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Abstract

People with Chronic Obstructive Pulmonary Disease (COPD) are at heightened risk of developing lung cancer. Recent research has suggested that in people who have the disease, the time between symptom onset and consultation can be long enough to significantly affect prognosis. The regular and routine clinical encounters that people with COPD engage in provide an opportunity for them to highlight new symptoms of concern, and for clinicians to be watchful for new symptomatic indicators. We present a micro-analysis of naturalistic data from a corpus of such encounters with the aim of exploring the interactional factors within these routine consultations which influence when and how new symptoms of concern are raised. Our hypothesis is that although the underlying aim of the review consultation is the same in both settings, the different consultation structures oriented to by nurses and GPs have a tangible effect on how new and concerning symptomatic information is introduced. Conversation analysis (CA) was used to examine 39 naturalistic review consultation recordings in two clinical settings; GP led (n=16), and practice nurse led (n=23). We describe three interactional formats by which patients chose to present new symptomatic concerns; 'direct', 'embedded', and 'oblique'. Both settings provided interactional 'slots' for patients to offer new and concerning symptomatic information. However, the structure of nurse led encounters tended to limit opportunities for patients to develop extended symptom narratives which in turn

facilitated 'oblique' formats. We suggest that the attenuation of the 'oblique' format in this particular clinical setting has implications relating to the psycho-social idiosyncrasies of lung cancer and the maintenance of interactional conditions that encourage patients to disclose new symptomatic concerns.

Keywords:

UK

Conversation analysis (CA)

Medical interactions

Symptom presentation

Socio-linguistics

Lung cancer

COPD

Introduction

The possible influence of delays in diagnosis on survival and the risk factors for delay in patients with cancer have been the subject of considerable interest and controversy for many years (Mcleod *et al*, 2009). Survival from cancer in the United Kingdom is poorer than that of other European countries, and it has been suggested that this can be attributed to more advanced disease stage at presentation (Cancer Research UK, 2009). The situation is particularly serious in the case of lung cancer, where for up to 80% of patients, their disease is found to be inoperable because it has been diagnosed too late (Cancer Research UK, 2007). In the UK, it appears that the picture is particularly serious, with Corner *et al* (2006) reporting that delays of up to a year following the onset of worrying symptoms were not uncommon before patients decided to seek medical help. Additionally, high risk groups such as long-term smokers, those living alone, and those with conditions such as Chronic Obstructive Pulmonary Disease (COPD) (Young *et al*, 2009), have been found to be at particular risk of taking longer to consult with symptoms of lung cancer (Smith *et al*, 2005).

This is significant because in the case of people diagnosed with COPD, the treatment and management of their disease involves frequent interactions with a variety of health care professionals. The General Medical Services contract for primary care in the UK (in the form of the *Quality and Outcomes Framework (QOF) pay for performance system*) has increased the focus on the performance of the tests and monitoring procedures necessary to meet targets, so COPD patients will be called in for annual or 6-monthly review appointments. These are usually with a practice nurse. In addition, because of the debilitating nature of their condition, and the ongoing management of their symptoms, they are also likely to make frequent visits to their GP. These two types of clinical encounter, therefore, represent important locations for spotting the early signs of lung cancer in an 'at risk' group. They not only give clinicians regular occasions where they can be

watchful for new symptom indicators, but also provide an opportunity for patients to highlight new symptoms that they might not ordinarily consider serious enough to warrant a visit to their doctor. The kinds of symptoms and symptom changes that may indicate the early signs of lung cancer include: persistent coughs or long standing coughs that get worse; unexplained breathlessness; unexplained weight loss; coughing up blood; changes in the colour and quality of mucus; chest and/or shoulder pains; unexplained tiredness or lack of energy; a hoarse voice (Buccheri & Ferrigno, 2004). The nature of COPD, however, means that patients are likely to be suffering from many of these symptoms already – particularly those relating to breathing and breathlessness – so clinicians need to be vigilant not only for new symptoms, but also for changes in those already present.

This article reports conversation analysis of recordings of routine review consultations involving nurses and GPs consulting with patients who have COPD. The work represents findings from a qualitative study focusing on the role of social factors on help-seeking, symptom interpretation and diagnosis in patients with lung cancer, or who are at heightened risk of developing the disease (see acknowledgements). The study aimed to explore what influenced peoples' decision to seek medical help if they had symptoms of concern relating to lung cancer; what they actually considered 'symptoms of concern' to be; and how these symptoms or symptom changes were talked about and managed in appointments with health care staff. It is the last point that we focus on in this article. The consultation data we utilised were originally collected as part of a sister study investigating primary care support for patient self-management strategies in chronic illness – in this case COPD (Kennedy *et al*, 2010). However, the micro-interactional elements of the corpus were not previously examined, and here we present an analysis focusing largely on sequences of talk which occurred during discussions where potentially concerning symptoms were broached.

The negative associations that are attached to all forms of cancer can be a reason why some people are reticent about seeking medical help – or even mention to clinicians that they have noticed worrying symptoms. The effect is particularly significant in the case of lung cancer because of its

strong connections with smoking and the perceptions of self infliction that this inevitably generates. According to recent data collated by Cancer Research UK (Cancer Research UK, 2012), smoking is directly responsible for 90% of lung cancers. Braybrook et al (2011) have highlighted how many lung cancer patients believed they were stigmatised because people not only associated their type of cancer with smoking, but also with other 'dirty' manmade substances such as asbestos and airborne pollutants. So while individuals may delay seeking treatment for cancers such as prostate, colorectal and ovarian due to embarrassment and an understandable reluctance to undergo intrusive medical examinations, lung cancer - being inexorably linked to smoking - carries a significant extra layer of social stigma. This appears to have a tangible influence on the point at which people decide to seek medical help. At a practical level, for example, some individuals who smoke have been reported to hold the belief that if they present with chest-related symptoms, health professionals will view them as being at fault (Sant, 2003). Interestingly, it has also been reported that even when people eventually do decide that they need to see a doctor, they may not couch their presenting complaints as being particularly significant, or directly indicative of anything serious. This may not always be due to issues of stigma of course, but it has been noted in a number of studies that individuals may choose to indirectly reveal worrying symptoms while ostensively consulting about other more mundane problems (Corner & Brindle, 2010).

Essentially then, in this article, we start from a position that accepts that people with COPD are at high risk of developing lung cancer - an illness which can carry with it many levels of negative association, stigma and fear. However, due to the chronic nature of COPD, people who have the condition receive regular 'review' consultations with a doctor or nurse where potentially concerning symptoms may be spotted. Our hypothesis is that although the underlying aim of COPD review consultations with doctors and nurses are often fundamentally the same, the different consultation structures and communicative approaches oriented to by the two types of clinician may have a tangible effect on how new and concerning symptomatic information is introduced.

Methods and analysis

Our data corpus comprised a total of 39 naturalistic consultation recordings that were originally collected from two large inner city GP practices in NW England during 2010 (see acknowledgements). The current analysis was conducted in 2013. All of the recordings were made during the symptom management appointments which COPD patients routinely have every few months, or more often if their symptoms are severe. 16 of our recordings involved patients and their GP (n=6 GPs), and 23 were with a patient and a practice nurse (n=8 nurses). The original recordings were transcribed verbatim in their entirety and purposive sampling was used to identify particular instances within consultations where talk about symptom changes occurred. Specifically, our sampling technique involved carefully studying the recordings and transcripts to isolate sequences of interaction where symptoms which might potentially be early indicators of lung cancer - such as a persistent cough, increased breathlessness, significant weight loss and so forth - were introduced. We largely excluded instances where patients introduced or talked about symptoms which were unlikely to be connected with lung cancer, unless the positioning of such talk proved to be part of an extended sequence which ultimately resulted in potential cancer related symptoms being discussed. 26 consultations (14 with GPs, and 12 with nurses) were found to contain 40 instances where relevant symptomatic information was introduced, and these sections of data were then prepared using the Jefferson notation system (Ten Have, 2007). This system has been universally adopted for conversation and discourse analytical work and is designed to accurately portray features of verbal and non-verbal actions and their timing. An outline of the transcription symbols used in our data extracts is given in box 1. Sequences of interaction were then further examined using conversation analytic techniques to explore how, at the level of individual turns at talk, participants engaged in symptomatically relevant exchanges. This involved repeatedly listening to the original consultation recordings and making detailed notes about the sequential positioning and interactional outcomes that these types of engagements engendered. We also incorporated contextual information; how

the particular idiosyncrasies and requirements of the encounter might have influenced the way in which patients framed their turns at talk; the particular phase of the encounter where patients chose, or were prompted, to introduce talk around new symptomatic developments. The study received full UK NHS ethical approval from NHS NRES Committee North West – Greater Manchester. REC Reference number 12/NW/0592.

Conversation analysis

CA is well established as a highly effective method for the investigation of interaction. It has been used in a wide variety of settings, with medical and health related areas being particularly well represented. CA has, for example, been applied to aspects of primary care interactions (Heritage & Stivers, 1999; Heath, 1995); health visiting (Heritage & Sefi, 1995); counselling, (Perakyla, 1995); mental health (Maynard, 1995); specialist neurological consultations (Plug & Reuber, 2007) and complementary and alternative medicine consultations in a variety of therapeutic modalities (Chatwin, 2013, 2009, 2008; Ruusuvuori, 2005; Ruusuvuori and Lindfors, 2008; Chatwin & Collins, 2002). Many studies have been concerned with providing a broad socio-linguistic analysis of the features of particular environments, but work has also focused on exploring specific aspects of interaction within these settings - such as the ways in which patients 'frame' their presenting complaints (Heritage and Maynard, 2006); the ways in which medical consultations proceed in distinct phases (Heritage and Maynard, 2006; Robinson, 2003; Byrne and Long, 1976); how health professionals offer diagnostic information to patients, (Heath, 1995); the 'question-driven' nature of doctor / patient interaction (Frankel, 1995; Maynard, 1991: Frankel, 1984); and various other aspects of how presenting complaints are offered, and treatment offers are negotiated (Entwistle et al, 2004). To date, there have been few CA based studies which have explored the comparative aspects of routine clinical encounters undertaken by different types of health professional, such as the COPD review consultations we present here, although notable exceptions are: Collins et al, 2005,

and Smith *et al,* 2010, who examined the features of nurse encounters as well as those of GP's. It is within this broad area of CA enquiry that the present work is positioned.

Results

Although the nurses and GPs in our corpus were involved in regular and repeated encounters with their patients – essentially the routine monitoring of COPD symptoms – the structure and approach of the two clinical settings were significantly different. Broadly speaking, the nurse based consultations were sessions where patients were called in for a review based on a computer-guided template (designed for the purpose of meeting QOF requirements). In these reviews, checks were made on specific aspects of their ongoing condition, such as ensuring they had the right type of inhaler and were using it correctly, or that currently prescribed levels of medication were adequate. The other routine purpose of the nurse-led consultations was to conduct a spirometry test, which is a mechanical procedure that measures breathing ability. At a global level then, the nurse-led consultations were focused on relatively narrowly defined activities and tasks, and if considered in terms of the format followed by traditional medical consultations (see, for example, Byrne and Long, 1976), consisted of attenuated, absent, or modified presenting complaint and treatment giving phases, and a greatly extended examination phase. In contrast, even if some or all of the 'technical' tasks routinely undertaken in a nurse led review were observed taking place in a review consultation with a GP, these proceeded far more along the lines of a conventional 'doctor / patient' encounter and broadly conformed to presenting complaint, history taking, examination and treatment giving phases. Table 1 (below) summarises the phases at which new symptom sequences were observed in both clinical settings, and also shows the relative occurrence of three presentation formats. The definition and presentation of these formats form the basis of our analysis, and are explained below.

So at a local level, how might the underlying interactional characteristics of our two corpuses influence whether or not a patient decides to present additional symptoms of concern? In terms of the general introduction of new symptoms - not necessarily ones that are particularly concerning or worrying - there appears to be no particular consensus. Nielsen (2012) has highlighted how a number of studies into the dynamics of medical interaction indicate that the introduction of additional concerns by patients is a relatively rare occurrence. Heath (1986), for example, found no instances of additional concerns being raised in a large corpus of consultation recordings made with GPs in the UK. However, other research indicates that the raising of additional concerns is a relatively common phenomena. White et al (1994, 1997) report additional concerns being raised in 21-23% of consultations but (significantly for the line of argument we shall be developing) note that the more explicit clinicians are about the purpose of the visit, and the nature of the therapeutic regime, the less likely it is that patients will mention additional concerns. The focus on shared decision making in consultations which is a feature of current medical training would also appear to facilitate opportunities for people to bring up more than one concern, and for clinicians to elicit more tangential information from patients in the course of an encounter (See, for example, Peters et al, 2009).

At a micro-level Heritage *et al* (2007), noted that doctors' wordings in final question sequences are crucial. When asking the question 'is there anything / something else you want to address in the visit today', the use of 'something' rather than 'anything' had a significantly higher statistical effect on whether or not a patient chose to present an additional concern. It should be noted that the above studies, following the trend indicated earlier, were exclusively concerned with doctor / patient encounters. It is also important to remember that they were not necessarily limited to particularly worrying issues. Beckman and Frankel (1984) focused on 'door handle' remarks whereby a patient waits until they are literally out of the door of the consulting room before suddenly remembering another concern (Nielsen, 2012). This type of new concern introduction, by definition, comes at or

near the closing turns of a consultation. And similarly, in much research in this area the temporal and sequential positioning of interjections is of primary interest, rather than the nature of the underlying concern or the level of seriousness it represents to the patient. An analysis of our dual data corpus revealed, however, that in both sets of consultation encounters, patients routinely introduce new symptoms that were of concern to them, and that broadly speaking, they did this utilising one of three basic sequential formulations. These formulations have not been described in previous studies, and we have called them: *direct, embedded* and *oblique*.

(Table 1 to go here.)

Direct

The *direct* format is the most straightforward to observe in clinical encounters. It simply involves a patient volunteering a new symptomatic concern without utilising any significant preparatory turn construction. So for example, if a patient is utilising this format they may not attempt to engage in a stepwise transition from another related or indirectly related topic (Jefferson, 1985), but will deliver their new symptomatic concern *directly*. In practical terms we mainly observed them doing this in one of two ways. Firstly, they may be prompted as a result of a straightforward enquiry turn by the practitioner, which will usually be of a closed, rather than an open, construction. Because of this, the format is most evident during parts of an interaction where dedicated diagnostic questioning sequences - such as those routinely performed as part of a conventional history taking - are enacted. In such situations, where both parties are orienting to the conventions of medical diagnostic enquiry, it is normal for practitioners to construct their turns in this closed manner, and for patients to restrict their responses to delivering information that is specific to answering the question at hand (Lipkin *et al.*, 1995). The format occurs in other phases of the consultation too, but again, when it is as the result of an enquiry by the practitioner, it will largely be associated with a closed and direct question construction.

As we have outlined, in our data, practitioner initiated *direct* formats were observed most often during the formalised information gathering phases of our GP consultations, where we observed 9 instances (see table 1). Extract 1 (below), for example, comes from the history taking phase of a GP encounter:

```
1
            Hmm, you've come today about the chest (.) yea?
2
            (.)
3
      Pat:
            Yes.
4
            You're no better since you saw me last time?
5
      Pat:
            ((Cough - cough)) ((no))
6
            When you came last time I gave you some
      Doc:
7
            antibiotics didn't I (.) I remember sa[ying
8
      Pat:
                                                   [Yes:
            (1.0)
9
      Doc: Didn't I give you two?
10
           Yea, (0.5) h-hm
11
      Pat:
            H-m (0.5) h-m, and you've-have you finished
12
      Doc:
            them now. (1.5)
13
            H-hm. I finish them today.
14
      Pat:
            And do you still cough- are you
15
      Doc:
16
            coughing up anythi[ng
17
      Pat:
                               [Oh yea (1.0) well-hh.
            it's a little green (.) well, little balls of phlegm,
18
            but it's very very few. Not really ((in the mouth))
19
20
           So what's the main symptom that's troubling you now,
      Doc:
21
            is it the cough?
      Pat: Continuous cough.
22
23
            (0.5)
```

```
24
      Doc:
            Yea.
25
            Giving me a pain across the chest and (.) across me
26
            back [and
27
      Doc:
                  [As well yea, right. And what about any other
28
            symptoms, any wheezing or breathlessness?=
29
      Pat:
            =Oh <u>yea</u>
30
      Prt:
            Wheezing.
31
      Doc:
            Wheezing.
32
      Pat:
            Wheezing, especially when I'm asleep.
33
            (.)
34
            When you're asleep? Right. Ok (2.0) Let's have
      Doc:
            a listen. Stand up for me, let's have a listen.
35
36
            I thought I could hear something on
37
            the left side. . .
```

Extract 1

It can be seen from the sequential positioning of the GP's enquiry turns (lines 15-16, 20-21 and 27-28) that the new symptom which the patient offers (his wheezing and breathlessness – lines 30 and 32) arise as a result of direct prompting by the doctor; it comes as part of the diagnostic questioning sequence that the doctor is engaged in and is not volunteered spontaneously. In this case, it allows the doctor to move into the next phase of the consultation and examine the patient.

The second way in which the direct format was observed was as a discrete, patient initiated motif, opportunistically slotted between non-specifically related topics or activities. So, for example, in fig 2 we have the patient spontaneously volunteering new symptomatic information in the form of a new topic initiator:

```
1
      Doc: . . but they'll just have a chat with you and
2
            then tell you- (.) show you how to use this ((unclear))
3
            (.)
      Pat:
           Right
5
      Doc:
            Ok
6
      Pat:
            Ok, thanks very much.
7
            (1.0)
      Doc: Alright. (.) And what I want you to do is, I'll give
8
            you this form for a follow up blood test, and maybe
9
            come back in a month's time, and I want to check your
10
11
            weight agai[n
12
      Pat:
                       [Right
13
            To see how you're doing.
      Doc:
14
      Pat:
           Right
15
      Doc: Ok
16
      Pat: Right
      Doc: Because if it's dropping there and even if I can't find
17
            anything on the blood test and things, I would be concerned.
19
20
      Pat: Right
22
      Doc:
            Ok
            (1.5)
23
           Yes, so- (0.5) would I- (.) could I ask erm: (.) is it
24
      Pat:
25
            possible that I could have some sort of mild sleeping
26
            tablet that I could (.) cos me sleeping's terrible.
27
      Doc: It's terrible
      Pat: Oh it's terrible, me sleeping.
28
```

Extract 2

This extract comes from the end of the consultation, and as can be seen from the interaction occurring from lines 1 – 19, the doctor is engaged in a summing up and closing sequence; on lines 8 – 10 he confirms to the patient that he needs to arrange a follow up blood test and come back in a month. On lines 17 -19 he provides an account for his reasoning. The consultation sequence effectively closes at line 22 with the doctor's terminating 'Ok'. However, the patient chooses this juncture to initiate a new treatment request – one that is not directly connected to the exchange that occurred previously in the consultation. In some ways, this particular example fits into the established typology of doctor / patient consultation closings in that it could almost be classed as a 'doorknob phenomenon' (Beckman and Frankel, 1984) outlined earlier. In this example, following the part transcribed here, the doctor re-engaged the patient in a brief sequence of enquiry questions about his sleeping problem and prescribed a trial dose of medication. The interaction then re-closed.

The direct format was less common in our corpus of nurse interactions (3 instances), and in contrast to the GP data, in which examples occurred across all phases of the consultation, this format was only observed during history taking phases. The two examples below are from nurse-led consultations:

```
Everything else stable at the moment?
1
2
      Pat:
             Yes
3
             (.)
4
      Nur:
            Ok
5
             (1.5)
6
            My husband was a heavy smoker
      Pat:
7
            Was he?
      Nur:
```

- 8 Pat: He died ten years ago now (.) yea. 9 Nur: Right. So you were= 10 =I was there (.) exposed to that smoke as well. 11 (1.0)12 OK. Erm:: (.) not coughed up any blood or 13 anything like tha[t? 14 Pat: [No. 15 Nur: And when you do cough up, what sort of colour 16 is it? Extract 3
- 1 Would you say that's got worse since perhaps you 2 last came? 3 Pat: Erm:: (1.0) I think it has actually .hhm and what about a cou[gh? 4 Nur: 5 Pat: [Oh \underline{y} es, I've got a cough. 6 Nur: Oh (.) every day? 7 Yes, ongoing cough. Pat: (1.0)8 Are you smoking[g? 9 Nur:

10

Pat:

Extract 4

In both of these extracts it can be seen that the nurse initiates a direct question about coughing – a persistent cough being one of the potential danger signs in terms of lung cancer. Significantly, this enquiry was the case in all of our *direct* nurse examples (none of which were initiated by the

[Yes ((laughs)) I shouldn't.

patient). And as is illustrated in extract 3, this initial question usually lead into more detailed diagnostic enquiries about the nature of the cough, what is being coughed up and, in this case, direct questions about whether or not the patient has actually coughed up blood (lines 12-13).

Embedded

In contrast to the direct format, embedded symptomatic constructions essentially involved the introduction of new or concerning symptomatic information by the patient, not as part of a topic shift or the introduction of a new topic (Campion & Langdon, 2004), but as a discrete step within a symptom related narrative. For a patient to utilise an embedded approach, therefore, the interactional arena needs to be conducive to the production of such narratives. So as might be expected, in our data, examples of this format were largely positioned within regions loosely demarcated for activity of this kind; sequences where the patient built on the account of their illness across several turns, and where forensic or directly focused enquiries by the clinician were utilised to follow the focus this provided. In our GP corpus, for example all of the embedded examples were found in the history taking phases of consultations (n=5). Similarly, 10 out of the 13 nurse examples took place during this phase. The therapeutic value of patient narratives in their own right is well established in many forms of counselling and psychotherapy, and there is continuing interest in the role that they can play as a resource in primary care encounters too. 'Narrative based medicine', for example, (See: Greenhalgh and Hurwitz, 2004; Launer, 2002; Elwyn and Gwyn, 1999) involves the careful attending of the clinician to not only the symptomatic information that a patient gives, but also to the contextualisation provided by the way in which they present the 'story' of their illness, and of their wider life concerns. In the case of the embedded format however (as well as in the oblique format we shall describe later), we are purely concerned with the fact that a degree of interactional space is being utilised for some form of narrative based interchange to develop. Whether or not a given narrative sequence has any specific therapeutic value in itself is a secondary issue.

If a patient chooses to introduce new symptomatic information using an *embedded* format they are essentially utilising the established features of their on-going illness experience to provide an additional element of legitimisation. New symptomatic information is presented as a directly relevant part of their on-going condition; one which displays an internal logic, both in terms of how they choose to give the information (i.e. the underlying interactional structure they work to in order to make the elements of their story 'doctorable', or relevant to the context of the medical interaction they are engaged in (Katz, 2000)), and how this presentation reveals the way in which they are making sense of their changing health status. Extract 5, below is an example of an embedded construction from a nurse led consultation:

```
1
            . . . you've not had a chest x-ray for a while.
2
            A long time (.) I can't tell you how long.
3
            [Typing] would it be years?
      Nur:
            Yes, yes. Er::m I've had a couple of erm: chest do's in
      Pat:
5
            the winter, you know (.) chest infections recently.
6
            Recently?
      Nur:
7
      Pat:
            Last winter.
8
      Nur:
            Yes.
9
      Pat:
            The last one would be er:: about January, when I
10
            needed to have er:: to have medication
11
      Nur:
            [On phone] Could I have [patient name] notes. It's
            [gives patient's address] Thank you.
12
            Well I needed to see a doctor.
13
      Pat:
14
      Nur:
            So twice this year?
15
            I'm not sure of the dates now. Certainly twice.
      Pat:
      Nur: Certainly twice
16
      Pat: Certainly twice (.) a year. I-I either this year (.)
17
18
            certainly once this year and once last year. And it
```

was then, I think last winter. (1.0) the previous
winter that he-he first started me on er: inhailers.

Nur: [Typing] Right

Pat: I'd never had them until then. But this was the
result of erm (.) you know- some sort of chest
infection. (1.0) Some sort of chest problem. . .

Extract 5

This extract occurred just following a spirometry test during the examination stage of the consultation. It can be seen that in contrast to the direct format, this sequence is arranged far more like a discrete narrative cycle. The nurse initially prompts the patient about when he last had an xray (line 1). This, and the follow-up enquiry on line 3 ('would it be years?') allows the patient to perform a slight topic shift and introduce the issue of his recent chest infections. As in the direct example, the direction of the forensic questioning taken by the nurse is tied very much to the need to gather specific items of relevant information; she prompts the patient to be as accurate as possible over dates and occurrences, for example (lines 14-21). However, what differentiates this format is the way in which it is contingent on the clinician creating or accommodating within the interaction, space for a narrative account to develop. It is also a feature of this format that the clinician does not offer any direct or leading enquiry questions, but rather it is the patient who utilises the narrative openings to offer information they regard as relevant. Initially he describes the 'chest do's in the winter' (lines 4-5), the need for the doctor to increase the inhaler prescription (line 20), and subsequently, his concern that the problem remains unresolved; he begins the narrative by describing the problem in terms of a chest infection, but by his final turn (lines 22-24) this has become 'some sort of chest problem. . . the infection or whatever'.

The *embedded* format was also evident in the doctor led consultations:

```
No trouble with your bowels? Or your
1
2
            waterworks or anything?
3
            (.)
      Pat:
            No
            You're not feeling sickly?
5
      Doc:
6
      Pat:
            Erm (1.0) yes well I do feel sick. I think
7
            that's why I don't want to eat and erm (0.5)
8
            I just generally feel unwell, because I had a
            fall in February.
9
      Doc: And is it since then?
10
      Pat: It's since then I've lost a lot of weight
11
12
            and I just (0.5) my appetite's gone. Just
13
            generally don't feel-
      Doc: You feeling low?
14
            I feel very low and I feel erm (0.5) just
15
16
            not fit like I was and I mean I was quite fit but-
17
            Right. Ok. I'd like to check . . .
```

Extract 6

In our GP data *embedded* formats were found to occur solely during history taking. The COPD patient in extract 6 presented for the results of a routine blood test, and at an early point during history taking mentioned that her appetite was poor, and had been for some time. Here, at the end of the phase, the doctor is completing a line of forensic questioning related to this: he enquires about the patient's bowels and bladder function (lines 1 and 2), then asks a general question about whether or not she feels sickly. However, as in extract 5, the doctor in this example does not directly ask the patient about what might be a potentially serious symptom (her ongoing weight loss); this is

allowed to emerge in the course of her narrative (lines 11 and 12), as is the fact that she feels 'just not fit like I was. .' (lines 15 and 16).

Oblique

An *oblique* format is possibly the most significant construction utilised by patients when offering up new concerns, particularly in the context of the present work, because in order for it to be enacted there needs to be sufficient space for much longer, and potentially tangential, narrative threads to emerge. While the *embedded* format is indeed contingent on some degree of narrative freedom, it will still be tied fairly closely to the topic in hand; in our extracts 5 and 6 (above), for example, the narratives in which the patients embed their new symptoms are linked closely to diagnostic questioning from the clinician which relates directly to the current illness trajectory. The *oblique* format, on the other hand, can be seen as occurring where the patient employs a much longer, extended narrative to introduce talk about their concerns, but significantly, doesn't necessarily do so in any direct way – they may not even broach the specific nature of their worry, but rather construct an account that refers to it in some indirect or tangential way:

```
. but I feel today (1.0) is my good day. .hh
1
            h.er:m (1.0) an-it's it's lovely waking up in the morning
2
3
            and I think (1.5) I can do a bit more.
4
      Doc:
            Yes.
5
            Without (1.0) I couldn't even shower - I didn't have the
6
            energy - no, I couldn't breath to have a shower, wash my
7
            hair .hh and that isn't me.
8
      Doc:
            Right.
9
            And that's- (.) I just had no- (.) it completely
      Pat:
10
            wiped- and all I wanted to do (.) was just sleep.
```

```
11
      Doc:
           Hmm
12
      Pat: Sleep (.) sleep.
13
      Doc: What I'd like you to do really for the future is to
14
            (1.0) make sure, in fact we aught to give you some,
15
            a course of steroids and antibiotics for you
16
           to keep in
18
      Pat: Hm[m
            [That's number one, so that you react very
17
      Doc:
18
           quickly to any (.) erm, you might get a cold but
19
           it goes to your chest straight away, so I want you
20
           to start those things right away=
      Pat: =instead of waiting leaving it
21
22
      Doc: And then at the same time making arrangements to
           see us .hh because really rather than say well it
23
24
           might be alright, I might get better . . . you know
25
           that's not a good idea. You know that don't you now
26
      Pat: I do yea
      Doc: That's number one (1.0) The second thing I presume
27
           what you're telling me is that you've
28
29
           stopped smoking completely?
30
      Pat: I couldn't smoke doctor ((nam[e)). I didn't even=
      Doc:
                                         [T'h.
31
            =want a cigarette
32
33
           Have you- is it- cu[h
     Doc:
34
     Pat:
                               [It's gone=
           =you've cracked it now?
35
      Doc:
      Pat: Cracked it. And I'm- .hh
36
37
      Doc: Well done
38
      Pat: And (.) it's (.) bin-k.hh (0.5).hh (.) I'll be honest
39
           with you and I did try (0.5) when-a (.) this week
            (1.0) it was a horrible taste (1.0) so I (1.0) over my
40
```

```
daughter's the moon .hh and so are my friends as
41
42
            well .hh e::rm (.)it's been really(.) I just,
43
            k-.h I was too poorly to have a cigarette so
44
            that tells me .hhh and then I got- I done a lot of
45
            thinking(2.0) It's them that's made me poorly
46
      Doc:
           Yea
            ^{\circ}And I didn't want that ^{\circ} but (.) yes
47
      Pat:
48
      Doc:
           One further question. (.) do you feel any more in control
49
            of your illness, in your self.
50
      Pat:
           I do now.
51
      Doc:
           Hm
      Pat: Since I've been poorly. And this is- really- I-I'm not
52
            jss- I'd always do that -an- (.) a-it frightened
53
54
            me so much, .h how the .hh emphysema got
55
            hold of me.
      Doc: Right
56
      Pat: Really got hold of me .hh erm:: (1.5) an I
57
            th-thought (1.0) I'll fight the bugg h.er.
58
59
            I- I've just got to be strong .hh an-a- obviously
60
            I wasn't eating so-wl-I know my immune system's
            going down. I know that, I've lost more weight.
61
            I know that myself, but .hh but I've got to
62
            now (1.0) keep eating. (.) I wasn't eating for a
63
64
            long time, I ws-a I was skipping my meals- didn't
65
           feel like eating .hh (1.0) to keep, to build myself
            up. .hh I've got to do that. And I'm also going
66
            to breath easy .h (0.5) those have been
67
68
            arranged for m[e=
69
      Doc:
                        Ye[s
70
           =and I'm also going to .hh ths- on a Tuesday,
      Pat:
            it's Sister((name)) from ((name)) hospital
71
```

```
phoned me .hh this week to say ((name))

er:: will you go. She's going to send me information

.hh[hh

Doc: [°Pulmonary rehab°

Pat: Ak- yes .hh Because I've got to:: yes I've got

to be in control of it now. It's not going

to get the better of me.
```

79 Doc: Good

Extract 7

encounter, that the patients' underlying concern (which relates to the possibility of more serious consequences resulting from her smoking) is not referred to overtly. Instead, following a narrative sequence in which the patient describes her current state of relatively good health, and a more severe bout of illness she recently suffered (lines 1 – 13), the doctor begins a summing up. As part of this (on line 27) he says '...I presume what you're telling me is that you've stopped smoking completely?' This is an indication that the patient is engaging in an *oblique* formulation related to her smoking – and more significantly, that the doctor has picked up on this. At no point during her initial narrative sequence (lines 1 – 12), or during the sections that preceded it (not transcribed here), does the patient actually mention smoking. Her emphasis is on the debilitating effects of her breathlessness. The sequences following the doctor's turn on line 27 are of further interest because it can be seen that the effect of this turn, which brings the smoking issue into the open, is to allow the patient to develop an account which continues to refer obliquely to it as a source of concern. Of particular relevance here are the patients remarks on lines 43 – 45: 'I was too poorly to have a cigarette so that tells me...' and 'I done a lot of thinking (2.0) it's them what's made me poorly'.

And most significantly, perhaps: '. . . a –it frightened me so much, .h how the .hh emphysema got hold of me. . . Really got hold of me' (lines 52 – 57).

Significantly, the *oblique* format only occurred twice in our nurse led encounters (as opposed to 8 times in the doctor led consultations). And on both occasions this was during the examination phase of the consultation; that is, at a point in the interaction when the nurse's attention was primarily focused on performing practical tasks such as the spirometry test, rather than prompting for, and closely attending to, verbal information from the patient. Extract 8 (below) comes from one such nurse-led consultation. The interaction occurred during a sequence of informal conversation which took place as the nurse was engaged in taking an oxygen reading from the patient:

```
. . do you walk the dog or-
1
2
            No I've not been just lately (.) It's
3
            -it's a good job we've got a big garden.
4
            Right.
      Nur:
5
            Cos it's a big do[g.
      Pat:
                              [Yes, yes. (1.0) Do you think
6
      Nur:
7
            you might be able to start doing that again
            now that your chest's improving a little bit?
8
9
            Well I want to.
      Pat:
10
            You want t[o.
      Nur:
11
                      [Yes, it's not fair on the dog really
      Pat:
12
      Nur:
            No what I was thinking is when you get that urge
13
            to have a cigarette you can say right, lets take
14
            the dog for a walk ((laughing))
15
            Yes, yes it's true.
16
      Nur:
            It's true.
17
            Like that, yes. It's distraction.
```

18 Nur: Yes. . ((nurse outlines some practical distraction 19 techniques the patient might try)). . take a 20 paper or book to read instead. It's just doing 21 things slightly differently. 22 Pat: Yes. (1.0) Well my neighbour next door she lives 23 on her own, she lost her husband a couple of 24 year ago. 25 Nur: Yes. 26 Pat: She's sixty two. 27 Nur: Yes. 28 Pat: The (.) er: (.) she was smoking heavy 29 Nur: yes. Pat: And then the what do you call it, the (.) er, 30 31 she'd got lung cancer. Nur: U:hm 32 Pat: So they took part of her lung out. 33 34 Nur: Yes. Pat: And she's been brilliant ((unclear)) chemo. 35 36 (1.0) Never bothered. 37 Nur: No 38 Pat: And she just finished that about a month ago. 39 40 Nur: She's done very well hasn't she. 41 Pat: That's the chemo. 42 Nur: Yes (.) yes. She's smoking. 43 Pat: Nur: Oh no. Ah::: 44 45 Pat: She comes round every morning for a coffee 46 and I laugh my head off someties. She's got 47 one of those plastic things in a bag.

Nur: Oh right, they're quite good yes. (1.0)

48

```
49
            But you know you can come and see [the
50
            nurses]
51
      Pat:
            Yes.
52
      Nur:
            Have you seen them at all?
53
            No. (.) I saw the other nurse last time.
54
            And went through it with her. (1.5) I've
55
            tried most of them but
56
      Nur:
            Right.
57
      Pat:
            And most of them (.) when I've (.)
58
            like it were chewing gum or owt
59
            like that, or that I felt like a
60
            cigarette after straight away. It's::
61
            It may be that (1.0) you need something a
62
            bit stronger to start with and then
63
            come down.
      Pat:
64
            Yes.
            erm:: (.) we do things slightly
65
      Nur:
66
            different maybe since you last came. We
67
            used to just give you one type of nicotine
68
            replacement but now. .
```

Extract 8

In this extract it is clear that even though the nurse is engaged in performing a technical task (i.e. fitting the blood monitor to the patient, taking the reading, and so on), and her informal exchange with the patient is seemingly on the 'non-medical' topic of the patient's dog (lines 1-6), she is still able to subtly focus the subsequent talk on how this might have a positive impact on the patient's smoking problem. She achieves this in a stepwise manner by firstly suggesting that the patient might be able to walk the dog more often (lines 6-9) '. . now that your chest's improving a little bit?' (line

8). And then on lines 12-15, by connecting this to the possibility that walking the dog might help distract her from having a cigarette, by lines 17-21, the nurse has been able to create a slot where she can offer the patient a series of practical hints on how to use other forms of distraction. The grounding of this sequence as somehow outside the formal medical focus of the encounter helps to create an interactional environment where the patient is free to start talking about her neighbour's history of smoking related cancer. This effectively shifts the encounter onto this topic without directly indicating that it may be something which is concerning the patient, and subsequently to the transcribed sequence, the nurse is able to address these concerns by offering further strategies and advice to help the patient give up smoking. Again, as in the previous extract with the GP, this is also achieved *obliquely* without further direct mention of lung cancer.

Essentially, then, an *oblique* formulation allows a patient to hint at or approach issues that concern them by a roundabout means, but requires an interactional arena that is flexible enough for the clinician to accommodate this.

Discussion

The clinicians conducting the types of routine COPD review consultations we have been concerned with are in a prime position to notice, and follow up on, potentially concerning symptoms, and of course this is often what they are able to do. However, in the case of the nurse led encounters we were able to examine, it appears that the underlying technical and fragmented nature of the tasks they were required to perform had the effect of reducing opportunities for patients to offer symptoms following an *oblique* trajectory. We found only two examples where the interactional environment allowed the patient to utilise this formulation to indicate a concern to their nurse. This in contrast to the eight examples noted in our GP led consultations. The system that practice nurses (in the UK at least) currently operate within prioritises the collection and recording of information

because this allows the medical practice to meet QOF targets. In the types of encounter we analysed, it can also lead to the fragmentation of narrative 'slots', and essentially limit interactional opportunities for patients who may be disposed to embark on more *oblique* symptomatic motifs. This is in spite of findings which suggest that patients generally feel more in control in nurse-led consultations (Collins *et al*, 2005), or that they tend to regard nurses more as social equals (Österlund Efraimsson, 2005; Bourhis *et al*, 1989).

An important issue here is that it is not simply the amount of time a practitioner is able to spend with a patient that impacts on the occurrence of the oblique format. Our GP corpus were completely routine (i.e. relatively short) consultations averaging 15-20 minutes, while our nurse interactions lasted an average of 30-40 minutes. The issue is focus. In interactional environments where symptom narratives can become subordinate to the demands of technical activities, there will necessarily be a high degree of fragmentation, both sequentially, in terms of where opportunities for narrative expression are built into the encounter, but also to what degree the sequential elements present are allowed to generate an underlying continuity. In line with the broad structural demands of the two settings, for the nurses, the majority of formats we observed were of the embedded type, and were situated in the history taking and examination phases. For the doctors, there were more direct types in evidence. These were focused particularly on the presenting complaint phase, with embedded formats also occurring – like the nurses – in the history taking phase. The occurrence of these formats in both types of encounter illustrates that opportunities for patients to offer symptoms of concern are by no means absent, even if structural and task oriented factors are accounted for. However, direct and embedded openings – by their nature – tend to result in responses and actions that are focused directly on the subject of concern rather than as triggers or openings for the development of extended narratives with a potentially tangential focus. It is not that patients are particularly restricted in opportunities to offer new symptoms per se in either setting. Rather, it is that the relative absence of the oblique format in the nurse consultations could

indicate that, in these particular types of encounter at least, there may be less interactional leeway to develop extended or tangentially oriented narratives.

So what implications might all this have in terms of understanding how patients at heightened risk of developing lung cancer may choose whether or not to introduce new symptoms? As we have outlined, an oblique format allows patients to introduce issues or concerns without necessarily acknowledging them openly, and in the case of possible lung cancer symptoms this is a significant issue. The negative associations that are attached to all forms of cancer have been shown to be a reason why some people delay seeking medical help when they notice worrying symptoms. However, the effect is particularly significant in the case of lung cancer because of its strong connections with smoking and the significant extra layer of social stigma it generates (Braybrook et al, 2011). This perception of stigma appears to have a tangible influence on the point at which people decide to seek medical help in the first place, and it has also been noted in a number of studies that during medical consultations individuals may choose to indirectly reveal worrying symptoms while describing other more mundane problems (Corner & Brindle, 2011). What we would suggest, then, is that if patients are experiencing reticence or reluctance to broach the subject of potential cancer symptoms with health care professionals, the kinds of interactional environments which offer the highest level of facilitation are those which might allow them to utilise oblique formulations and approach the issue indirectly. We would further suggest that although our data essentially focuses on one particular type of review consultation relating to a specific chronic condition, our findings are likely to be relevant to a variety of other clinical encounters where the completion of a particular 'task' - such as the routine monitoring of an ongoing condition - is the priority. We do, of course, acknowledge that further investigation is required to confirm this suggestion: a longitudinal study incorporating interactional data from multiple clinical encounters over the course of an illness trajectory would perhaps be necessary to provide empirical depth. Such a study might also usefully integrate relevant clinical data on diagnosis and treatment outcomes, and

the incorporation of retrospective qualitative material to establish the terms by which participants themselves judged their encounters.

Conclusions

Overall, then, there are a myriad of different clinical arenas in which patients and clinicians engage. All of them will, to varying degrees, be unavoidably influenced by systematic demands, hierarchical expectations and interactional norms. However, there are some clinical situations where the idiosyncratic alignment of these factors serves to more actively undermine the potential effectiveness of an encounter. The COPD reviews we have outlined, and particularly those undertaken by practice nurses, may be one such arena. Given that these review consultations are an ideal opportunity for clinicians to spot the early signs of lung cancer in patients who are considered to be at higher risk of developing the disease, and that it is established that patients are often reluctant to mention concerning symptoms directly, there may be an argument for developing adaptations to the consultation process which can accommodate more *oblique* narrative trajectories. Such adaptations would not only need to address the reticence of patients, but also the focus and purpose of review appointments.

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Young RP, Hopkins RJ, Christmas T, Black PN, Metcalf P & Gamble DG (2009) COPD prevalence is increased in lung cancer, independent of age, sex and smoking history. *European Respiratory Journal*. 34. 2: 380-386

Consultation Phase	Format: Nurse led consultations (N=12)			Format: GP led consultations (N=14)		
	Direct	Embedded	Oblique	Direct	Embedded	Oblique
Presenting complaint	0	0	0	5	0	0
History taking	3	10	0	2	5	1
Examination	0	3	2	1	0	0
Treatment	0	0	0	1	0	7
Total for each format	3	13	2	9	5	8
Total instances where new symptoms were introduced		18			22	

Table 1 Occurrence of formats and phase of the consultation where formats were observed

How potentially serious symptom changes are talked about and managed in COPD clinical review consultations: a micro-analysis.

Highlights

- People with symptoms of lung cancer often present late, affecting prognosis.
- Those with COPD are at high risk of lung cancer, but have regular clinical reviews.
- We analysed a corpus of GP-led, and nurse-led review consultations.
- Patients often revealed lung cancer symptoms obliquely during extended narratives.
- The task oriented nature of the nurse-led reviews tended to limit these narratives.

CA transcription symbols

This is a simplified list of symbols that are used in the transcription of recorded data. In CA, punctuation such as full stops, commas and question marks etc., are used to denote the characteristics of ongoing speech and do not necessarily maintain a conventional grammatical function.

- exe degree signs indicate speech that is quiet relative to the surrounding talk.
- LOUD capital letters indicate speech which is louder relative to the surrounding talk.
- text underlining indicates emphasis on a word (not necessarily a rise in volume).
- . full stops are used to indicating a falling intonation.
- , commas indicate continuing intonation.
- .h indicates an in breath.
- h. indicates an out breath.
- \uparrow or \downarrow indicates speech spoken with a high or low pitch relative to the surrounding talk.
- (0.5) numbers within brackets indicate timings in whole and tenths of a second.
- (.) a full stop within brackets indicates a 'micro pause' of less than 2/10ths of a second.
- [Square brackets are used to denote the points at which speech overlaps.