recommendation slot to recommend trying the medication in the future.

In (14), the patient presents with a flare up of a chronic skin condition. She is going to be a bridesmaid in a few weeks time. Another physician at the practice has previously prescribed a course of antibiotics that has not been effective. There is a further difficulty in that the patient has an on-going digestive condition that has been exacerbated by this treatment. The physician has just suggested that she could try a different antibiotic, but admits the possibility of similar side effects. The alternative option presented, 'a pill', refers to the oral contraceptive pill, which is known to improve skin conditions. At line 1, the physician begins to recommend as yet unnamed treatment, "The other thing you \can tr::y", a suggestion that is abandoned mid turn. The turn-in-progress is replaced by a presequence launched with a 'No'-preferring, 'have you ever had a pi:ll\_,' then following a gap at line 3, recycled as a 'Yes'-preferring, 'are you on a pill'.

```
(14)
         01111202
1 DOC:
         The other thing you ↑can tr::y, (.)
2
         have you ever had a pi:ll
         (0.4)
4 DOC:
         Are you on a pill.
5 PAT:
         ↑U:hm I have had ↑a: lo:::ng long time
         ago .hh But >I don't really
7
         wanna try that at the moment_<
         [>Okay_ cos that's< the other
8 DOC
9
         [ (
                           )
10 DOC:
         op[tion,
11 PAT:
           [it's the:: (.) >thing about
         putting on weight a:n y'know I can
12
13
         just about get in my dre:ss
```

At line 5, the patient's turn-initial "↑Uhm" suggests the disaligning nature (Schegloff, 2010) of her upcoming response - a non-type-conforming repetitional answer (Heritage & Raymond, 2012; Raymond, 2003) that is framed as responsive to the question at line 1. In responding she informs the physician that she has previously been on a pill "\u03b7a: lo:::ng long time ago", recognising the request as preliminary to a projected possible prescribing of the pill. Between lines 5 and 7, she mobilises both her experiential knowledge and deontic authority extending her turn to block the projected recommendation, "But I don't really wanna try that at the moment." At line 8, the physician confirms the would-have-been recommendation, ">Okay\_ cos that's< the other option," tying back to the action interrupted at the beginning of line 1. Following the patient's post-positioned account between lines 11 and 14 regarding the fit of her bridesmaid's dress, instead of moving to a next activity; at line 15, the physician initiates an anticipatory recommendation overtly orienting back to the patient's account, "SO MAYBE ONCE THAT'S OVER."

In (15), the patient has requested a 'fit note' as medical evidence for an extension to submitting her postgraduate dissertation. The physician discovers that she has an established history of anxiety and depression, is not on any medication currently but is on a waiting list for psychological therapy. At line 1, the physician launches a pre-sequence enquiring about a particular class of medicines – antidepressants – via a 'No'-preferring polar question, "have you tried antidepressants in the past at \alpha:!l?"

```
(15)
         02011300
1 DOC:
         . hh An have you tried antidepressants
         in the past at ↑a:11?
2
3 PAT:
         I ha:ve. But a:: not helpfu:l.
4 > DOC:
         °Yeah.° ↑That's fi:ne. .hh But just
5
         (.) jus so you know they
6
         [↓are ↓there if you wanted to try
7 PAT:
         [((Head nod))]
8 DOC:
         the:m.
```

At line 3, the patient offers a repetitional answer drawing upon the framing of the prior question, "I ha:ve", stepping outside of its constraints by disconfirming its propositional content. As in (14), she then extends her turn mobilising her experiential knowledge to raise lack of efficacy as an obstacle to the projected transition to the base treatment recommendation sequence. At line 4, after registering the acceptability of the patient's response with "↑That's fi:ne," as in (14), the physician pushes back to issue an anticipatory offer in place of the would-have-been recommendation, "But just (.) so you know they ↓are ↓there if you wanted to try the:m."

In this section, it has been argued that preliminaries are not only used to identify medicines that are not 'right' for patients, they are also resources for ascertaining the basis of possible resistance, allowing physicians to push forward with a projected recommendation. The question becomes: Do preliminary sequences lead to increased rates of patient resistance – after all if physicians anticipate possible resistance and enquire about medicines in these contexts, resistance might be more likely – or decreased rates of patient resistance – because physicians have shaped their recommendations to counter any resistance, despite the fact that they may be persisting to some extent against patient preferences? The next section returns to the coding to explore this question.

# The role of preliminaries in patient resistance to recommendations

Preliminary sequences are not used equally often across all They prescribing contexts. were more be used to recommend pain medications (including non-steroidal anti-inflammatories) than other medication classes  $[\chi^2]$ (1, N = 121) = 20.1, p < 0.001, and slightly more likely to be used when recommending treatment for patients with existing rather than new conditions [ $\chi^2$  (1, N = 172) = 4.1, p < 0.05]. Both of these contexts are ones where higher rates of resistance might be reasonably anticipated since pain medications often have side effects, and patients with on-going conditions may be tired of taking medicines or have tried many medicines already.

Moreover, it might be expected that pre-recommendation sequences might constrain the type of action used to recommend the medicine ultimately (Stivers et al., 2017). It is known that proposals are mostly employed in contexts where there was either diagnostic and/or treatment uncertainty, and that they tend to be delivered in the spirit of trial and error (cf. Stivers et al., 2017). For this very reason proposals rely on a collaborative crafting with patients. Thus, it might be expected that presequences would be associated with proposals. Indeed, as shown in Table 1, while pre-sequences led to the full range of recommending actions, they were more likely to be followed by proposals than other actions (23% vs 13%) [ $\chi^2$  (1, N = 64) = 4.9, p < 0.05], and were significantly less likely to be followed by pronouncements than other actions (9% vs 17%) [ $\chi^2$  (1, N = 113) = 4.1, p < 0.05].

Finally, as raised earlier, if physicians anticipate possible resistance and enquire about medicines in these contexts, resistance might be more likely. Yet, if pre-sequences allow physicians space to ease patients towards a recommendation

Table 1. Distribution of pre-sequences across recommending actions.

	n	%	TOTAL
Pronouncements	10	9%	113
Suggestions	13	14%	94
Proposals	15	23%	64
Offers	10	17%	58
Assertions	9	14%	64

Table 2. Predictors of resistance to a treatment recommendation.

	EST	95% CI
Pre-recommendation	76	-1.49,03
Pronouncement recommendation	19	76, .38
Proposal recommendation	.48	16, 1.13
Psychiatric medication class	.67	05, 1.39
Pain medication class	18	73, .38
Chronic problem	.55	09, 1.19

adjusted to accommodate patients' obstacles to care, then it follows that this practice should help avoid patient resistance to the recommendation proper. Indeed bivariately, when a pre-sequence was employed, the recommendation was significantly *less* likely to be resisted (including no response and active resistance) than when the recommendation was offered without a pre-sequence [ $\chi^2$  (1, N = 337) = 17.4, p < 0.01].

The question then becomes whether resistance was less likely to occur following a recommendation that had been preceded by a pre-sequence, independent of other factors including the action of the recommendation, medication type, and whether the recommendation was for an acute or chronic condition (see Table 2).

Table 2 shows that pre-recommendations were associated with significantly less resistance not only bivariately, but independent of the recommendating action, the medication being recommended, and the type of patient problem being treated.

Considering the social costs of pushing ahead in the face of resistance, the number of cases in our sample that transitioned successfully from pre-recommendation sequence to the base treatment recommendation in the face of obstacles raised by patients was surprising. Why this might be so deserves consideration. It should be borne in mind that patients generally visit their primary care physician because they require some kind of remedial action. Moreover, it should also be considered that for both physicians and patients, what counts as an acceptable remedial action is often a medical one - consultations with no treatment recommendations appear to be uncommon,<sup>2</sup> and recommendations for no action are rare.3 It might be also argued that physicians have a tendency towards action rather than inaction, a 'commission bias' (Croskerry, 2003) as it were, towards persuading patients around obstacles to care in the service of treatment.

Yet the use of the pre-sequence also allows for patients to be involved in the making of these decisions. One factor that may well be associated with post hoc resistance to medicines is a lack of patient involvement in decision making. If there are obstacles to treatment that have not been volunteered by patients or solicited by physicians pre-diagnosis, use of pre-sequences post-diagnosis can successfully elicit these in advance of the recommendation proper. As seen earlier, patients often answer more than the question, allowing physicians to ascertain the basis of a patient's possible resistance. It was also seen that because physicians are able to build their recommendations in ways that display their responsiveness to the patient's answers to preliminary enquiries, this allows them to persist with these recommendations and push through to 'successful' sequence completion.

<sup>&</sup>lt;sup>2</sup>45/327 (14%) consultations in dataset 2 contained no recommendations at all, for any kind of treatment.

<sup>&</sup>lt;sup>3</sup>Only 16/631 (2.5%) of all treatment recommendation types in dataset 2 were recommendations for no action.

#### **Discussion**

Conversation analytic work to date has identified a range of 'type-specific' pre-sequences that project and are preliminary to a base adjacency pair, including pre-announcements, pre-invitations, pre-requests, and pre-offers (Heritage, 1984; Levinson, 1983; Schegloff, 1980, 2007; Terasaki, 2004). What they claim to have in common is that they are designed to 'test the waters' (Clayman, 2002) - to anticipate and avoid a dispreferrred outcome (e.g. already-known-ness, declines due to lack of availability, and denials or rejections due to other circumstantial factors). In everyday conversation, a discouraging response to a pre-sequence might be expected to result in the abandoning or radical adjustment of the projected next action. However, in the context of UK primary care, recommendations that were preceded by a pre-sequences were equally likely to be met with a block or a go ahead response suggesting that patient response was not criterial to proceeding to the base recommendation.

Pre-sequences are one way in which shared decision making about medical treatments can be initiated by physicians. As has been shown, it may not always be the case that patients treat the possibility of being recommended a named medication or class of medications as 'right' – necessary, beneficial or in accord with their own preferences and concerns. For physicians, pre-sequences are 'cautious ways of proceeding' (Sacks, 1992, p. 691), in that they can work to elicit any obstacles towards the acceptance of a projected action upfront. Compared to recommendations issued without pre-sequences, the presence of a pre-recommendation did reduce the chance of patient resistance. It seems, then, that the foreshadowing of the likely patient response allowed physicians to adjust the base recommendation in such a way as to minimize the potential for an ill-fitted recommendation that might be resisted or rejected as unwanted or unnecessary.

At the same time, the employment of pre-sequences can also serve patients' interest. Because they are typically heard in ordinary conversation as actions that are leading up to something else, when done post-diagnosis – a place where patients might expect to be involved in a decision about treatment – a pre-sequence provides the patient with resources for 'action ascription' – recognising what kind of next action is being projected (Levinson, 2012). In other words, they offer an early space for patients to exercise their epistemic and deontic authority to encourage, discourage, or block a projected treatment recommendation. The use of pre-sequences in the prescribing context can therefore be a vehicle for shared decision making, allowing patients and physicians a chance to discuss and negotiate optimal treatment plans together, enhancing mutual participation.

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