



Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

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| Journal: | <i>BMJ Open</i> |
| Manuscript ID: | bmjopen-2013-003112 |
| Article Type: | Research |
| Date Submitted by the Author: | 23-Apr-2013 |
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| Primary Subject Heading: | Communication |
| Secondary Subject Heading: | Oncology |
| Keywords: | QUALITATIVE RESEARCH, ONCOLOGY, MEDICAL EDUCATION & TRAINING |
| <p>Note: The following files were submitted by the author for peer review, but cannot be converted to PDF. You must view these files (e.g. movies) online.</p> <p>New_patients1.3approved[1].docm Follow_up_patients1.3approved[1].docm</p> | |

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3 **Patient initiated questions: how can doctors encourage them and improve the consultation**
4 **process? A qualitative study**
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53 **Manuscript word count 3,505**
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55 **Abstract word count: 237**
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Abstract

Objective: To investigate the circumstances under which patients initiate direct questions in Oncology consultations

Design: Conversation analysis of 47 consultations between oncologists and cancer patients

Setting: An oncology clinic at a teaching hospital in the East Midlands.

Participants: 16 Oncologists and 67 cancer patients

Outcome measure: Patient initiated direct questions

Results: On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there is a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

Conclusions: This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

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3 that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective
4 way of increasing levels of patient question asking. Doctors need to be able to encourage patient
5 question asking to ensure that patients have at their disposal an important means through which
6 they can determine their information needs. Although these results come from a study of
7 oncology consultations, this finding may be transferable to other clinical contexts.
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Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations.

Consequently, other aspects of social interaction, e.g. eye contact, bodily comporment etc which can also have a significant influence on the content of the consultation, have not been included.

For peer review only

Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.^{1,2} Studies have examined patient preferences for information provision and involvement^{1,3,4,5} and have shown, among other things, that patients do want specific information concerning their illness.^{4,5} However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.¹ Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.⁶ When patients ask questions it allows them to shape their own levels of involvement⁸ and handle the contingencies of information exchange.⁹ In addition, patient question asking has been linked to improved information provision.^{8,10}

These findings still beg the question, how and when do patients ask questions? In the context of cancer care studies have shown that direct questions (alongside indirect cues) occur most often during the treatment phase of the consultation¹¹; that companions who accompany patients, tend to ask more questions than patients particularly in relation to treatment and diagnosis¹²; that

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3 ethnic and racial differences between patients can reflect differences in levels of question asking
4 and direct question asking¹³; that question prompt lists can encourage patient question asking
5 particularly in relation to prognosis and diagnosis.^{14,15} Moreover, patients who receive an answer
6 to their question demonstrate better psychological adjustment following the consultation than
7 those who ask questions but don't receive a response.^{16, 17}

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19 These studies provide valuable direction in understanding some of the factors behind patient
20 question asking in cancer care. However, there is still a lot that is unknown about the specific
21 situational variables which underpin and shape patient question asking in relation to the doctor's
22 communication behaviours. The extent to which patients initiate information seeking, in the first
23 place, is often contingent on the doctor's communicative style. The import of this lies in the fact
24 that when patients seek information (e.g. through asking questions), doctors typically respond in
25 more informative and accommodative ways,¹⁸ simply because patient questions are one of the
26 ways in which patients establish their information needs. The purpose of this study was to
27 capture the interactional and situational variables that occur alongside patient initiated questions
28 to establish possible connections between the two.

29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 **Methods**

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51 The study was carried out in a large UK Cancer Centre. LF recruited patients (with different
52 types of cancers) attending the oncology department (n=77) as well as a mix of oncology
53 consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited
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3 to ensure maximum variability in our sample group. Following each consultation patients were
4 invited to complete a satisfaction questionnaire and interviews were conducted with the patients
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6 by LF shortly after their consultation. We audio recorded 47 consultations which were then
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8 transcribed and analysed using conversation analysis.²² This paper reports on the first 30 of those
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10 consultations.
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19 **Analysis**

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21 This analysis involved examining the turn-by-turn construction of utterances between doctor and
22 patient. This allowed us to identify the occasions where patients ask direct questions. It also
23 enabled us to target the link between the different ways in which test results were delivered and
24 levels of patient initiated questions. For the purposes of analysis we defined a direct question as
25 that which is initiated solely by the patient, without a verbal prompt from the doctor and which
26 targets a specific topic.
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40 Audio recordings of the oncology consultations were subjected to repeated listening and were
41 then transcribed and analysed using conversation analysis, a method of analysis which details
42 characteristics of speech exchange including phraseology, pauses, pace and intonation. Analysis
43 with this level of detail allowed us to identify typical as well as variable features of doctor and
44 patient talk. We then re-analysed the data to see how those features influenced levels of patient
45 involvement patient initiated question asking. For example, we started to notice how variations
46 in the delivery format of test results can shape the patient's response and more specifically
47 influence their levels of question asking. The transcription symbols used to indicate these
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3 characteristics are provided in table 1. The consultations were examined with a view to
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5 identifying some of the systematic and recurrent properties of patient question asking to see if
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7 that would provide further direction in improving consultation practice. Some key sequences
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9 from the consultations are presented verbatim in the text and the symbols used for characteristics
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11 of speech exchange are provided in table 1.
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15 16 17 18 19 **Results**

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24 Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of
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26 consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30
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28 consultations (just under 60 mins of consultation time) there were no patient initiated direct
29
30 questions. In the remaining 23 consultations there were 76 instances of patients asking questions
31
32 (avg. 2.5 direct patient questions per consultation). In 5 out of those 23 consultations (22%)
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34 patients' questions came at the end (within 3-4 mins of the end of the consultation) following a
35
36 prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or
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38 embedded questions arising at different junctures of the consultation following a prompt from
39
40 the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur
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42 specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient
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44 initiated question asking occurs following a careful explanation of test results and diagnostic
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46 evidence e.g. the doctor's use of scan or x-rays. In only two consultations did the patient decline
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48 to ask a question following and invitation to do so from the doctor.
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3 We noted a number of variations in the way in which doctors announce test results. Our main
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5 finding, however, is that patients are more inclined to initiate direct questions when doctors
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7 explicate test results with direct reference to the diagnostic evidence e.g. x-rays or scans. We
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9 identified two types of information delivery each resulting in different types of patient response,
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11 the most marked difference being levels of patient initiated question asking. In delivery type 1,
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13 test results were delivered in a very general way without elaboration (e.g. ‘your scan results are
14
15 fine’). With this type of delivery patient initiated questions were absent or minimal. In delivery
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17 type 2 (‘your scan shows that’) the doctor elaborated or explained the test results sometimes
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19 invoking the scan or the x-ray to do so. This type of delivery typically positively influenced
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21 levels of patient involvement in the consultation and prompted more patient initiated direct
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23 questions and consequently more information provision from the doctor.
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Transcription symbols

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36 ° ° Talk marked by the degree sound indicates words that are softly spoken
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38 (.) A full stop in brackets indicates a micro pause
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40 (1.0), (0.5) indicates silence in seconds and tenths of seconds
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42 [Okay
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44 [Yes Talk which is preceded by a square bracket indicates overlap in speech between
45
46 two different speakers
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48 = Talk marked with the equals sign at the end of one line and the beginning of
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50 another indicates no pause between the end of one utterance and the start of another
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3 **Type 1**
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9 **Table 1**

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11 **0 patient initiated questions**
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16 1. Doctor: The CT scan result is here (0.5) and that was
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18 2. basically normal erm nothing to suggest any new no new
19
20 3. glands you have got some changes on your erm (4.0) lungs
21
22 4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
23
24 5. CT scan and I'm just trying to find the (0.5) lung function
25
26 6. tests(.) when did you have those done
27
28
29
30 7. Patient: (2.0) had them done
31
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33 8. Husband: Two weeks ago
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42 **Table 2**

43
44 **0 initiated patient questions**
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48 1. Doctor: Okay (.) um (0.5) scan result was fine
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50 2. Patient: Good
51
52 3. Doctor: Good okay an everything's stable on the in the
53
54 4. bones
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3 5. Patient: Right
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8 **Table 3**

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10 **0 patient questions**

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14 1. Doctor: Your scan shows everything is the same
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16 2. Patient: Good
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18 3. Doctor: So that's very good
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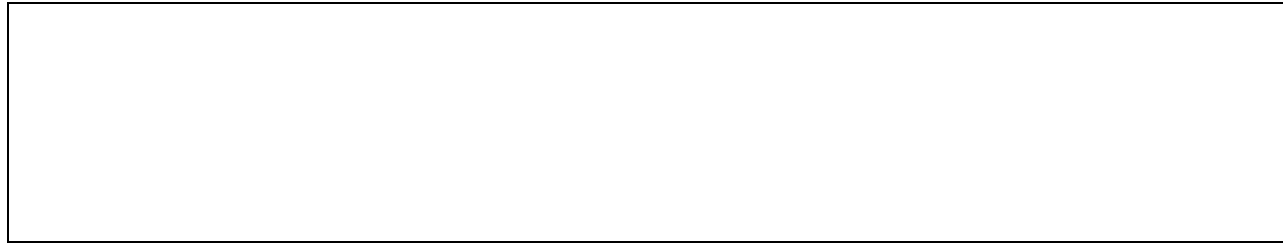
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24 **Table 4**

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26 **1 patient initiated question**

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31 1. Doctor: And you've had an echocardiogram of your heart an
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33 2. that's all fine
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35 3. Patient: Is it [okay
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37 4. Doctor: [you had that done on?
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39 5. Patient: °Last Friday°
40
41 6. Doctor: Last Friday that's all fine (.) no problems so
42
43 7. that's good news could I er examine you
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3 The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1
4 delivery. In each case the results are delivered in a general, non-specific way characterised by a
5 general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery
6 produces a minimal response from the patient. It seems that this is partly to do with the fact that
7 the general delivery projects a paternalistic approach where the doctor presents his/her
8 interpretation of the results as the authoritative one, without any specific reference to further
9 details of findings.²¹ Consequently, the patient is invited to accept the diagnostic judgement of
10 the doctor and the general, non-specific explanation of the results is reflected in the general, non-
11 specific response provided by the patient.¹⁹ In almost a third of the sample, apart from the
12 sequence in table 4, the patient does not question or inquire further into the results following the
13 type 1 delivery. In table 4 for the patient does ask a question, but again this is presented in a
14 general form 'is it okay?' again reflecting the general way in which the results of the
15 echocardiogram is presented. However, later on following a physical examination the patient
16 targets back on this assessment, after a physical examination, following a prompt from the
17 doctor.

- 18 1. Doctor: Is there anything you wanted to ask at all?
- 19 2. Patient: I did want to ask about my heart function
- 20 3. Doctor: Ya sure
- 21 4. Patient: I know you said the echocardiograms are oka:y
- 22 5. Doctor: Yes
- 23 6. Patient: but has it (.) erm deteriorated at all[through
- 24 7. Doctor: [no no



Type 2

Table 1

1patient initiated question

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

Table 2

5 patient initiated questions

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in
3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart
6. Patient: Where's the tumor?
7. Doctor: That's it
8. Patient: It's there? So when I saw it previously it was
9. about that size?
10. Doctor: It's only a couple of centimetres most
11. Patient: As small as that? In fact it's smaller
12. than when I first came about walnut size
13. Doctor: It doesn't really say how big it was
14. initially
15. Patient: So it would be about like that wouldn't it?
16. Doctor: Yeah
17. Patient: It was on the lymph gland, is that the lymph
18. gland?
19. Doctor: No that's your bowel that's the tumor and
20. that's your bowel there and that's your aneurism
21. they've

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| 22. measured it for you 55 mm |
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In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response, asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6) then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the lymph gland (line 17-18).

Table 3

2 patient initiated questions

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| <ol style="list-style-type: none">1. Doctor: The scan is very much the same erm there hasn't2. been um any obvious problems there is quite a lot of3. fibrosis still but that's to be expected so fibrosis is4. healing and scarring5. Patient: Where's that?6. Doctor: Umm both in the air in the central areas you know7. where all the problems originally were with the8. swallowing so in the central area and in the tummy um (2.0)9. °let me tell you exactly°10. Patient: Was that there before? |
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11. Doctor: They've said there's an increase in the volum
12. of that fibrosis
13. Patient: So basically that's scar tissue, is that what
14. you're saying?

This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much the same') but then goes on to point out that fibrosis is still present which is 'to be expected'. The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is. When the doctor explains the location of the fibrosis, the patient asks if it was present before. The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13) then presents a gloss of the meaning of the news which is posed as a question.

Table 4

5 patient initiated questions

1. Doctor: So they've reported it as stable disease basically
2. nothing new to find there are some lymph nodes in your
3. pelvis but there's nothing different from that
4. Patient: Just where exactly?
5. Doctor: Did you want to look at your scan you [can
6. Patient: [Will I be
7. able to tell from that?
8. Doctor: Well we can look at it together
9. Patient: Yeah

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10. Doctor: (3.0) So this is your pelvis
11. Patient: Right
12. Doctor: This is your right hip and that is your left
13. hip=
14. Patient: =Mhm
15. Doctor: And then you've got some lymph nodes that are
16. predominantly on the on the right hand side
17. Patient: Yes right so the other side is what they
18. should look like is it?
19. Doctor: Yeah you've got some tiny lymph nodes there
20. they're normally a centimeter and a half is as big as
21. you'd expect them to be normally
22. Patient: Right
23. Doctor: You have got some higher up as well
24. Patient: So that's more into the tummy?
25. Doctor: Yeah
26. Patient: Dya think it is possible that thee enlarged
27. (.) lymph nodes could be (0.5) pressing on a ne::rve
28. [or
29. Doctor: [Sometimes they can do ya ya

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The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from

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3 that'?) at line 7 manifests the knowledge-competence gap between doctors and patients. This
4
5 may partly account for why doctors do not always invite patients to look at scan/x-ray results and
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7 why patients do not always ask to see them when they are available. The doctor's response ('we
8
9 can look at it together') bridges this gap by inviting the patient to examine the scan jointly
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11 allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the
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13 patient to inquire further.
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21 The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2
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23 delivery. In these sequences the results are delivered alongside a clinical assessment which either
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25 includes a numerical reading or further explication of the findings. These features appear to be
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27 interpreted by patients as accommodative of their opinion and understanding. An important
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29 consequence of this is higher levels of patient involvement including more patient initiated
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31 questions.
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39 Discussion

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46 In the main, consultations covered topics such as treatment, the progression of the cancer itself
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48 and the symptoms experienced by the patient. Not all topics were addressed in every consultation
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50 and doctors varied in how they dealt with each topic. We found that generally patients' actual
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52 levels of involvement in the consultation were relatively low and patients varied in how active
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54 they were in seeking information. We also found that, on the whole, patients seemed disinclined
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56 to ask questions or show communication behaviours designed to elicit information. This finding
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3 is consistent with much earlier research into this topic.^{6,17}
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8 In relation to discussions of test results between doctor and patient, the data appear to indicate
9 that there may be a connection between the way in which the results are delivered and the
10 occurrence of patient initiated direct questions. That is to say, the plainer announcement of
11 diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic
12 evidence projects a more paternalistic approach implicit in which, the patient is expected to
13 accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of
14 the results which is reflected in the general response provided by the patient.¹⁹ In contrast the
15 Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the
16 scan or the x-ray, where appropriate, appears to be significant in encouraging patient
17 involvement and consequently patient initiated direct questions. Incorporating and explaining the
18 evidence appears to be interpreted by patients as an opportunity to contribute to the consultation
19 and establish their information needs in an environment within which the patient's
20 queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or
21 x-rays, this would appear to be an effective way of encouraging patient involvement generally
22 and increasing levels of patient question asking. Consequently, patients are then able to establish
23 and satisfy their information needs in a timely and effective way.
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48 In cases where patients did ask more questions, there was no significant increase in consultation
49 length and no patient refused the offer of looking at examination results. The examples presented
50 above were carefully selected because they display the most marked variation in consultation
51 style highlighting clear contrasts between the two types of delivery.
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6 A number of different types of intervention have been used in cancer care to help facilitate
7
8 patient involvement. For example, question prompt lists have been used quite widely, but their
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10 actual implementation in consultations is not always straightforward and their rates of success do
11
12 vary.¹⁵ Moreover, we found in our study, that even when patients entered the consultation with
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14 question lists, they often left the consultation without having asked the questions they came
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16 prepared for.
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22 The finding that when the doctor elaborates or explicates findings from the evidence, this can
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24 increase levels of patient involvement has been identified previously in a study of primary care
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26 consultations.²⁰ Clearly there are important differences between an oncology consultation and a
27
28 primary care consultation. However, in relation to consulting behaviours, in both settings there
29
30 appear to be striking similarities. That is to say, careful explication of diagnostic findings can
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32 encourage patient involvement such as, in this case, question asking, which in turn can enable
33
34 patients to establish their information needs. Further research in this area demands a closer
35
36 investigation of what Frankel⁹ has described as the ‘presuppositional grounds upon which the
37
38 communication situation itself rests’. This would then allow us to identify other consulting
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40 behaviours doctors can utilise to encourage patient involvement.
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48 There may be a number of reasons why patients are disinclined to ask questions following the
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50 ‘your scan result is fine’ type of announcement. The minimal responses identified may not
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52 actually be conditioned solely by the type of announcement of test results but may also be a
53
54 consequence of patient preference or information needs at that particular moment. As noted, in
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3 Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as 'okay'.
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6 This clearly merits further empirical investigation.
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10 11 **Conclusion** 12 13

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17 Currently there is good research evidence indicating that patient initiated question asking should
18
19 be encouraged. Doctors need to be able to encourage patient question asking to ensure that
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21 patients have at their disposal an important means through which they can determine and express
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23 their information needs. This study confirms the findings from previous studies showing that
24
25 levels of patient initiated questions in Oncology are relatively low. Our study suggests that
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27 patient initiated question asking can be encouraged through timely and deliberate information
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29 giving which incorporates and explanation and display of test results. The findings at this stage
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31 are only suggestive and further exploration is required to establish their actual significance.
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36 Studies which involve closer examination of the actual interactional episodes between doctors
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38 and patients are required to provide a deeper understanding of patient initiated questions and the
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40 situational variables which may influence them.
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Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

Data sharing

There is no additional data available

Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

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3 from the funding body. Each had had full access to all of the data in the study and can take
4 responsibility for the integrity of the data and the accuracy of the data analysis
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7 This paper presents independent research funded by the National Institute for Health Research
8 (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-
9 PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the
10 NHS, the NIHR or the Department of Health.
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Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

| | |
|---|---|
| Journal: | <i>BMJ Open</i> |
| Manuscript ID: | bmjopen-2013-003112.R1 |
| Article Type: | Research |
| Date Submitted by the Author: | 30-May-2013 |
| Complete List of Authors: | Murtagh, Ged; Imperial College London, Surgery and Cancer Furber, Lynn; University of Leicester, Department of Cancer Studies and Molecular Medicine Thomas, Anne; Leicester Royal Infirmary, Department of Cancer Studies and Molecular Medicine |
| Primary Subject Heading: | Communication |
| Secondary Subject Heading: | Oncology |
| Keywords: | QUALITATIVE RESEARCH, ONCOLOGY, MEDICAL EDUCATION & TRAINING |
| <p>Note: The following files were submitted by the author for peer review, but cannot be converted to PDF. You must view these files (e.g. movies) online.</p> <p>New_patients1.3approved[1].docm Follow_up_patients1.3approved[1].docm</p> | |

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3 **Patient initiated questions: how can doctors encourage them and improve the consultation**
4 **process? A qualitative study**
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52

53 **Manuscript word count 3,505**
54

55 **Abstract word count: 237**
56
57
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59
60

Abstract

Objective: To investigate the circumstances under which patients initiate direct questions in oncology consultations

Design: Conversation analysis of 47 consultations between oncologists and cancer patients

Setting: An oncology clinic at a teaching hospital in the East Midlands.

Participants: 16 Oncologists and 67 cancer patients

Outcome measure: Patient initiated direct questions

Results: On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

Conclusions: This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

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3 that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective
4 way of increasing levels of patient question asking. Doctors need to be able to encourage patient
5 question asking to ensure that patients have at their disposal an important means through which
6 they can determine their information needs. Although these results come from a study of
7 oncology consultations, this finding may be transferable to other clinical contexts.
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Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations.

Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

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Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.^{1,2} Studies have examined patient preferences for information provision and involvement^{1,3,4,5} and have shown, among other things, that patients do want specific information concerning their illness.^{4,5} However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.¹ Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.⁶ When patients ask questions it allows them to shape their own levels of involvement⁸ and handle the contingencies of information exchange.⁹ In addition, patient question asking has been linked to improved information provision.^{8,10} Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.^{16,17}

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3 These findings still beg the question, how and when do patients ask questions? In the context of
4 cancer care, studies have shown that direct questions (alongside indirect cues) occur most often
5 during the treatment phase of the consultation¹¹; that companions who accompany patients, tend
6 to ask more questions than patients particularly in relation to treatment and diagnosis¹²; that
7 ethnic and racial differences between patients can reflect differences in levels of question asking
8 and direct question asking¹³; that question prompt lists can encourage patient question asking
9 particularly in relation to prognosis and diagnosis.^{14,15}
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24 These studies provide valuable direction in understanding some of the factors behind patient
25 question asking in cancer care. However, there is still a lot that is unknown about the specific
26 situational variables which underpin and shape patient question asking in relation to the doctor's
27 communication behaviours. The extent to which patients initiate information seeking, in the first
28 place, is often contingent on the doctor's communicative style. The import of this lies in the fact
29 that when patients seek information (e.g. through asking questions), doctors typically respond in
30 more informative and accommodative ways,¹⁸ simply because patient questions are one of the
31 ways in which patients establish their information needs. The purpose of this study was to
32 capture the interactional and situational variables that occur alongside patient initiated questions
33 to establish how and when patients are more inclined to initiate direct questions.
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Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. Patient consent was obtained before their consultation was recorded and before collecting questionnaire data.

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis.²² 30 of those 47 consultations were selected for closer inspection as they demonstrated the strongest variation in delivery style and patient response. The paper reports on a sample from that selection of 30. Transcription and analysis was carried out by GM. Subsequent analyses were carried out by GM, AT and LF. Any disagreements regarding interpretation of the data were resolved through discussion and by revisiting the data. This paper reports on a sample from these consultations which were most strongly indicative of a general pattern between the doctor's communicative style and patient initiated direct questions. Inclusion Criteria: Patients over the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and willing to participate in the study. Exclusion criteria: Any patient unable to consent for themselves, patients with a cognitive impairment and patients who do not speak fluent English.

Analysis

This analysis involved examining the turn-by-turn construction of utterances between doctor and patient. This allowed us to identify the occasions where patients ask questions as well as the type of question e.g. if the question followed a prompt from the doctor or not. It also enabled us to target the link between the different ways in which test results were delivered and levels of patient initiated questions. For the purposes of analysis we defined a direct question as that which is initiated solely by the patient, without a verbal prompt from the doctor and which targets a specific topic.

Audio recordings of the oncology consultations were subjected to repeated listening and were then transcribed and analysed using conversation analysis, a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). The consultations were examined with a view to identifying some of the systematic and recurrent properties of patient question asking to see if that would provide further direction in improving consultation practice. Analysis with this level of detail allowed us to unpack the exchanges and to identify typical as well as variable features of doctor and patient talk. For example, we started to notice how variations in the delivery format of test results can shape the patient's response and more specifically influence their levels of question asking.

Transcription symbols

- ◦ Talk marked by the degree sound indicates words that are softly spoken
- (.) A full stop in brackets indicates a micro pause
- (1.0), (0.5) indicates silence in seconds and tenths of seconds
- [Okay
- [Yes Talk which is preceded by a square bracket indicates overlap in speech between two different speakers
- = Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another

Results

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) the patients did not ask any questions. In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). However patients' questions arose in different ways. For example, in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) again following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at different

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3 junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations,
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5 (52%) patient initiated direct questions occur specifically in relation to discussion of test results.
6
7
8 In 7 of these 12 consultations (58%) patient initiated question asking occurs following a careful
9
10 explanation of test results and diagnostic evidence e.g. the doctor's use of scan or x-rays. In only
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12 two consultations did the patient decline to ask a question following an invitation to do so from
13
14 the doctor.
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20 We noted a number of variations in the way in which doctors deliver test results. Our main
21
22 finding, however, is that patients are more inclined to initiate direct questions when doctors
23
24 deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify
25
26 this we identified two types of information delivery each resulting in different types of patient
27
28 response, the most marked difference being levels of patient initiated question asking. In delivery
29
30 type 1, test results were delivered in a very general way without elaboration (**Restricted delivery**
31
32 - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were
33
34 absent or minimal. In delivery type 2 (**Elaborate delivery** - 'your scan shows that...') the doctor
35
36 elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This
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38 type of delivery typically positively influenced levels of patient involvement in the consultation
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40 and prompted more patient initiated direct questions and consequently more information
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42 provision from the doctor.
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Restricted delivery

Table 1

0 patient initiated questions

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

Table 2

0 initiated patient questions

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

Table 3**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

Table 4**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery

1
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3 produces a minimal response from the patient. It seems that this is partly to do with the fact that
4
5 the general delivery projects a paternalistic approach where the doctor presents his/her
6
7 interpretation of the results as the authoritative one, without any specific reference to further
8
9 details of the findings.²¹ Consequently, the patient is invited to accept the diagnostic judgement
10
11 of the doctor and the general, non-specific explanation of the results is reflected in the general,
12
13 non-specific response provided by the patient.¹⁹ In almost a third of the sample, apart from the
14
15 sequence in table 4, the patient does not question or inquire further into the results following the
16
17 type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general
18
19 form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is
20
21 presented. However, later on following a physical examination the patient targets back on this
22
23 assessment, after a physical examination, following a prompt from the doctor.
24
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- 31
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- 33 1. Doctor: Is there anything you wanted to ask at all?
 - 34 2. Patient: I did want to ask about my heart function
 - 35 3. Doctor: Ya sure
 - 36 4. Patient: I know you said the echocardiograms are oka:y
 - 37 5. Doctor: Yes
 - 38 6. Patient: but has it (.) erm deteriorated at all[through
 - 39 7. Doctor: [no no
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Elaborate delivery**Table 1****1 patient initiated question**

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

Table 2**5 patient initiated questions**

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in

1
2
3 3. the chest and in the bowel
4

5 4. Patient: Is it possible for me to see the scan?
6

7 5. Doctor: Yes, these are your lungs, that's your heart
8

9 6. Patient: Where's the tumor?
10

11 7. Doctor: That's it
12

13 8. Patient: It's there? So when I saw it previously it was
14

15 9. about that size?
16

17 10. Doctor: It's only a couple of centimetres most
18

19 11. Patient: As small as that? In fact it's smaller
20

21 12. than when I first came about walnut size
22

23 13. Doctor: It doesn't really say how big it was
24

25 14. initially
26

27 15. Patient: So it would be about like that wouldn't it?
28

29 16. Doctor: Yeah
30

31 17. Patient: It was on the lymph gland, is that the lymph
32

33 18. gland?
34

35 19. Doctor: No that's your bowel that's the tumor and
36

37 20. that's your bowel there and that's your aneurism
38

39 21. they've measured it for you 55 mm
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51 In this sequence the results are delivered and carefully explicated with the inclusion of numerical
52 data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a
53 precise frame of reference regarding the cancer. Interestingly in this case the patient, in response,
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3 asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the
4
5 relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6)
6
7
8 then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the
9
10 lymph gland (line 17-18).
11
12
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15

16
17 **Table 3**

18
19 **2 patient initiated questions**

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21
22 1. Doctor: The scan is very much the same erm there hasn't
23
24 2. been um any obvious problems there is quite a lot of
25
26 3. fibrosis still but that's to be expected so fibrosis is
27
28 4. healing and scarring
29
30 5. Patient: Where's that?
31
32 6. Doctor: Umm both in the air in the central areas you know
33
34 7. where all the problems originally were with the
35
36 8. swallowing so in the central area and in the tummy um (2.0)
37
38 9. °let me tell you exactly°
39
40
41 10. Patient: Was that there before?
42
43 11. Doctor: They've said there's an increase in the volum
44
45 12. of that fibrosis
46
47 13. Patient: So basically that's scar tissue, is that what
48
49 14. you're saying?
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3 This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much
4 the same') but then goes on to point out that fibrosis is still present which is 'to be expected'.
5
6

7
8 The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is.
9

10 When the doctor explains the location of the fibrosis, the patient asks if it was present before.
11

12 The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13)
13 then presents a gloss of the meaning of the news which is posed as a question.
14
15
16
17

18 **Table 4**

19 **5 patient initiated questions**

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|----|---|
| 20 | |
| 21 | |
| 22 | |
| 23 | |
| 24 | |
| 25 | 1. Doctor: So they've reported it as stable disease basically |
| 26 | 2. nothing new to find there are some lymph nodes in your |
| 27 | 3. pelvis but there's nothing different from that |
| 28 | 4. Patient: Just where exactly? |
| 29 | 5. Doctor: Did you want to look at your scan you [can |
| 30 | 6. Patient: [Will I be |
| 31 | 7. able to tell from that? |
| 32 | 8. Doctor: Well we can look at it together |
| 33 | 9. Patient: Yeah |
| 34 | 10. Doctor: (3.0) So this is your pelvis |
| 35 | 11. Patient: Right |
| 36 | 12. Doctor: This is your right hip and that is your left |
| 37 | 13. hip= |
| 38 | 14. Patient: =Mhm |
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15. Doctor: And then you've got some lymph nodes that are
16. predominantly on the on the right hand side
17. Patient: Yes right so the other side is what they
18. should look like is it?
19. Doctor: Yeah you've got some tiny lymph nodes there
20. they're normally a centimeter and a half is as big as
21. you'd expect them to be normally
22. Patient: Right
23. Doctor: You have got some higher up as well
24. Patient: So that's more into the tummy?
25. Doctor: Yeah
26. Patient: Dya think it is possible that thee enlarged
27. (.) lymph nodes could be (0.5) pressing on a ne::rve
28. [or
29. Doctor: [Sometimes they can do ya ya

The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from that?') at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly

1
2
3 allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the
4
5 patient to inquire further.
6
7
8
9

10
11 The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2
12
13 delivery. In these sequences the results are delivered alongside a clinical assessment which either
14
15 includes a numerical reading or further explication of the findings. When results are delivered in
16
17 this way, patients tend to engage with the doctor. An important consequence of this is higher
18
19 levels of patient involvement including more patient initiated questions.
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27 Discussion

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34 In the main, consultations covered topics such as treatment, the progression of the cancer itself
35
36 and the symptoms experienced by the patient. Not all topics were addressed in every consultation
37
38 and doctors varied in how they dealt with each topic. We found that generally patients' actual
39
40 levels of involvement in the consultation were relatively low and patients varied in how active
41
42 they were in seeking information. We also found that, on the whole, patients seemed disinclined
43
44 to ask questions or show communication behaviours designed to elicit information. This finding
45
46 is consistent with much earlier research into this topic.^{6,17}
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53 In relation to discussions of test results between doctor and patient, the data appear to indicate
54
55 that there may be a connection between the way in which the results are delivered and the
56
57 occurrence of patient initiated direct questions. That is to say, the plainer announcement of
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1
2
3 diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic
4
5 evidence projects a more paternalistic approach implicit in which, the patient is expected to
6
7 accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of
8
9 the results which is reflected in the general response provided by the patient.¹⁹ In contrast the
10
11 Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the
12
13 scan or the x-ray, where appropriate, appears to be significant in encouraging patient
14
15 involvement and consequently patient initiated direct questions. Incorporating and explaining the
16
17 evidence appears to be interpreted by patients as an opportunity to contribute to the consultation
18
19 and establish their information needs in an environment within which the patient's
20
21 queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or
22
23 x-rays, this would appear to be an effective way of encouraging patient involvement generally
24
25 and increasing levels of patient question asking. Consequently, patients are then able to establish
26
27 and satisfy their information needs in a timely and effective way.
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36 In cases where patients did ask more questions, there was no significant increase in consultation
37
38 length and no patient refused the offer of looking at examination results. The examples presented
39
40 above were carefully selected because they display the most marked variation in consultation
41
42 style highlighting clear contrasts between the two types of delivery.
43
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48 A number of different types of intervention have been used in cancer care to help facilitate
49
50 patient involvement. For example, question prompt lists have been used quite widely, but their
51
52 actual implementation in consultations is not always straightforward and their rates of success do
53
54 vary.¹⁵ Moreover, we found in our study, that even when patients entered the consultation with
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1
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3 question lists, they often left the consultation without having asked the questions they came
4
5 prepared for.
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10 The finding that when the doctor elaborates or explicates findings from the evidence, this can
11
12 increase levels of patient involvement has been identified previously in a study of primary care
13
14 consultations.²⁰ Clearly there are important differences between an oncology consultation and a
15
16 primary care consultation. However, in relation to consulting behaviours, in both settings there
17
18 appear to be striking similarities. That is to say, careful explication of diagnostic findings can
19
20 encourage patient involvement such as, in this case, question asking, which in turn can enable
21
22 patients to establish their information needs. Further research in this area demands a closer
23
24 investigation of what Frankel⁹ has described as the ‘presuppositional grounds upon which the
25
26 communication situation itself rests’. This would then allow us to identify other consulting
27
28 behaviours doctors can utilise to encourage patient involvement.
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36 There may be a number of reasons why patients are disinclined to ask questions following the
37
38 ‘your scan result is fine’ type of announcement. The minimal responses identified may not
39
40 actually be conditioned solely by the type of announcement of test results but may also be a
41
42 consequence of patient preference or information needs at that particular moment. As noted, in
43
44 Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as ‘okay’.
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47 This clearly merits further empirical investigation.
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Conclusion

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9 Currently there is good research evidence indicating that patient initiated question asking should
10 be encouraged. Doctors need to be able to encourage patient question asking to ensure that
11 patients have at their disposal an important means through which they can determine and express
12 their information needs. This study confirms the findings from previous studies showing that
13 levels of patient initiated questions in Oncology are relatively low. Our study suggests that
14 patient initiated question asking can be encouraged through timely and deliberate information
15 giving which incorporates an explanation and display of test results. The findings at this stage are
16 only suggestive and further exploration is required to establish their actual significance. Studies
17 which involve closer examination of the actual interactional episodes between doctors and
18 patients are required to provide a deeper understanding of patient initiated questions and the
19 situational variables which may influence them.
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Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

Data sharing

There is no additional data available

Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

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2
3 from the funding body. Each had had full access to all of the data in the study and can take
4 responsibility for the integrity of the data and the accuracy of the data analysis
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7 This paper presents independent research funded by the National Institute for Health Research
8 (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-
9 PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the
10 NHS, the NIHR or the Department of Health.
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For peer review only

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3 **Patient initiated questions: how can doctors encourage them and improve the consultation**
4 **process? A qualitative study**
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53 **Manuscript word count 3,505**
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55 **Abstract word count: 237**
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Abstract

Objective: To investigate the circumstances under which patients initiate direct questions in oncology consultations

Design: Conversation analysis of 47 consultations between oncologists and cancer patients

Setting: An oncology clinic at a teaching hospital in the East Midlands.

Participants: 16 Oncologists and 67 cancer patients

Outcome measure: Patient initiated direct questions

Results: On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

Conclusions: This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

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3 that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective
4 way of increasing levels of patient question asking. Doctors need to be able to encourage patient
5 question asking to ensure that patients have at their disposal an important means through which
6 they can determine their information needs. Although these results come from a study of
7 oncology consultations, this finding may be transferable to other clinical contexts.
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Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations.

Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

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Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.^{1,2} Studies have examined patient preferences for information provision and involvement^{1,3,4,5} and have shown, among other things, that patients do want specific information concerning their illness.^{4,5} However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.¹ Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.⁶ When patients ask questions it allows them to shape their own levels of involvement⁸ and handle the contingencies of information exchange.⁹ In addition, patient question asking has been linked to improved information provision.^{8,10} Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.^{16,17}

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3 These findings still beg the question, how and when do patients ask questions? In the context of
4 cancer care, studies have shown that direct questions (alongside indirect cues) occur most often
5 during the treatment phase of the consultation¹¹; that companions who accompany patients, tend
6 to ask more questions than patients particularly in relation to treatment and diagnosis¹²; that
7 ethnic and racial differences between patients can reflect differences in levels of question asking
8 and direct question asking¹³; that question prompt lists can encourage patient question asking
9 particularly in relation to prognosis and diagnosis.^{14,15}
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24 These studies provide valuable direction in understanding some of the factors behind patient
25 question asking in cancer care. However, there is still a lot that is unknown about the specific
26 situational variables which underpin and shape patient question asking in relation to the doctor's
27 communication behaviours. The extent to which patients initiate information seeking, in the first
28 place, is often contingent on the doctor's communicative style. The import of this lies in the fact
29 that when patients seek information (e.g. through asking questions), doctors typically respond in
30 more informative and accommodative ways,¹⁸ simply because patient questions are one of the
31 ways in which patients establish their information needs. The purpose of this study was to
32 capture the interactional and situational variables that occur alongside patient initiated questions
33 to establish how and when patients are more inclined to initiate direct questions.
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Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. **Patient consent was obtained before their consultation was recorded and before collecting questionnaire data.**

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis.²² 30 of those 47 consultations were selected for closer inspection as they demonstrated the strongest variation in delivery style and patient response. The paper reports on a sample from that selection of 30. **Transcription and analysis was carried out by GM. Subsequent analyses were carried out by GM, AT and LF. Any disagreements regarding interpretation of the data were resolved through discussion and by revisiting the data. This paper reports on a sample from these consultations which were most strongly indicative of a general pattern between the doctor's communicative style and patient initiated direct questions. Inclusion Criteria: Patients over the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and willing to participate in the study. Exclusion criteria: Any patient unable to consent for themselves, patients with a cognitive impairment and patients who do not speak fluent English.**

Analysis

This analysis involved examining the turn-by-turn construction of utterances between doctor and patient. This allowed us to identify the occasions where patients ask questions as well as the type of question e.g. if the question followed a prompt from the doctor or not. It also enabled us to target the link between the different ways in which test results were delivered and levels of patient initiated questions. For the purposes of analysis we defined a direct question as that which is initiated solely by the patient, without a verbal prompt from the doctor and which targets a specific topic.

Audio recordings of the oncology consultations were subjected to repeated listening and were then transcribed and analysed using conversation analysis, a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). The consultations were examined with a view to identifying some of the systematic and recurrent properties of patient question asking to see if that would provide further direction in improving consultation practice. Analysis with this level of detail allowed us to unpack the exchanges and to identify typical as well as variable features of doctor and patient talk. For example, we started to notice how variations in the delivery format of test results can shape the patient's response and more specifically influence their levels of question asking.

Transcription symbols

- ° ° Talk marked by the degree sound indicates words that are softly spoken
- (.) A full stop in brackets indicates a micro pause
- (1.0), (0.5) indicates silence in seconds and tenths of seconds
- [Okay
- [Yes Talk which is preceded by a square bracket indicates overlap in speech between two different speakers
- = Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another

Results

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) **the patients did not ask any questions.** In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). **However patients' questions arose in different ways. For example,** in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) **again** following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at

1
2
3 different junctures of the consultation following a prompt from the doctor. In 12 of the 23
4 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion
5 of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs
6 following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of
7 scan or x-rays. In only two consultations did the patient decline to ask a question following an
8 invitation to do so from the doctor.
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20 We noted a number of variations in the way in which doctors deliver test results. Our main
21 finding, however, is that patients are more inclined to initiate direct questions when doctors
22 deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify
23 this we identified two types of information delivery each resulting in different types of patient
24 response, the most marked difference being levels of patient initiated question asking. In delivery
25 type 1, test results were delivered in a very general way without elaboration (**Restricted delivery**
26 - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were
27 absent or minimal. In delivery type 2 (**Elaborate delivery** - 'your scan shows that...') the doctor
28 elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This
29 type of delivery typically positively influenced levels of patient involvement in the consultation
30 and prompted more patient initiated direct questions and consequently more information
31 provision from the doctor.
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Restricted delivery**Table 1****0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

Table 2**0 initiated patient questions**

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

Table 3**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

Table 4**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery

1
2
3 produces a minimal response from the patient. It seems that this is partly to do with the fact that
4
5 the general delivery projects a paternalistic approach where the doctor presents his/her
6
7 interpretation of the results as the authoritative one, without any specific reference to further
8
9 details of the findings.²¹ Consequently, the patient is invited to accept the diagnostic judgement
10
11 of the doctor and the general, non-specific explanation of the results is reflected in the general,
12
13 non-specific response provided by the patient.¹⁹ In almost a third of the sample, apart from the
14
15 sequence in table 4, the patient does not question or inquire further into the results following the
16
17 type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general
18
19 form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is
20
21 presented. However, later on following a physical examination the patient targets back on this
22
23 assessment, after a physical examination, following a prompt from the doctor.
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- 33 1. Doctor: Is there anything you wanted to ask at all?
34
35 2. Patient: I did want to ask about my heart function
36
37 3. Doctor: Ya sure
38
39 4. Patient: I know you said the echocardiograms are oka:y
40
41 5. Doctor: Yes
42
43 6. Patient: but has it (.) erm deteriorated at all[through
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47 7. Doctor: [no no
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Elaborate delivery**Table 1****1 patient initiated question**

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

Table 2**5 patient initiated questions**

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in

1
2
3 3. the chest and in the bowel
4

5 4. Patient: Is it possible for me to see the scan?
6

7 5. Doctor: Yes, these are your lungs, that's your heart
8

9 6. Patient: Where's the tumor?
10

11 7. Doctor: That's it
12

13 8. Patient: It's there? So when I saw it previously it was
14

15 9. about that size?
16

17 10. Doctor: It's only a couple of centimetres most
18

19 11. Patient: As small as that? In fact it's smaller
20

21 12. than when I first came about walnut size
22

23 13. Doctor: It doesn't really say how big it was
24

25 14. initially
26

27 15. Patient: So it would be about like that wouldn't it?
28

29 16. Doctor: Yeah
30

31 17. Patient: It was on the lymph gland, is that the lymph
32

33 18. gland?
34

35 19. Doctor: No that's your bowel that's the tumor and
36

37 20. that's your bowel there and that's your aneurism
38

39 21. they've measured it for you 55 mm
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51 In this sequence the results are delivered and carefully explicated with the inclusion of numerical
52 data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a
53 precise frame of reference regarding the cancer. Interestingly in this case the patient, in response,
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3 asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the
4
5 relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6)
6
7 then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the
8
9 lymph gland (line 17-18).
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17 **Table 3**

18
19 **2 patient initiated questions**

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21
22 1. Doctor: The scan is very much the same erm there hasn't
23
24 2. been um any obvious problems there is quite a lot of
25
26 3. fibrosis still but that's to be expected so fibrosis is
27
28 4. healing and scarring
29
30 5. Patient: Where's that?
31
32 6. Doctor: Umm both in the air in the central areas you know
33
34 7. where all the problems originally were with the
35
36 8. swallowing so in the central area and in the tummy um (2.0)
37
38 9. °let me tell you exactly°
39
40 10. Patient: Was that there before?
41
42
43 11. Doctor: They've said there's an increase in the volum
44
45 12. of that fibrosis
46
47 13. Patient: So basically that's scar tissue, is that what
48
49 14. you're saying?
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3 This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much
4 the same') but then goes on to point out that fibrosis is still present which is 'to be expected'.
5
6

7
8 The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is.
9

10 When the doctor explains the location of the fibrosis, the patient asks if it was present before.
11

12 The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13)
13 then presents a gloss of the meaning of the news which is posed as a question.
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18 **Table 4**

19 **5 patient initiated questions**

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| 25 | 1. Doctor: So they've reported it as stable disease basically |
| 26 | 2. nothing new to find there are some lymph nodes in your |
| 27 | 3. pelvis but there's nothing different from that |
| 28 | 4. Patient: Just where exactly? |
| 29 | 5. Doctor: Did you want to look at your scan you [can |
| 30 | 6. Patient: [Will I be |
| 31 | 7. able to tell from that? |
| 32 | 8. Doctor: Well we can look at it together |
| 33 | 9. Patient: Yeah |
| 34 | 10. Doctor: (3.0) So this is your pelvis |
| 35 | 11. Patient: Right |
| 36 | 12. Doctor: This is your right hip and that is your left |
| 37 | 13. hip= |
| 38 | 14. Patient: =Mhm |
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4 15. Doctor: And then you've got some lymph nodes that are
5
6 16. predominantly on the on the right hand side
7
8 17. Patient: Yes right so the other side is what they
9
10 18. should look like is it?
11
12 19. Doctor: Yeah you've got some tiny lymph nodes there
13
14 20. they're normally a centimeter and a half is as big as
15
16 21. you'd expect them to be normally
17
18 22. Patient: Right
19
20 23. Doctor: You have got some higher up as well
21
22 24. Patient: So that's more into the tummy?
23
24 25. Doctor: Yeah
25
26 26. Patient: Dya think it is possible that thee enlarged
27
28 27. (.) lymph nodes could be (0.5) pressing on a ne::rve
29
30 28. [or
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32 29. Doctor: [Sometimes they can do ya ya
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41 The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In
42
43 response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would
44
45 like to look at their scan. Interestingly the patient's next question ('will I be able to tell from
46
47 that?') at line 7 manifests the knowledge-competence gap between doctors and patients. This
48
49 may partly account for why doctors do not always invite patients to look at scan/x-ray results and
50
51 why patients do not always ask to see them when they are available. The doctor's response ('we
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53 can look at it together') bridges this gap by inviting the patient to examine the scan jointly
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3 allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the
4
5 patient to inquire further.
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11 The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2
12
13 delivery. In these sequences the results are delivered alongside a clinical assessment which either
14
15 includes a numerical reading or further explication of the findings. When results are delivered in
16
17 this way, patients tend to engage with the doctor. An important consequence of this is higher
18
19 levels of patient involvement including more patient initiated questions.
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27 **Discussion**

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34 In the main, consultations covered topics such as treatment, the progression of the cancer itself
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36 and the symptoms experienced by the patient. Not all topics were addressed in every consultation
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38 and doctors varied in how they dealt with each topic. We found that generally patients' actual
39
40 levels of involvement in the consultation were relatively low and patients varied in how active
41
42 they were in seeking information. We also found that, on the whole, patients seemed disinclined
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44 to ask questions or show communication behaviours designed to elicit information. This finding
45
46 is consistent with much earlier research into this topic.^{6,17}
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53 In relation to discussions of test results between doctor and patient, the data appear to indicate
54
55 that there may be a connection between the way in which the results are delivered and the
56
57 occurrence of patient initiated direct questions. That is to say, the plainer announcement of
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1
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3 diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic
4
5 evidence projects a more paternalistic approach implicit in which, the patient is expected to
6
7 accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of
8
9 the results which is reflected in the general response provided by the patient.¹⁹ In contrast the
10
11 Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the
12
13 scan or the x-ray, where appropriate, appears to be significant in encouraging patient
14
15 involvement and consequently patient initiated direct questions. Incorporating and explaining the
16
17 evidence appears to be interpreted by patients as an opportunity to contribute to the consultation
18
19 and establish their information needs in an environment within which the patient's
20
21 queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or
22
23 x-rays, this would appear to be an effective way of encouraging patient involvement generally
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25 and increasing levels of patient question asking. Consequently, patients are then able to establish
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27 and satisfy their information needs in a timely and effective way.
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36 In cases where patients did ask more questions, there was no significant increase in consultation
37
38 length and no patient refused the offer of looking at examination results. The examples presented
39
40 above were carefully selected because they display the most marked variation in consultation
41
42 style highlighting clear contrasts between the two types of delivery.
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48 A number of different types of intervention have been used in cancer care to help facilitate
49
50 patient involvement. For example, question prompt lists have been used quite widely, but their
51
52 actual implementation in consultations is not always straightforward and their rates of success do
53
54 vary.¹⁵ Moreover, we found in our study, that even when patients entered the consultation with
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3 question lists, they often left the consultation without having asked the questions they came
4 prepared for.
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10 The finding that when the doctor elaborates or explicates findings from the evidence, this can
11 increase levels of patient involvement has been identified previously in a study of primary care
12 consultations.²⁰ Clearly there are important differences between an oncology consultation and a
13 primary care consultation. However, in relation to consulting behaviours, in both settings there
14 appear to be striking similarities. That is to say, careful explication of diagnostic findings can
15 encourage patient involvement such as, in this case, question asking, which in turn can enable
16 patients to establish their information needs. Further research in this area demands a closer
17 investigation of what Frankel⁹ has described as the ‘presuppositional grounds upon which the
18 communication situation itself rests’. This would then allow us to identify other consulting
19 behaviours doctors can utilise to encourage patient involvement.
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36 There may be a number of reasons why patients are disinclined to ask questions following the
37 ‘your scan result is fine’ type of announcement. The minimal responses identified may not
38 actually be conditioned solely by the type of announcement of test results but may also be a
39 consequence of patient preference or information needs at that particular moment. As noted, in
40 Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as ‘okay’.
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48 This clearly merits further empirical investigation.
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Conclusion

Currently there is good research evidence indicating that patient initiated question asking should be encouraged. Doctors need to be able to encourage patient question asking to ensure that patients have at their disposal an important means through which they can determine and express their information needs. This study confirms the findings from previous studies showing that levels of patient initiated questions in Oncology are relatively low. Our study suggests that patient initiated question asking can be encouraged through timely and deliberate information giving which incorporates an explanation and display of test results. The findings at this stage are only suggestive and further exploration is required to establish their actual significance. Studies which involve closer examination of the actual interactional episodes between doctors and patients are required to provide a deeper understanding of patient initiated questions and the situational variables which may influence them.

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Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

Data sharing

There is no additional data available

Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

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3 from the funding body. Each had had full access to all of the data in the study and can take
4 responsibility for the integrity of the data and the accuracy of the data analysis
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7 This paper presents independent research funded by the National Institute for Health Research
8 (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-
9 PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the
10 NHS, the NIHR or the Department of Health.
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Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

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|---|---|
| Journal: | <i>BMJ Open</i> |
| Manuscript ID: | bmjopen-2013-003112.R2 |
| Article Type: | Research |
| Date Submitted by the Author: | 28-Jun-2013 |
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| Primary Subject Heading: | Communication |
| Secondary Subject Heading: | Oncology |
| Keywords: | QUALITATIVE RESEARCH, ONCOLOGY, MEDICAL EDUCATION & TRAINING |
| <p>Note: The following files were submitted by the author for peer review, but cannot be converted to PDF. You must view these files (e.g. movies) online.</p> <p>New_patients1.3approved[1].docm Follow_up_patients1.3approved[1].docm</p> | |

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3 **Patient initiated questions: how can doctors encourage them and improve the consultation**
4 **process? A qualitative study**
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53 **Manuscript word count 3,505**
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55 **Abstract word count: 237**
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Abstract

Objective: To investigate the circumstances under which patients initiate direct questions in oncology consultations

Design: Conversation analysis of 47 consultations between oncologists and cancer patients

Setting: An oncology clinic at a teaching hospital in the East Midlands.

Participants: 16 Oncologists and 67 cancer patients

Outcome measure: Patient initiated direct questions

Results: On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

Conclusions: This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

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3 that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective
4 way of increasing levels of patient question asking. Doctors need to be able to encourage patient
5 question asking to ensure that patients have at their disposal an important means through which
6 they can determine their information needs. Although these results come from a study of
7 oncology consultations, this finding may be transferable to other clinical contexts.
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Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations.

Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

For peer review only

Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.^{1,2} Studies have examined patient preferences for information provision and involvement^{1,3,4,5} and have shown, among other things, that patients do want specific information concerning their illness.^{4,5} However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.¹ Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.⁶ When patients ask questions it allows them to shape their own levels of involvement⁸ and handle the contingencies of information exchange.⁹ In addition, patient question asking has been linked to improved information provision.^{8,10} Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.^{16,17}

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3 These findings still beg the question, how and when do patients ask questions? In the context of
4 cancer care, studies have shown that direct questions (alongside indirect cues) occur most often
5 during the treatment phase of the consultation¹¹; that companions who accompany patients, tend
6 to ask more questions than patients particularly in relation to treatment and diagnosis¹²; that
7 ethnic and racial differences between patients can reflect differences in levels of question asking
8 and direct question asking¹³; that question prompt lists can encourage patient question asking
9 particularly in relation to prognosis and diagnosis.^{14,15}
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24 These studies provide valuable direction in understanding some of the factors behind patient
25 question asking in cancer care. However, there is still a lot that is unknown about the specific
26 situational variables which underpin and shape patient question asking in relation to the doctor's
27 communication behaviours. The extent to which patients initiate information seeking, in the first
28 place, is often contingent on the doctor's communicative style. The import of this lies in the fact
29 that when patients seek information (e.g. through asking questions), doctors typically respond in
30 more informative and accommodative ways,¹⁸ simply because patient questions are one of the
31 ways in which patients establish their information needs. The purpose of this study was to
32 capture the interactional and situational variables that occur alongside patient initiated questions
33 to establish how and when patients are more inclined to initiate direct questions.
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Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. **Each of the interviews were analysed to identify common themes across the data until saturation was reached. Patient consent was obtained before their consultation was recorded and before collecting questionnaire data. This paper reports on the recordings of the consultation data only.**

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis,²² a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). In each consultation we identified the number of patient initiated questions which arose. We then examined the location of these questions which allowed us to identify clusters around diagnostic news delivery. We also noted, however, that in other consultations patient initiated questions were minimal or absent on occasions of diagnostic news discussion. This led us to question if there was a relation between the doctor's communication behaviour and the patient's response when doctor and patient talked about test results. Using this as our focal point we identified 30 of the 47 consultations where the relation between style of diagnostic news delivery. (elaborate/restricted) and patient response/involvement (patient

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3 initiated questions/no patient initiated questions) was most clear. The paper reports on a sample
4 from that selection of 30. Transcription and analysis was carried out by GM. Subsequent
5 analyses were carried out by GM, AT and LF. Any disagreements regarding interpretation of the
6 data were resolved through discussion and by revisiting the data. Inclusion Criteria: Patients over
7 the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and willing to
8 participate in the study. Exclusion criteria: Any patient unable to consent for themselves, patients
9 with a cognitive impairment and patients who do not speak fluent English.
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23 **Analysis**

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26 For the purposes of analysis we defined a direct question as that which is initiated solely by the
27 patient, without a verbal prompt ('Do you have any questions?') from the doctor and which
28 targets a specific topic. The consultations were examined with a view to identifying some of the
29 systematic and recurrent properties of delivering news of test results and the patient's response.
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31 More specifically, we examined how styles of news delivery shape patients' responses, in
32 particular their levels of question asking.
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46 **Transcription symbols**

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48 • • Talk marked by the degree sound indicates words that are softly spoken
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50 (.) A full stop in brackets indicates a micro pause
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52 (1.0), (0.5) indicates silence in seconds and tenths of seconds
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55 [Okay
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4 [Yes Talk which is preceded by a square bracket indicates overlap in speech between
5
6 two different speakers

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8 = Talk marked with the equals sign at the end of one line and the beginning of
9
10 another indicates no pause between the end of one utterance and the start of another
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Results

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) the patients did not ask any questions. In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). However patients' questions arose in different ways. For example, in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) again following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at different junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of scan or x-rays. In only two consultations did the patient decline to ask a question following an invitation to do so from

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3 the doctor.
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8 We noted a number of variations in the way in which doctors deliver test results. Our main
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10 finding, however, is that patients are more inclined to initiate direct questions when doctors
11
12 deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify
13
14 this we identified two types of information delivery each resulting in different types of patient
15
16 response, the most marked difference being levels of patient initiated question asking. In delivery
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18 type 1, test results were delivered in a very general way without elaboration (Restricted delivery
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20 - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were
21
22 absent or minimal. In delivery type 2 (Elaborate delivery - 'your scan shows that...') the doctor
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24 elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This
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26 type of delivery typically positively influenced levels of patient involvement in the consultation
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28 and prompted more patient initiated direct questions and consequently more information
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30 provision from the doctor.
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46 **Restricted delivery**

47 48 49 **Table 1**

50 51 52 **0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

Table 2**0 initiated patient questions**

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

Table 3**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

Table 4**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery produces a minimal response from the patient. It seems that this is partly to do with the fact that the general delivery projects a paternalistic approach where the doctor presents his/her interpretation of the results as the authoritative one, without any specific reference to further

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3 details of the findings.²¹ Consequently, the patient is invited to accept the diagnostic judgement
4 of the doctor and the general, non-specific explanation of the results is reflected in the general,
5 non-specific response provided by the patient.¹⁹ In almost a third of the sample, apart from the
6 sequence in table 4, the patient does not question or inquire further into the results following the
7 type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general
8 form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is
9 presented. However, later on following a physical examination the patient targets back on this
10 assessment, after a physical examination, following a prompt from the doctor.
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26 1. Doctor: Is there anything you wanted to ask at all?
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28 2. Patient: I did want to ask about my heart function
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30 3. Doctor: Ya sure
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32 4. Patient: I know you said the echocardiograms are oka:y
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34 5. Doctor: Yes
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36 6. Patient: but has it (.) erm deteriorated at all[through
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38 7. Doctor: [no no
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51 52 53 **Elaborate delivery**

54 55 56 **Table 1**

1patient initiated question

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

Table 2

5 patient initiated questions

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in
3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart

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6. Patient: Where's the tumor?

7. Doctor: That's it

8. Patient: It's there? So when I saw it previously it was

9. about that size?

10. Doctor: It's only a couple of centimetres most

11. Patient: As small as that? In fact it's smaller

12. than when I first came about walnut size

13. Doctor: It doesn't really say how big it was

14. initially

15. Patient: So it would be about like that wouldn't it?

16. Doctor: Yeah

17. Patient: It was on the lymph gland, is that the lymph

18. gland?

19. Doctor: No that's your bowel that's the tumor and

20. that's your bowel there and that's your aneurism

21. they've measured it for you 55 mm

In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response, asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6)

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3 then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the
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5 lymph gland (line 17-18).
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11 **Table 3**

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14 **2 patient initiated questions**
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| <p>16 17 1. Doctor: The scan is very much the same erm there hasn't 18 19 2. been um any obvious problems there is quite a lot of 20 21 3. fibrosis still but that's to be expected so fibrosis is 22 23 4. healing and scarring 24 25 5. Patient: Where's that? 26 27 28 6. Doctor: Umm both in the air in the central areas you know 29 30 7. where all the problems originally were with the 31 32 8. swallowing so in the central area and in the tummy um (2.0) 33 34 9. °let me tell you exactly° 35 36 37 10. Patient: Was that there before? 38 39 40 11. Doctor: They've said there's an increase in the volum 41 42 12. of that fibrosis 43 44 13. Patient: So basically that's scar tissue, is that what 45 46 14. you're saying? 47 48 49 50</p> |
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52 This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much
53
54 the same') but then goes on to point out that fibrosis is still present which is 'to be expected'.
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57 The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is.
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3 When the doctor explains the location of the fibrosis, the patient asks if it was present before.
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6 The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13)
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8 then presents a gloss of the meaning of the news which is posed as a question.
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11 **Table 4**

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14 **5 patient initiated questions**
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18 1. Doctor: So they've reported it as stable disease basically
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20 2. nothing new to find there are some lymph nodes in your
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22 3. pelvis but there's nothing different from that
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24 4. Patient: Just where exactly?
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26 5. Doctor: Did you want to look at your scan you [can
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28 6. Patient: [Will I be
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30 7. able to tell from that?
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32 8. Doctor: Well we can look at it together
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34 9. Patient: Yeah
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36 10. Doctor: (3.0) So this is your pelvis
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38 11. Patient: Right
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40 12. Doctor: This is your right hip and that is your left
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42 13. hip=
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44 14. Patient: =Mhm
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46 15. Doctor: And then you've got some lymph nodes that are
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48 16. predominantly on the on the right hand side
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50 17. Patient: Yes right so the other side is what they
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18. should look like is it?

19. Doctor: Yeah you've got some tiny lymph nodes there

20. they're normally a centimeter and a half is as big as

21. you'd expect them to be normally

22. Patient: Right

23. Doctor: You have got some higher up as well

24. Patient: So that's more into the tummy?

25. Doctor: Yeah

26. Patient: Dya think it is possible that thee enlarged

27. (.) lymph nodes could be (0.5) pressing on a ne::rve

28. [or

29. Doctor: [Sometimes they can do ya ya

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The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from that?') at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the patient to inquire further.

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3 The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2
4 delivery. In these sequences the results are delivered alongside a clinical assessment which either
5 includes a numerical reading or further explication of the findings. When results are delivered in
6 this way, patients tend to engage with the doctor. An important consequence of this is higher
7 levels of patient involvement including more patient initiated questions.
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20 Discussion

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25 In the main, consultations covered topics such as treatment, the progression of the cancer itself
26 and the symptoms experienced by the patient. Not all topics were addressed in every consultation
27 and doctors varied in how they dealt with each topic. We found that generally patients' actual
28 levels of involvement in the consultation were relatively low and patients varied in how active
29 they were in seeking information. We also found that, on the whole, patients seemed disinclined
30 to ask questions or show communication behaviours designed to elicit information. This finding
31 is consistent with much earlier research into this topic.^{6,17}
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45 In relation to discussions of test results between doctor and patient, the data appear to indicate
46 that there may be a connection between the way in which the results are delivered and the
47 occurrence of patient initiated direct questions. That is to say, the plainer announcement of
48 diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic
49 evidence projects a more paternalistic approach implicit in which, the patient is expected to
50 accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of
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3 the results which is reflected in the general response provided by the patient.¹⁹ In contrast the
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5 Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the
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7 scan or the x-ray, where appropriate, appears to be significant in encouraging patient
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9 involvement and consequently patient initiated direct questions. Incorporating and explaining the
10
11 evidence appears to be interpreted by patients as an opportunity to contribute to the consultation
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13 and establish their information needs in an environment within which the patient's
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15 queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or
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17 x-rays, this would appear to be an effective way of encouraging patient involvement generally
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19 and increasing levels of patient question asking. Consequently, patients are then able to establish
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21 and satisfy their information needs in a timely and effective way.
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29 In cases where patients did ask more questions, there was no significant increase in consultation
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31 length and no patient refused the offer of looking at examination results. The examples presented
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33 above were carefully selected because they display the most marked variation in consultation
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35 style highlighting clear contrasts between the two types of delivery.
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41 A number of different types of intervention have been used in cancer care to help facilitate
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43 patient involvement. For example, question prompt lists have been used quite widely, but their
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45 actual implementation in consultations is not always straightforward and their rates of success do
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47 vary.¹⁵ Moreover, we found in our study, that even when patients entered the consultation with
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49 question lists, they often left the consultation without having asked the questions they came
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51 prepared for.
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3 The finding that when the doctor elaborates or explicates findings from the evidence, this can
4 increase levels of patient involvement has been identified previously in a study of primary care
5 consultations.²⁰ Clearly there are important differences between an oncology consultation and a
6 primary care consultation. However, in relation to consulting behaviours, in both settings there
7 appear to be striking similarities. That is to say, careful explication of diagnostic findings can
8 encourage patient involvement such as, in this case, question asking, which in turn can enable
9 patients to establish their information needs. Further research in this area demands a closer
10 investigation of what Frankel⁹ has described as the ‘presuppositional grounds upon which the
11 communication situation itself rests’. This would then allow us to identify other consulting
12 behaviours doctors can utilise to encourage patient involvement.
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29 There may be a number of reasons why patients are disinclined to ask questions following the
30 ‘your scan result is fine’ type of announcement. The minimal responses identified may not
31 actually be conditioned solely by the type of announcement of test results but may also be a
32 consequence of patient preference or information needs at that particular moment. As noted, in
33 Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as ‘okay’.
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39 This clearly merits further empirical investigation.
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53 **Conclusion**

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3 Currently there is good research evidence indicating that patient initiated question asking should
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5 be encouraged. Doctors need to be able to encourage patient question asking to ensure that
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7 patients have at their disposal an important means through which they can determine and express
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9 their information needs. This study confirms the findings from previous studies showing that
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11 levels of patient initiated questions in Oncology are relatively low. Our study suggests that
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13 patient initiated question asking can be encouraged through timely and deliberate information
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15 giving which incorporates an explanation and display of test results. The findings at this stage are
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17 only suggestive and further exploration is required to establish their actual significance. Studies
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19 which involve closer examination of the actual interactional episodes between doctors and
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21 patients are required to provide a deeper understanding of patient initiated questions and the
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23 situational variables which may influence them.
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Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

Data sharing

There is no additional data available

Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

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3 from the funding body. Each had had full access to all of the data in the study and can take
4 responsibility for the integrity of the data and the accuracy of the data analysis
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7 This paper presents independent research funded by the National Institute for Health Research
8 (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-
9 PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the
10 NHS, the NIHR or the Department of Health.
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For peer review only

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3 **Patient initiated questions: how can doctors encourage them and improve the consultation**
4 **process? A qualitative study**
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53 **Manuscript word count 3,505**
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55 **Abstract word count: 237**
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Abstract

Objective: To investigate the circumstances under which patients initiate direct questions in oncology consultations

Design: Conversation analysis of 47 consultations between oncologists and cancer patients

Setting: An oncology clinic at a teaching hospital in the East Midlands.

Participants: 16 Oncologists and 67 cancer patients

Outcome measure: Patient initiated direct questions

Results: On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

Conclusions: This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

1
2
3 that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective
4 way of increasing levels of patient question asking. Doctors need to be able to encourage patient
5 question asking to ensure that patients have at their disposal an important means through which
6 they can determine their information needs. Although these results come from a study of
7 oncology consultations, this finding may be transferable to other clinical contexts.
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Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations.

Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

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Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.^{1,2} Studies have examined patient preferences for information provision and involvement^{1,3,4,5} and have shown, among other things, that patients do want specific information concerning their illness.^{4,5} However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.¹ Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.⁶ When patients ask questions it allows them to shape their own levels of involvement⁸ and handle the contingencies of information exchange.⁹ In addition, patient question asking has been linked to improved information provision.^{8,10} Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.^{16,17}

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3 These findings still beg the question, how and when do patients ask questions? In the context of
4 cancer care, studies have shown that direct questions (alongside indirect cues) occur most often
5 during the treatment phase of the consultation¹¹; that companions who accompany patients, tend
6 to ask more questions than patients particularly in relation to treatment and diagnosis¹²; that
7 ethnic and racial differences between patients can reflect differences in levels of question asking
8 and direct question asking¹³; that question prompt lists can encourage patient question asking
9 particularly in relation to prognosis and diagnosis.^{14,15}
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24 These studies provide valuable direction in understanding some of the factors behind patient
25 question asking in cancer care. However, there is still a lot that is unknown about the specific
26 situational variables which underpin and shape patient question asking in relation to the doctor's
27 communication behaviours. The extent to which patients initiate information seeking, in the first
28 place, is often contingent on the doctor's communicative style. The import of this lies in the fact
29 that when patients seek information (e.g. through asking questions), doctors typically respond in
30 more informative and accommodative ways,¹⁸ simply because patient questions are one of the
31 ways in which patients establish their information needs. The purpose of this study was to
32 capture the interactional and situational variables that occur alongside patient initiated questions
33 to establish how and when patients are more inclined to initiate direct questions.
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Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. **Each of the interviews were analysed to identify common themes across the data until saturation was reached. Patient consent was obtained before their consultation was recorded and before collecting questionnaire data. This paper reports on the recordings of the consultation data only.**

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis,²² a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). **In each consultation we identified the number of patient initiated questions which arose. We then examined the location of these questions which allowed us to identify clusters around diagnostic news delivery. We also noted, however, that in other consultations patient initiated questions were minimal or absent on occasions of diagnostic news discussion. This led us to question if there was a relation between the doctor's communication behaviour and the patient's response when doctor and patient talked about test results. Using this as our focal point we identified 30 of the 47 consultations where the relation between style of diagnostic news delivery.**

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2
3 (elaborate/restricted) and patient response/involvement (patient initiated questions/no
4 patient initiated questions) was most clear. The paper reports on a sample from that selection
5
6 of 30. Transcription and analysis was carried out by GM. Subsequent analyses were
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8 carried out by GM, AT and LF. Any disagreements regarding interpretation of the data
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10 were resolved through discussion and by revisiting the data. Inclusion Criteria: Patients
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12 over the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and
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14 willing to participate in the study. Exclusion criteria: Any patient unable to consent for
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16 themselves, patients with a cognitive impairment and patients who do not speak fluent
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18 English.
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28 Analysis

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31 For the purposes of analysis we defined a direct question as that which is initiated solely by the
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33 patient, without a verbal prompt ('Do you have any questions?') from the doctor and which
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35 targets a specific topic. The consultations were examined with a view to identifying some of the
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37 systematic and recurrent properties of delivering news of test results and the patient's response.
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39 More specifically, we examined how styles of news delivery shape patients' responses, in
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41 particular their levels of question asking.
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51 Transcription symbols

- 52
53 • • Talk marked by the degree sound indicates words that are softly spoken
54
55 (.) A full stop in brackets indicates a micro pause
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(1.0), (0.5) indicates silence in seconds and tenths of seconds

[Okay

[Yes Talk which is preceded by a square bracket indicates overlap in speech between two different speakers

= Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another

Results

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) **the patients did not ask any questions.** In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). **However patients' questions arose in different ways. For example,** in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) **again** following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at different junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs

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3 following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of
4 scan or x-rays. In only two consultations did the patient decline to ask a question following an
5 invitation to do so from the doctor.
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12 We noted a number of variations in the way in which doctors deliver test results. Our main
13 finding, however, is that patients are more inclined to initiate direct questions when doctors
14 deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify
15 this we identified two types of information delivery each resulting in different types of patient
16 response, the most marked difference being levels of patient initiated question asking. In delivery
17 type 1, test results were delivered in a very general way without elaboration (**Restricted delivery**
18 - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were
19 absent or minimal. In delivery type 2 (**Elaborate delivery** - 'your scan shows that...') the doctor
20 elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This
21 type of delivery typically positively influenced levels of patient involvement in the consultation
22 and prompted more patient initiated direct questions and consequently more information
23 provision from the doctor.
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50 **Restricted delivery**

51 **Table 1**

52 **0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5) uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

Table 2

0 initiated patient questions

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

Table 3

0 patient questions

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

Table 4**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery produces a minimal response from the patient. It seems that this is partly to do with the fact that the general delivery projects a paternalistic approach where the doctor presents his/her interpretation of the results as the authoritative one, without any specific reference to further

1
2
3 details of the findings.²¹ Consequently, the patient is invited to accept the diagnostic judgement
4
5 of the doctor and the general, non-specific explanation of the results is reflected in the general,
6
7 non-specific response provided by the patient.¹⁹ In almost a third of the sample, apart from the
8
9 sequence in table 4, the patient does not question or inquire further into the results following the
10
11 type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general
12
13 form ‘is it okay?’ again reflecting the general way in which the results of the echocardiogram is
14
15 presented. However, later on following a physical examination the patient targets back on this
16
17 assessment, after a physical examination, following a prompt from the doctor.
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26 1. Doctor: Is there anything you wanted to ask at all?
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28 2. Patient: I did want to ask about my heart function
29
30 3. Doctor: Ya sure
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32 4. Patient: I know you said the echocardiograms are oka:y
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34 5. Doctor: Yes
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36 6. Patient: but has it (.) erm deteriorated at all[through
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38 7. Doctor: [no no
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53 Elaborate delivery

54 Table 1

1patient initiated question

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

Table 2

5 patient initiated questions

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in
3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart

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6. Patient: Where's the tumor?

7. Doctor: That's it

8. Patient: It's there? So when I saw it previously it was

9. about that size?

10. Doctor: It's only a couple of centimetres most

11. Patient: As small as that? In fact it's smaller

12. than when I first came about walnut size

13. Doctor: It doesn't really say how big it was

14. initially

15. Patient: So it would be about like that wouldn't it?

16. Doctor: Yeah

17. Patient: It was on the lymph gland, is that the lymph

18. gland?

19. Doctor: No that's your bowel that's the tumor and

20. that's your bowel there and that's your aneurism

21. they've measured it for you 55 mm

In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response, asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6)

1
2
3 then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the
4
5 lymph gland (line 17-18).
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11 **Table 3**

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14 **2 patient initiated questions**
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18 1. Doctor: The scan is very much the same erm there hasn't
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20 2. been um any obvious problems there is quite a lot of
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22 3. fibrosis still but that's to be expected so fibrosis is
23
24 4. healing and scarring
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26 5. Patient: Where's that?
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29 6. Doctor: Umm both in the air in the central areas you know
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31 7. where all the problems originally were with the
32
33 8. swallowing so in the central area and in the tummy um (2.0)
34
35 9. °let me tell you exactly°
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38 10. Patient: Was that there before?
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41 11. Doctor: They've said there's an increase in the volum
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43 12. of that fibrosis
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45 13. Patient: So basically that's scar tissue, is that what
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47 14. you're saying?
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52 This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much
53
54 the same') but then goes on to point out that fibrosis is still present which is 'to be expected'.
55

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57 The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is.
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3 When the doctor explains the location of the fibrosis, the patient asks if it was present before.
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6 The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13)
7
8 then presents a gloss of the meaning of the news which is posed as a question.
9
10

11 **Table 4**

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14 **5 patient initiated questions**
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18 1. Doctor: So they've reported it as stable disease basically
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20 2. nothing new to find there are some lymph nodes in your
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22 3. pelvis but there's nothing different from that
23
24 4. Patient: Just where exactly?
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26 5. Doctor: Did you want to look at your scan you [can
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28 6. Patient: [Will I be
29
30 7. able to tell from that?
31
32 8. Doctor: Well we can look at it together
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34 9. Patient: Yeah
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36 10. Doctor: (3.0) So this is your pelvis
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38 11. Patient: Right
39
40 12. Doctor: This is your right hip and that is your left
41
42 13. hip=
43
44 14. Patient: =Mhm
45
46 15. Doctor: And then you've got some lymph nodes that are
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48 16. predominantly on the on the right hand side
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50 17. Patient: Yes right so the other side is what they
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18. should look like is it?

19. Doctor: Yeah you've got some tiny lymph nodes there

20. they're normally a centimeter and a half is as big as

21. you'd expect them to be normally

22. Patient: Right

23. Doctor: You have got some higher up as well

24. Patient: So that's more into the tummy?

25. Doctor: Yeah

26. Patient: Dya think it is possible that thee enlarged

27. (.) lymph nodes could be (0.5) pressing on a ne::rve

28. [or

29. Doctor: [Sometimes they can do ya ya

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The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from that?') at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the patient to inquire further.

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3 The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2
4 delivery. In these sequences the results are delivered alongside a clinical assessment which either
5 includes a numerical reading or further explication of the findings. When results are delivered in
6 this way, patients tend to engage with the doctor. An important consequence of this is higher
7 levels of patient involvement including more patient initiated questions.
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20 Discussion

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25 In the main, consultations covered topics such as treatment, the progression of the cancer itself
26 and the symptoms experienced by the patient. Not all topics were addressed in every consultation
27 and doctors varied in how they dealt with each topic. We found that generally patients' actual
28 levels of involvement in the consultation were relatively low and patients varied in how active
29 they were in seeking information. We also found that, on the whole, patients seemed disinclined
30 to ask questions or show communication behaviours designed to elicit information. This finding
31 is consistent with much earlier research into this topic.^{6,17}
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45 In relation to discussions of test results between doctor and patient, the data appear to indicate
46 that there may be a connection between the way in which the results are delivered and the
47 occurrence of patient initiated direct questions. That is to say, the plainer announcement of
48 diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic
49 evidence projects a more paternalistic approach implicit in which, the patient is expected to
50 accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of
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3 the results which is reflected in the general response provided by the patient.¹⁹ In contrast the
4
5 Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the
6
7 scan or the x-ray, where appropriate, appears to be significant in encouraging patient
8
9 involvement and consequently patient initiated direct questions. Incorporating and explaining the
10
11 evidence appears to be interpreted by patients as an opportunity to contribute to the consultation
12
13 and establish their information needs in an environment within which the patient's
14
15 queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or
16
17 x-rays, this would appear to be an effective way of encouraging patient involvement generally
18
19 and increasing levels of patient question asking. Consequently, patients are then able to establish
20
21 and satisfy their information needs in a timely and effective way.
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29 In cases where patients did ask more questions, there was no significant increase in consultation
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31 length and no patient refused the offer of looking at examination results. The examples presented
32
33 above were carefully selected because they display the most marked variation in consultation
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35 style highlighting clear contrasts between the two types of delivery.
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41 A number of different types of intervention have been used in cancer care to help facilitate
42
43 patient involvement. For example, question prompt lists have been used quite widely, but their
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45 actual implementation in consultations is not always straightforward and their rates of success do
46
47 vary.¹⁵ Moreover, we found in our study, that even when patients entered the consultation with
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49 question lists, they often left the consultation without having asked the questions they came
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51 prepared for.
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3 The finding that when the doctor elaborates or explicates findings from the evidence, this can
4 increase levels of patient involvement has been identified previously in a study of primary care
5 consultations.²⁰ Clearly there are important differences between an oncology consultation and a
6 primary care consultation. However, in relation to consulting behaviours, in both settings there
7 appear to be striking similarities. That is to say, careful explication of diagnostic findings can
8 encourage patient involvement such as, in this case, question asking, which in turn can enable
9 patients to establish their information needs. Further research in this area demands a closer
10 investigation of what Frankel⁹ has described as the ‘presuppositional grounds upon which the
11 communication situation itself rests’. This would then allow us to identify other consulting
12 behaviours doctors can utilise to encourage patient involvement.
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29 There may be a number of reasons why patients are disinclined to ask questions following the
30 ‘your scan result is fine’ type of announcement. The minimal responses identified may not
31 actually be conditioned solely by the type of announcement of test results but may also be a
32 consequence of patient preference or information needs at that particular moment. As noted, in
33 Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as ‘okay’.
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39 This clearly merits further empirical investigation.
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53 **Conclusion**

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3 Currently there is good research evidence indicating that patient initiated question asking should
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5 be encouraged. Doctors need to be able to encourage patient question asking to ensure that
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7 patients have at their disposal an important means through which they can determine and express
8
9 their information needs. This study confirms the findings from previous studies showing that
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11 levels of patient initiated questions in Oncology are relatively low. Our study suggests that
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13 patient initiated question asking can be encouraged through timely and deliberate information
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15 giving which incorporates an explanation and display of test results. The findings at this stage are
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17 only suggestive and further exploration is required to establish their actual significance. Studies
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19 which involve closer examination of the actual interactional episodes between doctors and
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21 patients are required to provide a deeper understanding of patient initiated questions and the
22
23 situational variables which may influence them.
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Competing interests

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Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

Data sharing

There is no additional data available

Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

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2
3 from the funding body. Each had had full access to all of the data in the study and can take
4 responsibility for the integrity of the data and the accuracy of the data analysis
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7 This paper presents independent research funded by the National Institute for Health Research
8 (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-
9 PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the
10 NHS, the NIHR or the Department of Health.
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Patient initiated questions: how can doctors encourage them and improve the consultation process? A qualitative study

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|---|---|
| Journal: | <i>BMJ Open</i> |
| Manuscript ID: | bmjopen-2013-003112.R3 |
| Article Type: | Research |
| Date Submitted by the Author: | 10-Jul-2013 |
| Complete List of Authors: | Murtagh, Ged; Imperial College London, Surgery and Cancer Furber, Lynn; University of Leicester, Department of Cancer Studies and Molecular Medicine Thomas, Anne; Leicester Royal Infirmary, Department of Cancer Studies and Molecular Medicine |
| Primary Subject Heading: | Communication |
| Secondary Subject Heading: | Oncology |
| Keywords: | QUALITATIVE RESEARCH, ONCOLOGY, MEDICAL EDUCATION & TRAINING |
| <p>Note: The following files were submitted by the author for peer review, but cannot be converted to PDF. You must view these files (e.g. movies) online.</p> <p>New_patients1.3approved[1].docm Follow_up_patients1.3approved[1].docm</p> | |

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3 **Patient initiated questions: how can doctors encourage them and improve the consultation**
4 **process? A qualitative study**
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52
53 **Manuscript word count 3,505**
54

55 **Abstract word count: 237**
56
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59
60

Abstract

Objective: To investigate the circumstances under which patients initiate direct questions in oncology consultations

Design: Conversation analysis of 47 consultations between oncologists and cancer patients

Setting: An oncology clinic at a teaching hospital in the East Midlands.

Participants: 16 Oncologists and 67 cancer patients

Outcome measure: Patient initiated direct questions

Results: On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

Conclusions: This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

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3 that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective
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5 way of increasing levels of patient question asking. Doctors need to be able to encourage patient
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7 question asking to ensure that patients have at their disposal an important means through which
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9 they can determine their information needs. Although these results come from a study of
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11 oncology consultations, this finding may be transferable to other clinical contexts.
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Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations.

Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

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Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.^{1,2} Studies have examined patient preferences for information provision and involvement^{1,3,4,5} and have shown, among other things, that patients do want specific information concerning their illness.^{4,5} However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.¹ Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.⁶ When patients ask questions it allows them to shape their own levels of involvement⁸ and handle the contingencies of information exchange.⁹ In addition, patient question asking has been linked to improved information provision.^{8,10} Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.^{16,17}

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3 These findings still beg the question, how and when do patients ask questions? In the context of
4 cancer care, studies have shown that direct questions (alongside indirect cues) occur most often
5 during the treatment phase of the consultation¹¹; that companions who accompany patients, tend
6 to ask more questions than patients particularly in relation to treatment and diagnosis¹²; that
7 ethnic and racial differences between patients can reflect differences in levels of question asking
8 and direct question asking¹³; that question prompt lists can encourage patient question asking
9 particularly in relation to prognosis and diagnosis.^{14,15}
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24 These studies provide valuable direction in understanding some of the factors behind patient
25 question asking in cancer care. However, there is still a lot that is unknown about the specific
26 situational variables which underpin and shape patient question asking in relation to the doctor's
27 communication behaviours. The extent to which patients initiate information seeking, in the first
28 place, is often contingent on the doctor's communicative style. The import of this lies in the fact
29 that when patients seek information (e.g. through asking questions), doctors typically respond in
30 more informative and accommodative ways,¹⁸ simply because patient questions are one of the
31 ways in which patients establish their information needs. The purpose of this study was to
32 capture the interactional and situational variables that occur alongside patient initiated questions
33 to establish how and when patients are more inclined to initiate direct questions.
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Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. **Each of the interviews were analysed to identify common themes across the data until saturation was reached. Patient consent was obtained before their consultation was recorded and before collecting questionnaire data. This paper reports on the recordings of the consultation data only.**

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis,²² a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). **In each consultation we identified the number of patient initiated questions which arose. We then examined the location of these questions which allowed us to identify clusters around diagnostic news delivery. We also noted, however, that in other consultations patient initiated questions were minimal or absent on occasions of diagnostic news discussion. This led us to question if there was a relation between the doctor's communication behaviour and the patient's response when doctor and patient talked about test results. Using this as our focal point we identified 30 of the 47 consultations where the relation between style of diagnostic news delivery**

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3 (elaborate/restricted) and patient response/involvement (patient initiated questions/no
4 patient initiated questions) was most clear. From this sample of 30 we selected 8 examples
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6 (discussed below) which in our view provided the strongest indication of how the style of
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8 delivery of news/results can influence patient involvement/questions. This sample of 8 also
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10 allows us to demonstrate most clearly the contrast between the two different styles of
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12 delivery, restricted and elaborate. Transcription and analysis was carried out by GM.
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14 Subsequent analyses were carried out by GM, AT and LF. Any disagreements regarding
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16 interpretation of the data were resolved through discussion and by revisiting the data.
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18 **Inclusion Criteria:** Patients over the age of eighteen, having been diagnosed with cancer,
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20 aware of their diagnosis and willing to participate in the study. **Exclusion criteria:** Any
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22 patient unable to consent for themselves, patients with a cognitive impairment and patients
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24 who do not speak fluent English.
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35 Analysis

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38 For the purposes of analysis we defined a direct question as that which is initiated solely by the
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40 patient, without a verbal prompt ('Do you have any questions?') from the doctor and which
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42 targets a specific topic. The consultations were examined with a view to identifying some of the
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44 systematic and recurrent properties of delivering news of test results and the patient's response.
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46 More specifically, we examined how styles of news delivery shape patients' responses, in
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48 particular their levels of question asking.
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Transcription symbols

- ◦ Talk marked by the degree sound indicates words that are softly spoken
- (.) A full stop in brackets indicates a micro pause
- (1.0), (0.5) indicates silence in seconds and tenths of seconds
- [Okay
- [Yes Talk which is preceded by a square bracket indicates overlap in speech between two different speakers
- = Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another

Results

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) **the patients did not ask any questions.** In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). **However patients' questions arose in different ways. For example,** in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) **again** following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at

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3 different junctures of the consultation following a prompt from the doctor. In 12 of the 23
4 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion
5 of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs
6 following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of
7 scan or x-rays. In only two consultations did the patient decline to ask a question following an
8 invitation to do so from the doctor.
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20 We noted a number of variations in the way in which doctors deliver test results. Our main
21 finding, however, is that patients are more inclined to initiate direct questions when doctors
22 deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify
23 this we identified two types of information delivery each resulting in different types of patient
24 response, the most marked difference being levels of patient initiated question asking. In delivery
25 type 1, test results were delivered in a very general way without elaboration (**Restricted delivery**
26 - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were
27 absent or minimal. In delivery type 2 (**Elaborate delivery** - 'your scan shows that...') the doctor
28 elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This
29 type of delivery typically positively influenced levels of patient involvement in the consultation
30 and prompted more patient initiated direct questions and consequently more information
31 provision from the doctor.
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Restricted delivery

Table 1

0 patient initiated questions

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5)uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

Table 2

0 initiated patient questions

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

Table 3**0 patient questions**

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

Table 4**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery

1
2
3 produces a minimal response from the patient. It seems that this is partly to do with the fact that
4
5 the general delivery projects a paternalistic approach where the doctor presents his/her
6
7 interpretation of the results as the authoritative one, without any specific reference to further
8
9 details of the findings.²¹ Consequently, the patient is invited to accept the diagnostic judgement
10
11 of the doctor and the general, non-specific explanation of the results is reflected in the general,
12
13 non-specific response provided by the patient.¹⁹ In almost a third of the sample, apart from the
14
15 sequence in table 4, the patient does not question or inquire further into the results following the
16
17 type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general
18
19 form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is
20
21 presented. However, later on following a physical examination the patient targets back on this
22
23 assessment, after a physical examination, following a prompt from the doctor.
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- 33 1. Doctor: Is there anything you wanted to ask at all?
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35 2. Patient: I did want to ask about my heart function
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37 3. Doctor: Ya sure
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39 4. Patient: I know you said the echocardiograms are oka:y
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41
42 5. Doctor: Yes
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44 6. Patient: but has it (.) erm deteriorated at all[through
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47 7. Doctor: [no no
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Elaborate delivery**Table 1****1 patient initiated question**

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

Table 2**5 patient initiated questions**

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in

1
2
3 3. the chest and in the bowel
4

5 4. Patient: Is it possible for me to see the scan?
6

7 5. Doctor: Yes, these are your lungs, that's your heart
8

9 6. Patient: Where's the tumor?
10

11 7. Doctor: That's it
12

13 8. Patient: It's there? So when I saw it previously it was
14

15 9. about that size?
16

17 10. Doctor: It's only a couple of centimetres most
18

19 11. Patient: As small as that? In fact it's smaller
20

21 12. than when I first came about walnut size
22

23 13. Doctor: It doesn't really say how big it was
24

25 14. initially
26

27 15. Patient: So it would be about like that wouldn't it?
28

29 16. Doctor: Yeah
30

31 17. Patient: It was on the lymph gland, is that the lymph
32

33 18. gland?
34

35 19. Doctor: No that's your bowel that's the tumor and
36

37 20. that's your bowel there and that's your aneurism
38

39 21. they've measured it for you 55 mm
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51 In this sequence the results are delivered and carefully explicated with the inclusion of numerical
52 data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a
53 precise frame of reference regarding the cancer. Interestingly in this case the patient, in response,
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1
2
3 asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the
4
5 relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6)
6
7
8 then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the
9
10 lymph gland (line 17-18).
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17 **Table 3**

18
19 **2 patient initiated questions**

- 20
21
22 1. Doctor: The scan is very much the same erm there hasn't
23
24 2. been um any obvious problems there is quite a lot of
25
26 3. fibrosis still but that's to be expected so fibrosis is
27
28 4. healing and scarring
29
30 5. Patient: Where's that?
31
32 6. Doctor: Umm both in the air in the central areas you know
33
34 7. where all the problems originally were with the
35
36 8. swallowing so in the central area and in the tummy um (2.0)
37
38 9. °let me tell you exactly°
39
40
41 10. Patient: Was that there before?
42
43 11. Doctor: They've said there's an increase in the volum
44
45 12. of that fibrosis
46
47 13. Patient: So basically that's scar tissue, is that what
48
49 14. you're saying?
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2
3 This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much
4 the same') but then goes on to point out that fibrosis is still present which is 'to be expected'.
5
6

7
8 The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is.
9

10 When the doctor explains the location of the fibrosis, the patient asks if it was present before.
11

12 The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13)
13 then presents a gloss of the meaning of the news which is posed as a question.
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18 **Table 4**

19 **5 patient initiated questions**

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| 25 | 1. Doctor: So they've reported it as stable disease basically |
| 26 | 2. nothing new to find there are some lymph nodes in your |
| 27 | 3. pelvis but there's nothing different from that |
| 28 | 4. Patient: Just where exactly? |
| 29 | 5. Doctor: Did you want to look at your scan you [can |
| 30 | 6. Patient: [Will I be |
| 31 | 7. able to tell from that? |
| 32 | 8. Doctor: Well we can look at it together |
| 33 | 9. Patient: Yeah |
| 34 | 10. Doctor: (3.0) So this is your pelvis |
| 35 | 11. Patient: Right |
| 36 | 12. Doctor: This is your right hip and that is your left |
| 37 | 13. hip= |
| 38 | 14. Patient: =Mhm |
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4 15. Doctor: And then you've got some lymph nodes that are
5
6 16. predominantly on the on the right hand side
7
8 17. Patient: Yes right so the other side is what they
9
10 18. should look like is it?
11
12 19. Doctor: Yeah you've got some tiny lymph nodes there
13
14 20. they're normally a centimeter and a half is as big as
15
16 21. you'd expect them to be normally
17
18 22. Patient: Right
19
20 23. Doctor: You have got some higher up as well
21
22 24. Patient: So that's more into the tummy?
23
24 25. Doctor: Yeah
25
26 26. Patient: Dya think it is possible that thee enlarged
27
28 27. (.) lymph nodes could be (0.5) pressing on a ne::rve
29
30 28. [or
31
32 29. Doctor: [Sometimes they can do ya ya
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41 The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In
42
43 response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would
44
45 like to look at their scan. Interestingly the patient's next question ('will I be able to tell from
46
47 that?') at line 7 manifests the knowledge-competence gap between doctors and patients. This
48
49 may partly account for why doctors do not always invite patients to look at scan/x-ray results and
50
51 why patients do not always ask to see them when they are available. The doctor's response ('we
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53 can look at it together') bridges this gap by inviting the patient to examine the scan jointly
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3 allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the
4
5 patient to inquire further.
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11 The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2
12
13 delivery. In these sequences the results are delivered alongside a clinical assessment which either
14
15 includes a numerical reading or further explication of the findings. When results are delivered in
16
17 this way, patients tend to engage with the doctor. An important consequence of this is higher
18
19 levels of patient involvement including more patient initiated questions.
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27 Discussion

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34 In the main, consultations covered topics such as treatment, the progression of the cancer itself
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36 and the symptoms experienced by the patient. Not all topics were addressed in every consultation
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38 and doctors varied in how they dealt with each topic. We found that generally patients' actual
39
40 levels of involvement in the consultation were relatively low and patients varied in how active
41
42 they were in seeking information. We also found that, on the whole, patients seemed disinclined
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44 to ask questions or show communication behaviours designed to elicit information. This finding
45
46 is consistent with much earlier research into this topic.^{6,17}
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53 In relation to discussions of test results between doctor and patient, the data appear to indicate
54
55 that there may be a connection between the way in which the results are delivered and the
56
57 occurrence of patient initiated direct questions. That is to say, the plainer announcement of
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1
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3 diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic
4
5 evidence projects a more paternalistic approach implicit in which, the patient is expected to
6
7 accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of
8
9 the results which is reflected in the general response provided by the patient.¹⁹ In contrast the
10
11 Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the
12
13 scan or the x-ray, where appropriate, appears to be significant in encouraging patient
14
15 involvement and consequently patient initiated direct questions. Incorporating and explaining the
16
17 evidence appears to be interpreted by patients as an opportunity to contribute to the consultation
18
19 and establish their information needs in an environment within which the patient's
20
21 queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or
22
23 x-rays, this would appear to be an effective way of encouraging patient involvement generally
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25 and increasing levels of patient question asking. Consequently, patients are then able to establish
26
27 and satisfy their information needs in a timely and effective way.
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36 In cases where patients did ask more questions, there was no significant increase in consultation
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38 length and no patient refused the offer of looking at examination results. The examples presented
39
40 above were carefully selected because they display the most marked variation in consultation
41
42 style highlighting clear contrasts between the two types of delivery.
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48 A number of different types of intervention have been used in cancer care to help facilitate
49
50 patient involvement. For example, question prompt lists have been used quite widely, but their
51
52 actual implementation in consultations is not always straightforward and their rates of success do
53
54 vary.¹⁵ Moreover, we found in our study, that even when patients entered the consultation with
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3 question lists, they often left the consultation without having asked the questions they came
4
5 prepared for.
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10 The finding that when the doctor elaborates or explicates findings from the evidence, this can
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12 increase levels of patient involvement has been identified previously in a study of primary care
13
14 consultations.²⁰ Clearly there are important differences between an oncology consultation and a
15
16 primary care consultation. However, in relation to consulting behaviours, in both settings there
17
18 appear to be striking similarities. That is to say, careful explication of diagnostic findings can
19
20 encourage patient involvement such as, in this case, question asking, which in turn can enable
21
22 patients to establish their information needs. Further research in this area demands a closer
23
24 investigation of what Frankel⁹ has described as the ‘presuppositional grounds upon which the
25
26 communication situation itself rests’. This would then allow us to identify other consulting
27
28 behaviours doctors can utilise to encourage patient involvement.
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36 There may be a number of reasons why patients are disinclined to ask questions following the
37
38 ‘your scan result is fine’ type of announcement. The minimal responses identified may not
39
40 actually be conditioned solely by the type of announcement of test results but may also be a
41
42 consequence of patient preference or information needs at that particular moment. As noted, in
43
44 Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as ‘okay’.
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47 This clearly merits further empirical investigation.
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Conclusion

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9 Currently there is good research evidence indicating that patient initiated question asking should
10 be encouraged. Doctors need to be able to encourage patient question asking to ensure that
11 patients have at their disposal an important means through which they can determine and express
12 their information needs. This study confirms the findings from previous studies showing that
13 levels of patient initiated questions in Oncology are relatively low. Our study suggests that
14 patient initiated question asking can be encouraged through timely and deliberate information
15 giving which incorporates an explanation and display of test results. The findings at this stage are
16 only suggestive and further exploration is required to establish their actual significance. Studies
17 which involve closer examination of the actual interactional episodes between doctors and
18 patients are required to provide a deeper understanding of patient initiated questions and the
19 situational variables which may influence them.
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Competing interests

All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work."

Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

Data sharing

There is no additional data available

Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

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3 from the funding body. Each had had full access to all of the data in the study and can take
4 responsibility for the integrity of the data and the accuracy of the data analysis
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6

7 This paper presents independent research funded by the National Institute for Health Research
8 (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-
9 PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the
10 NHS, the NIHR or the Department of Health.
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For peer review only

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3 **Patient initiated questions: how can doctors encourage them and improve the consultation**
4 **process? A qualitative study**
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53 **Manuscript word count 3,505**
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55 **Abstract word count: 237**
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Abstract

Objective: To investigate the circumstances under which patients initiate direct questions in oncology consultations

Design: Conversation analysis of 47 consultations between oncologists and cancer patients

Setting: An oncology clinic at a teaching hospital in the East Midlands.

Participants: 16 Oncologists and 67 cancer patients

Outcome measure: Patient initiated direct questions

Results: On the whole patients' direct questions are designed to seek specific information regarding, the cancer itself, treatment options or their experience of symptoms. When patients do ask direct questions they typically follow the announcement of test results where some reference to the details of those results, is provided. More specifically, there appears to be a relation between showing the patient their scan/x-ray results, patient involvement and patient initiated direct questions. Higher levels of patient initiated direct questions were clustered around occasions where doctors provided information and explanations of test results (twelve consultations) sometimes with direct reference to scan or x-ray results (seven consultations).

Conclusions: This study highlights the importance of careful explanation of diagnostic evidence as a factor contributing to increased patient involvement. More specifically, the findings suggest

1
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3 that, when appropriate, invoking diagnostic evidence (e.g. scan or x-ray results) is an effective
4 way of increasing levels of patient question asking. Doctors need to be able to encourage patient
5 question asking to ensure that patients have at their disposal an important means through which
6 they can determine their information needs. Although these results come from a study of
7 oncology consultations, this finding may be transferable to other clinical contexts.
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Article Summary

- In cancer care patient question asking can significantly influence the provision of information from the doctor.
- The paper extends the existing research into communication in cancer care by reporting on distinctive patterns of communication behaviour which influence, in this case, patient question asking.

Key Messages

- The frequency of direct questions initiated by patients in oncology consultations is relatively low.
- Explicating test results alongside diagnostic evidence increases the chances of patient initiated direct questions in oncology consultations.
- This finding has implications for understanding how doctors can encourage patient questions within cancer care and, potentially, other clinical settings.

Strengths and Limitations of this study

- The strength of the study is that it targets actual instances of question asking behaviour in relation to other situational variables in the consultation.

- The study is limited by its sole reliance on audio recordings of consultations.

Consequently, other aspects of social interaction, e.g. eye contact, bodily comportment etc which can also have a significant influence on the content of the consultation, have not been included.

For peer review only

Introduction

One of the main problems oncologists face in the consultation is the difficulty of accurately gauging the patient's information needs.^{1,2} Studies have examined patient preferences for information provision and involvement^{1,3,4,5} and have shown, among other things, that patients do want specific information concerning their illness.^{4,5} However, patients' information needs are not static and there can be significant variations between patients in terms of their preferences for the timing, content and detail of information they require. Such variations may change during the course of an illness and even during the course of a single consultation depending on the type of information a patient receives.¹ Consequently, patients' attempts to elicit information from doctors also varies. These contingencies indicate a real need to understand more about the conditions under which patients actively seek information and, more specifically, the kinds of communication behaviours patients use to seek out information. Among these behaviours, question asking is key, as it can be used as a basic form of information seeking.⁶ When patients ask questions it allows them to shape their own levels of involvement⁸ and handle the contingencies of information exchange.⁹ In addition, patient question asking has been linked to improved information provision.^{8,10} Moreover, patients who receive an answer to their question demonstrate better psychological adjustment following the consultation than those who ask questions but don't receive a response.^{16,17}

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3 These findings still beg the question, how and when do patients ask questions? In the context of
4 cancer care, studies have shown that direct questions (alongside indirect cues) occur most often
5 during the treatment phase of the consultation¹¹; that companions who accompany patients, tend
6 to ask more questions than patients particularly in relation to treatment and diagnosis¹²; that
7 ethnic and racial differences between patients can reflect differences in levels of question asking
8 and direct question asking¹³; that question prompt lists can encourage patient question asking
9 particularly in relation to prognosis and diagnosis.^{14,15}
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24 These studies provide valuable direction in understanding some of the factors behind patient
25 question asking in cancer care. However, there is still a lot that is unknown about the specific
26 situational variables which underpin and shape patient question asking in relation to the doctor's
27 communication behaviours. The extent to which patients initiate information seeking, in the first
28 place, is often contingent on the doctor's communicative style. The import of this lies in the fact
29 that when patients seek information (e.g. through asking questions), doctors typically respond in
30 more informative and accommodative ways,¹⁸ simply because patient questions are one of the
31 ways in which patients establish their information needs. The purpose of this study was to
32 capture the interactional and situational variables that occur alongside patient initiated questions
33 to establish how and when patients are more inclined to initiate direct questions.
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Methods

The study was carried out in a large UK Cancer Centre. LF recruited patients (with different types of cancers) attending the oncology department (n=77) as well as a mix of oncology consultants and specialist registrars. Both newly diagnosed and follow up patients were recruited to ensure maximum variability in our sample group. Following each consultation patients were invited to complete a satisfaction questionnaire and interviews were conducted with the patients by LF shortly after their consultation. **Each of the interviews were analysed to identify common themes across the data until saturation was reached. Patient consent was obtained before their consultation was recorded and before collecting questionnaire data. This paper reports on the recordings of the consultation data only.**

We audio recorded 47 consultations which were then transcribed and analysed using conversation analysis,²² a method of analysis which details characteristics of speech exchange including pauses, pace and intonation etc (the transcription symbols used to indicate these characteristics are provided in table 1). **In each consultation we identified the number of patient initiated questions which arose. We then examined the location of these questions which allowed us to identify clusters around diagnostic news delivery. We also noted, however, that in other consultations patient initiated questions were minimal or absent on occasions of diagnostic news discussion. This led us to question if there was a relation between the doctor's communication behaviour and the patient's response when doctor and patient talked about test results. Using this as our focal point we identified 30 of the 47 consultations where the relation between style of diagnostic news delivery.**

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3 (elaborate/restricted) and patient response/involvement (patient initiated questions/no
4 patient initiated questions) was most clear. The paper reports on a sample from that selection
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6 of 30. Transcription and analysis was carried out by GM. Subsequent analyses were
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8 carried out by GM, AT and LF. Any disagreements regarding interpretation of the data
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10 were resolved through discussion and by revisiting the data. Inclusion Criteria: Patients
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12 over the age of eighteen, having been diagnosed with cancer, aware of their diagnosis and
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14 willing to participate in the study. Exclusion criteria: Any patient unable to consent for
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16 themselves, patients with a cognitive impairment and patients who do not speak fluent
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18 English.
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28 Analysis

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31 For the purposes of analysis we defined a direct question as that which is initiated solely by the
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33 patient, without a verbal prompt ('Do you have any questions?') from the doctor and which
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35 targets a specific topic. The consultations were examined with a view to identifying some of the
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37 systematic and recurrent properties of delivering news of test results and the patient's response.
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39 More specifically, we examined how styles of news delivery shape patients' responses, in
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41 particular their levels of question asking.
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51 Transcription symbols

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53 • • Talk marked by the degree sound indicates words that are softly spoken
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55 (.) A full stop in brackets indicates a micro pause
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(1.0), (0.5) indicates silence in seconds and tenths of seconds

[Okay

[Yes Talk which is preceded by a square bracket indicates overlap in speech between two different speakers

= Talk marked with the equals sign at the end of one line and the beginning of another indicates no pause between the end of one utterance and the start of another

Results

Our focussed sample of 30 consultations in total came to 451.30 mins, just over 7.5 hours of consultation time with the average length of the consultation at 15.04 mins. In 7 out of the 30 consultations (just under 60 mins of consultation time) **the patients did not ask any questions.** In the remaining 23 consultations there were 76 instances of patients asking questions (avg. 2.5 direct patient questions per consultation). **However patients' questions arose in different ways. For example,** in 5 out of those 23 consultations (22%) patients' questions came at the end (within 3-4 mins of the end of the consultation) **again** following a prompt from the doctor. In 6 out of the 23 consultations (26%) there is evidence of indirect or embedded questions arising at different junctures of the consultation following a prompt from the doctor. In 12 of the 23 consultations, (52%) patient initiated direct questions occur specifically in relation to discussion of test results. In 7 of these 12 consultations (58%) patient initiated question asking occurs

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3 following a careful explanation of test results and diagnostic evidence e.g. the doctor's use of
4 scan or x-rays. In only two consultations did the patient decline to ask a question following an
5 invitation to do so from the doctor.
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12 We noted a number of variations in the way in which doctors deliver test results. Our main
13 finding, however, is that patients are more inclined to initiate direct questions when doctors
14 deliver results with direct reference to the diagnostic evidence e.g. x-rays or scans. To exemplify
15 this we identified two types of information delivery each resulting in different types of patient
16 response, the most marked difference being levels of patient initiated question asking. In delivery
17 type 1, test results were delivered in a very general way without elaboration (**Restricted delivery**
18 - e.g. 'your scan results are fine'). With this type of delivery patient initiated questions were
19 absent or minimal. In delivery type 2 (**Elaborate delivery** - 'your scan shows that...') the doctor
20 elaborated or explained the test results sometimes invoking the scan or the x-ray to do so. This
21 type of delivery typically positively influenced levels of patient involvement in the consultation
22 and prompted more patient initiated direct questions and consequently more information
23 provision from the doctor.
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50 **Restricted delivery**

51 **Table 1**

52 **0 patient initiated questions**

1. Doctor: The CT scan result is here (0.5) and that was
2. basically normal erm nothing to suggest any new no new
3. glands you have got some changes on your erm (4.0) lungs
4. from(.) previous radiotherapy (0.5) uhm (1.5) so that's your
5. CT scan and I'm just trying to find the (0.5) lung function
6. tests(.) when did you have those done
7. Patient: (2.0) had them done
8. Husband: Two weeks ago

Table 2

0 initiated patient questions

1. Doctor: Okay (.) um (0.5) scan result was fine
2. Patient: Good
3. Doctor: Good okay an everything's stable on the in the
4. bones
5. Patient: Right

Table 3

0 patient questions

1. Doctor: Your scan shows everything is the same
2. Patient: Good
3. Doctor: So that's very good

Table 4**1 patient initiated question**

1. Doctor: And you've had an echocardiogram of your heart an
2. that's all fine
3. Patient: Is it [okay
4. Doctor: [you had that done on?
5. Patient: °Last Friday°
6. Doctor: Last Friday that's all fine (.) no problems so
7. that's good news could I er examine you

The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 1 delivery. In each case the results are delivered in a general, non-specific way characterised by a general clinical assessment, 'fine', 'normal' or 'no change'. In each case this type of delivery produces a minimal response from the patient. It seems that this is partly to do with the fact that the general delivery projects a paternalistic approach where the doctor presents his/her interpretation of the results as the authoritative one, without any specific reference to further

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3 details of the findings.²¹ Consequently, the patient is invited to accept the diagnostic judgement
4 of the doctor and the general, non-specific explanation of the results is reflected in the general,
5 non-specific response provided by the patient.¹⁹ In almost a third of the sample, apart from the
6 sequence in table 4, the patient does not question or inquire further into the results following the
7 type 1 delivery. In table 4 the patient does ask a question, but again this is presented in a general
8 form 'is it okay?' again reflecting the general way in which the results of the echocardiogram is
9 presented. However, later on following a physical examination the patient targets back on this
10 assessment, after a physical examination, following a prompt from the doctor.
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26 1. Doctor: Is there anything you wanted to ask at all?
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28 2. Patient: I did want to ask about my heart function
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30 3. Doctor: Ya sure
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32 4. Patient: I know you said the echocardiograms are oka:y
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34 5. Doctor: Yes
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36 6. Patient: but has it (.) erm deteriorated at all[through
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38 7. Doctor: [no no
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53 **Elaborate delivery**

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56 **Table 1**
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1patient initiated question

1. Doctor: The head scan, the CT and the MRI show that there
2. is something in the bones but what is unusual is that it
3. seems to be more on the right hand side than the left and I
4. think it was the left eye you were having problems with?
5. Patient: (0.5) Don't they cross?
6. Doctor: Well sometimes if it's more of a visual problem
7. they do cross yeah

In this sequence there are two distinctive features which appear to shape the patient's response. Firstly, the doctor delivers the findings from the scan and produces an expression of uncertainty regarding which eye the patient was having problems with. Secondly, there is a half second pause following the delivery which not only provides the patient with the opportunity to respond but also scope to negotiate the nature of that response.

Table 2

5 patient initiated questions

1. Doctor: Your scan shows that things are very much the
2. same, maybe slightly bigger but literally by 4mm both in
3. the chest and in the bowel
4. Patient: Is it possible for me to see the scan?
5. Doctor: Yes, these are your lungs, that's your heart

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6. Patient: Where's the tumor?

7. Doctor: That's it

8. Patient: It's there? So when I saw it previously it was

9. about that size?

10. Doctor: It's only a couple of centimetres most

11. Patient: As small as that? In fact it's smaller

12. than when I first came about walnut size

13. Doctor: It doesn't really say how big it was

14. initially

15. Patient: So it would be about like that wouldn't it?

16. Doctor: Yeah

17. Patient: It was on the lymph gland, is that the lymph

18. gland?

19. Doctor: No that's your bowel that's the tumor and

20. that's your bowel there and that's your aneurism

21. they've measured it for you 55 mm

In this sequence the results are delivered and carefully explicated with the inclusion of numerical data specifying the size of the cancerous growth (lines 1-3). This provides the patient with a precise frame of reference regarding the cancer. Interestingly in this case the patient, in response, asks to see the scan (line 4). The doctor then identifies the patient's lungs and heart providing the relevance for the proximal distance of the tumour from the lungs and heart. The patient (line 6)

then asks about the location of the tumour, its size (lines 8-9, 11) and finally asks about the lymph gland (line 17-18).

Table 3

2 patient initiated questions

1. Doctor: The scan is very much the same erm there hasn't
2. been um any obvious problems there is quite a lot of
3. fibrosis still but that's to be expected so fibrosis is
4. healing and scarring
5. Patient: Where's that?
6. Doctor: Umm both in the air in the central areas you know
7. where all the problems originally were with the
8. swallowing so in the central area and in the tummy um (2.0)
9. °let me tell you exactly°
10. Patient: Was that there before?
11. Doctor: They've said there's an increase in the volum
12. of that fibrosis
13. Patient: So basically that's scar tissue, is that what
14. you're saying?

This delivery of diagnostic news starts out almost as a type 1 delivery ('The scan is very much the same') but then goes on to point out that fibrosis is still present which is 'to be expected'.

The doctor then explains the term fibrosis and the patient responds (line 5) by asking where it is.

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3 When the doctor explains the location of the fibrosis, the patient asks if it was present before.
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6 The doctor then refers to the report regarding the increase in fibrosis and the patient (line 13)
7
8 then presents a gloss of the meaning of the news which is posed as a question.
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11 **Table 4**

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14 **5 patient initiated questions**
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19 1. Doctor: So they've reported it as stable disease basically
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21 2. nothing new to find there are some lymph nodes in your
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23 3. pelvis but there's nothing different from that
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25 4. Patient: Just where exactly?
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28 5. Doctor: Did you want to look at your scan you [can
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30 6. Patient: [Will I be
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32 7. able to tell from that?
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35 8. Doctor: Well we can look at it together
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37 9. Patient: Yeah
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39 10. Doctor: (3.0) So this is your pelvis
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41 11. Patient: Right
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44 12. Doctor: This is your right hip and that is your left
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46 13. hip=
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48 14. Patient: =Mhm
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51 15. Doctor: And then you've got some lymph nodes that are
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53 16. predominantly on the on the right hand side
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56 17. Patient: Yes right so the other side is what they
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18. should look like is it?

19. Doctor: Yeah you've got some tiny lymph nodes there

20. they're normally a centimeter and a half is as big as

21. you'd expect them to be normally

22. Patient: Right

23. Doctor: You have got some higher up as well

24. Patient: So that's more into the tummy?

25. Doctor: Yeah

26. Patient: Dya think it is possible that thee enlarged

27. (.) lymph nodes could be (0.5) pressing on a ne::rve

28. [or

29. Doctor: [Sometimes they can do ya ya

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The diagnostic news in this delivery specifies the fact that there 'are some lymph nodes'. In response the patient asks 'where' exactly' (line 6). The doctor then asks the patient if they would like to look at their scan. Interestingly the patient's next question ('will I be able to tell from that?') at line 7 manifests the knowledge-competence gap between doctors and patients. This may partly account for why doctors do not always invite patients to look at scan/x-ray results and why patients do not always ask to see them when they are available. The doctor's response ('we can look at it together') bridges this gap by inviting the patient to examine the scan jointly allowing the doctor to identify, for the patient, key anatomical structures whilst also allowing the patient to inquire further.

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3 The sequences in tables 1-4 show the announcement of diagnostic results depicting the type 2
4 delivery. In these sequences the results are delivered alongside a clinical assessment which either
5 includes a numerical reading or further explication of the findings. When results are delivered in
6 this way, patients tend to engage with the doctor. An important consequence of this is higher
7 levels of patient involvement including more patient initiated questions.
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20 Discussion

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25 In the main, consultations covered topics such as treatment, the progression of the cancer itself
26 and the symptoms experienced by the patient. Not all topics were addressed in every consultation
27 and doctors varied in how they dealt with each topic. We found that generally patients' actual
28 levels of involvement in the consultation were relatively low and patients varied in how active
29 they were in seeking information. We also found that, on the whole, patients seemed disinclined
30 to ask questions or show communication behaviours designed to elicit information. This finding
31 is consistent with much earlier research into this topic.^{6,17}
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45 In relation to discussions of test results between doctor and patient, the data appear to indicate
46 that there may be a connection between the way in which the results are delivered and the
47 occurrence of patient initiated direct questions. That is to say, the plainer announcement of
48 diagnostic results ('your scan is fine' - Type 1), which does not include sharing the diagnostic
49 evidence projects a more paternalistic approach implicit in which, the patient is expected to
50 accept the diagnostic judgement of the doctor. It is also characterised by a general explanation of
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3 the results which is reflected in the general response provided by the patient.¹⁹ In contrast the
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5 Type 2 delivery is much more accommodative of patient input. Moreover, the invocation of the
6
7 scan or the x-ray, where appropriate, appears to be significant in encouraging patient
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9 involvement and consequently patient initiated direct questions. Incorporating and explaining the
10
11 evidence appears to be interpreted by patients as an opportunity to contribute to the consultation
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13 and establish their information needs in an environment within which the patient's
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15 queries/opinions are welcomed. Unless the patient has specifically requested not to see scans or
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17 x-rays, this would appear to be an effective way of encouraging patient involvement generally
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19 and increasing levels of patient question asking. Consequently, patients are then able to establish
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21 and satisfy their information needs in a timely and effective way.
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29 In cases where patients did ask more questions, there was no significant increase in consultation
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31 length and no patient refused the offer of looking at examination results. The examples presented
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33 above were carefully selected because they display the most marked variation in consultation
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35 style highlighting clear contrasts between the two types of delivery.
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41 A number of different types of intervention have been used in cancer care to help facilitate
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43 patient involvement. For example, question prompt lists have been used quite widely, but their
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45 actual implementation in consultations is not always straightforward and their rates of success do
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47 vary.¹⁵ Moreover, we found in our study, that even when patients entered the consultation with
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49 question lists, they often left the consultation without having asked the questions they came
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51 prepared for.
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3 The finding that when the doctor elaborates or explicates findings from the evidence, this can
4 increase levels of patient involvement has been identified previously in a study of primary care
5 consultations.²⁰ Clearly there are important differences between an oncology consultation and a
6 primary care consultation. However, in relation to consulting behaviours, in both settings there
7 appear to be striking similarities. That is to say, careful explication of diagnostic findings can
8 encourage patient involvement such as, in this case, question asking, which in turn can enable
9 patients to establish their information needs. Further research in this area demands a closer
10 investigation of what Frankel⁹ has described as the ‘presuppositional grounds upon which the
11 communication situation itself rests’. This would then allow us to identify other consulting
12 behaviours doctors can utilise to encourage patient involvement.
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29 There may be a number of reasons why patients are disinclined to ask questions following the
30 ‘your scan result is fine’ type of announcement. The minimal responses identified may not
31 actually be conditioned solely by the type of announcement of test results but may also be a
32 consequence of patient preference or information needs at that particular moment. As noted, in
33 Type 1, table 4 the patient targets back on a general assessment of the echocardiogram as ‘okay’.
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39 This clearly merits further empirical investigation.
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53 **Conclusion**

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3 Currently there is good research evidence indicating that patient initiated question asking should
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5 be encouraged. Doctors need to be able to encourage patient question asking to ensure that
6
7 patients have at their disposal an important means through which they can determine and express
8
9 their information needs. This study confirms the findings from previous studies showing that
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11 levels of patient initiated questions in Oncology are relatively low. Our study suggests that
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13 patient initiated question asking can be encouraged through timely and deliberate information
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15 giving which incorporates an explanation and display of test results. The findings at this stage are
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17 only suggestive and further exploration is required to establish their actual significance. Studies
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19 which involve closer examination of the actual interactional episodes between doctors and
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21 patients are required to provide a deeper understanding of patient initiated questions and the
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23 situational variables which may influence them.
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Contributorship statement

All authors contributed to the research study. As PI AT led the study design with contributions from GM and LF. GM and LF led the data collection and analysis with contributions from AT. The first draft of the paper was prepared by GM and then subsequently all authors contributed to data interpretation and revisions to the manuscript. All authors had full access to the data derived from the study and can take full responsibility for the integrity of the data and the accuracy of the data analysis.

Data sharing

There is no additional data available

Ethics approval

This paper is an outcome from a study funded by the NIHR Research for Patient Benefit Programme. The funding body did not partake in the design of the study, collection, analysis and interpretation of data, writing and submission of the article for publication. The study received ethical approval from the Nottingham research ethics committee 2 ID: 09/H0408/34. All participants in the study gave informed consent before taking part. All authors are independent

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3 from the funding body. Each had had full access to all of the data in the study and can take
4 responsibility for the integrity of the data and the accuracy of the data analysis
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7 This paper presents independent research funded by the National Institute for Health Research
8 (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-
9 PG-0807-14122). The views expressed are those of the author(s) and not necessarily those of the
10 NHS, the NIHR or the Department of Health.
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