Exploring shared decision making in breast cancer care: A case-based conversation analytic approach

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Abstract

Shared decision making (SDM) is acknowledged as the gold standard of healthcare communication, particularly relevant to preference-sensitive care such as breast cancer treatment. However, research on patients' experiences shows a misalignment between clinicians' goals and the rhetoric regarding patients' empowerment during SDM for this treatment. This warrants detailed examination on the conversational dynamics of SDM, and this study aims to identify interactional features and social practices through which SDM is achieved.

Fifteen audio recordings from adjuvant treatment breast cancer consultations were examined using the methodology of conversation analysis (CA), and recurrent patterns relevant for understanding SDM were identified. Boundary markers, rhetorical questioning and epistemic markers discouraged a shared orientation to patient participation, reinforcing perceived imbalanced doctor–patient power relations. Cues for SDM such as multi-turn utterances and spaces for transition were presented but not recognised by patients, resulting in sub-optimal two-way discussions about decision making.

The findings also reveal that interactional practices were deployed that theoretically should have enabled patients to contribute to SDM. However, in reality these did not result in extended sequences of reciprocated contributions from practitioner and service user. SDM did not happen with the ease implied by current models, and the resultant interactions bore

more similarity to expert-led, rather than collaborative, decision making.

Keywords: breast cancer; conversation analysis; doctor–patient communication; doctor–patient relationship; shared decision making

1. Introduction

Effective doctor–patient communication is deemed pivotal to determining good interpersonal relationships and facilitating exchange of information, patients' commitment to treatment regimens and patient satisfaction (Ha and Longnecker 2010). However, despite its importance, evidence presents multiple barriers to good communication in the doctor–patient relationship, including patients' anxieties and fears, practitioner workload, fear of litigation and unrealistic patient expectations (Fentiman 2007)

In the UK, guidelines produced by the Department of Health (2010) and its National Institute for Health and Care Excellence (2016) advocate a patient-centred healthcare system built around shared decision making (SDM). SDM comprises both the patient and clinician making decisions after openly exchanging information, exploring beliefs and reaching explicit closure (Elwyn *et al.* 2012). However, it means more than just patient autonomy and preferences: it represents an important shift in the roles of both

patients and clinicians, moving away from a paternalistic doctor–patient relationship (Barry and Edgman-Levitan 2012). Evidence indicates that implementation of SDM in secondary healthcare has been successful insofar as embedding decision support tools (Frosch *et al.* 2011; Elwyn *et al.* 2012) and training clinicians (Légaré *et al.* 2010), but that difficulties remain, with SDM in practice appearing slow, complex and situational (Berger 2015). This is particularly so in the context of breast cancer care, as factors such as the patient's participatory role and a perceived discrepancy in doctor–patient knowledge and role expectations appear to hinder SDM (Joseph-Williams *et al.* 2014; Mahmoodi and Sargeant 2017).

An exploration of interactional practices associated with doctor–patient relationships and forms of patient participation during consultations in this specific context would enable a deeper understanding of the barriers to and complexities of SDM. Drawing on the framework of conversation analysis (CA) and as part of a case study methodology, this paper examines how SDM transpires during adjuvant consultations about post-surgical treatment for breast cancer. The methodological framework of CA is used to explore conversations between 15 women with breast cancer and an oncologist clinician. The paper outlines in the findings certain interactional practices which discourage patient participation and meaningful SDM, and concludes by offering implications for clinical practice to support SDM in breast cancer care.

2. Literature review

SDM can be a disruptive idea because it demands shifts in the power and control of interactions between clinicians and patients, and as reasons clinicians cite time limitations, lack of perceived relevance to the patient or clinical situation and patients' preferences for decision making as barriers to the effective implementation of SDM (Légaré *et al.* 2008; Joseph-Williams *et al.* 2014; Berger 2015). Further, preferences for participating in SDM vary amongst patients (Mahmoodi and Sargeant 2017), with some patients initially resisting the 'active' patient role and declining decisional responsibility (Elwyn *et al.* 2012) due to long-standing cultural beliefs about the user

as a 'passive spectator'. Factors contributing to this phenomenon include the perceived burden of making choices (De Haes 2006), and perceived discrepancy in doctor–patient expertise and roles (Joseph-Williams *et al.* 2014).

Some researchers argue that the inherently unequal power dynamic and asymmetry in doctor–patient roles prevent the successful implementation of SDM (Pilnick and Dingwall 2011; Frosch *et al.* 2012; Joseph-Williams *et al.* 2014; Mahmoodi and Sargeant 2017). From a practitioner perspective, clinicians may feel threatened by the concept of patient empowerment and be unwilling to adopt practices that challenge existing power dynamics, even if broadly supportive of SDM (O'Flynn and Britten 2006). Although some interventions address such power imbalances and challenge 'non-compliant' attitudes (Shepherd *et al.* 2011; Joseph-Williams *et al.* 2017), agreement on how best to integrate these into routine healthcare settings is elusive.

The interactional dimensions of SDM has received much scholarly attention, with the aim of better understanding doctor–patient relationships. Studies document the particular foci of clinical communication and the communicative behaviours of health professionals that may facilitate SDM (Duffin and Sarangi 2018; Lee *et al.* 2018), and evidence suggests that providing patients with certain skills (e.g., asking questions, verifying information) can lead to their more active involvement in decision making (Alegría *et al.* 2014). Attention has long been paid to the notion of asymmetry in conversations (Linell and Luckmann 1991) and this extends to more detailed explorations of how this transpires in clinical encounters, specifically unilateral and bilateral classifications assigned to conversations about cancer treatment (Collins *et al.* 2005)

CA research on doctor–patient encounters has focused almost exclusively on traditional consultations (Heritage and Stivers 1999; Peräkylä 1999; Heritage and Maynard 2005). Although a small body of research has deployed CA to examine SDM in healthcare settings (Elwyn *et al.* 1999; Landmark *et al.* 2015), many clinical specialities remain unexamined. One area of clinical practice where SDM has been identified as the prevailing approach for doctor–patient treatment decision making is in breast cancer care (Charles *et al.* 2004; Chewning

et al. 2012), a form of care that necessitates complex preference-sensitive decision making (i.e. when more than one treatment option is available and there is no single 'best' choice for every case) and that may present specific issues in relation to SDM. Earlier work indicates the positive impact of SDM on patient outcomes (Street and Voigt 1997); however, more recent studies highlight the particular issue of unequal power dynamics in relation to using this model effectively with this population (Keating *et al.* 2002; Mahmoodi and Sargeant 2017). Given this, a detailed examination of the interactions between breast cancer patients and health professionals may identify both hindrances and enablers of SDM in this clinical context.

3.   Data and methods

3.1. Sample and participants

Data were collected from a National Health Service (NHS) outpatient breast cancer oncology clinic from a UK hospital cancer centre. The study was approved by the local NHS Research Ethics Committee (Ref: 12/NW/0140), and the Hospital Research and Development Department (Ref: DC/hr)

All patient participants in this study were female. While it is acknowledged that men can also be diagnosed with breast cancer, the paper refers to a solely female sample. The data comprised audio recordings of initial breast cancer oncology consultations. These recordings were routinely made by clinicians and not initially produced for research purposes but instead to serve as a record for the women patients themselves to refer to should they need to. These recordings were made upon their verbal consent at the start of the consultation and existed prior to the conception and commencement of this study. It is worth noting that with the advent of telehealth and digitisation of many health records, there is increased evidence of opportunistic data utilisation from healthcare consultations (Chatwin *et al.* 2014).

Written informed consent was obtained from 25 women to access their recordings for analysis. All were aged 18+ and were contacted as registered patients of the breast cancer unit. They had undergone breast surgery and were referred to the oncology clinic for adjuvant treatment. Inclusion criteria required an initial oncology consultation two months prior to the time of recruitment. This timeframe was suggested by breast cancer health professionals to be an appropriate period for the patients to have adjusted to treatment and made use of the recording.

Fifteen women agreed to supply their recording, five declined and the remaining five did not respond. This provided 15 doctor–patient encounters (audio recordings) for analysis. The mean age of the consenting women was 51 years (range 40–63), and all of them had undergone chemotherapy, radiotherapy or hormone therapy as adjuvant treatment. All interactions took place between the female participants and the same one male senior oncologist clinician. In the context of CA and doctor–patient interaction, a case-based methodology is not uncommon (Elwyn *et al.* 1999; Chatwin 2014). A single case study approach on one clinician enables a detailed holistic investigation and captures the emergent and immanent properties and complex interactional details of SDM within its real-life context. This approach allows readers to make judgements about applicability rather than making a case for generalisability.

3.2. Analytical procedure

The practice of CA aims to explicate the shared practices that constitute social interaction from speakers' behaviours. This approach enables the identification of shared practices through which people accomplish particular actions. For example, CA research on medical encounters has identified certain practices for initiating advice and questioning to elicit patients' concerns (Robinson 2001; Stivers and Heritage 2001; Peräkylä 2002). A detailed CA was conducted on all 15 audio recordings (total of 801 minutes), which were transcribed in their entirety by NM according to Jefferson's (2004) transcription system (see Appendix). Anonymity was preserved in the extracts by using pseudonyms. CA was performed by locating patterns, structures and practices of talk-in-interaction, noting structural, turn-taking, turn-design and sequence organisation (Drew *et al.* 2001; Heritage and Maynard 2005). Validity of transcription and analysis was sought by applying aspects suggest by Arminen (2005) – transparency, validation by next turn, participant's validation

– and by holding data sessions with another experienced CA researcher (TM). Reflexive commentary was carried out by NM, using a reflexive diary, as a means to measure any subjectivity or influences during interpretations (Willig 2008).

4. Findings

During preliminary analysis, three themes emerged as influencing SDM. These themes display CA features which either deter or elicit doctor–patient collaborative interaction. Extracts from various consultations (consultation ID provided) are presented below to illustrate these themes between the patients (P) and the oncologist clinician (C).

4.1. *Theme 1: Epistemic status in SDM*

Extract 1 illustrates how the clinician indexes the epistemic status associated with medical knowledge and to the deontic right – that is, the right to determine actions – as a way to promote a proposed treatment plan. The practice of sequential positioning reinforces medical authority and the clinician's view as primary, which may not open a space for subsequent patient involvement.

Extract 1. (consultation ID 4)

```
1   C:  <So yes> we would want to give you
2       some treatment
3       (0.9)
4   C:  >We would< suggest that we give
5       you chemo:therapy (.) >given<
6       your illness history
7       (1.0)
8   C:  This is something we pre:fer (.)
9       as this is the only thing we kno:w
10      that is very likely to improve the
11      chances that we have got rid of it
12      completely
```

The clinician and the patient enter a conversation about chemotherapy, as a possible adjuvant treatment plan. The clinician starts by showing a collaboration between medical colleagues ('*we would want*') about the need for further treatment. The term '*we*' signifies a majority group that excludes the patient, thus self-situating the clinician's deontic order (clinician's responsibility) and epistemic status. Such claims for epistemic rights and the defining of the grounds for decision making

are reflected in lines 8–12, through the clinician's portrayal of knowledge ('*the only thing we know*' and '*it is very likely to improve*') and by drawing on medical authority ('*with your illness history*'). The steep deontic gradient arguably reduces the likelihood of counterarguments, which is most obvious in the statement '*something we prefer*' (line 8), following a delayed acknowledgement token from the patient.

Despite decision making being framed in terms of the clinician's expertise and actions, the patients were also given various opportunities to express their views following those presented by the clinician, as illustrated in the next extract. Extract 2 also shows the impact of sequential positioning, but with the clinician setting up varying deontic and epistemic gradients as shifts are made from '*we*', '*I*' and '*you*', to illustrate varying degrees of decisional responsibility between the doctor and the patient.

Extract 2. (consultation ID 7)

```
1   C:  I would <very stron:gly> advise you
2       to have chemo
3       (0.5)
4   C:  It then makes cure the most likely
5       thing↑
6       (4.0)
7   C:  I would be concerned↑ if you didn't
8       take the treatment (0.1) as you would
9       not be giving yourself the most likely
10      chance>
11      (3.8)
12  C:  Would there be a reason why you
13      would consider not taking it?↑
14      (2.5)
15  P:  No (0.2) reading about the
16      chemotherapy, I know it's rare
17      to get cancer elsewhere as a
18      side-effect.
19  P:  But I don't kno:w anything
20      about it?
20      (1.2)
21  C:  Yes↑ (.) and I just feel(.)in my view
22      >so to not< take it for that risk (0.9)
23      >so to increase< your risk of it
24      coming back and not being cured<
24      (2.9)
```

This extract is taken from a conversation about why chemotherapy would be a better treatment option. In lines 1–5, the clinician initially presents a '*we/I*' perspective by framing the talk about chemotherapy as led, and to some extent determined by, the

health professionals. Such sequential positioning of '*we/I*' is a clear delineated presentation of the medical viewpoint and decision making about treatment, to which the patient viewpoint comes second, and is sequentially invited as secondary to the clinician's opinion.

This is further reflected in the patient's lack of turn taking until asked a direct question (line 12). Even then, the patient's response options are constrained: the direct question is designed in such a way that it projects for a '*no*' response (Pomerantz 1984), accordingly delivered in line 15. However, by providing spaces and opportunities within this structure, the clinician tries to obtain some approval from the patient and invites her specifically to share her views and thoughts on the treatment proposal. For instance, the clinician changes use of the pronoun '*we/I*' to '*you*', which marks a shift in whose decision it is (line 12). While the medical '*we/I*' (i.e. the clinician) would choose chemotherapy, '*you*' (i.e. the patient) would have the possibility to choose differently.

This conveys a subtle shift and sharing of responsibility, which lies with the patient in choosing the suggested treatment option. Although showing agreement with the clinician, the patient backs her response with a disclaimer of knowledge: '*But I don't know anything about it*' (lines 19–20). This disclaimer aids withdrawing any of the patient's deontic stances and draws on their asymmetrical epistemic status: in claiming a lack of knowledge, the patient indirectly defers to the clinician to be knowledgeable and the real decision-maker. This is also explicated in the increment by the clinician in lines 21–24, portraying chemotherapy as the routine option to enhance cure, which indirectly draws on the deontic authority of the medical community. The clinician displays a positive acknowledging response (lines 20–24) and utilises the patient's response to further stress the importance of chemotherapy, along with stance-taking language such as '*I just feel*' and '*in my view*' as well as reference to potential negative outcomes of cancer, e.g. '*coming back*' and '*not being cured*'.

4.2. *Theme 2: Orientation to deter SDM*

The use of boundary markers and asymmetrical questioning became apparent during the consultations. On the one hand, rhetorical questioning posed by the clinician functioned to structure the content of the consultation and to provide the patient with appropriate health information to make an informed decision, but it also generated one-way interaction. The boundary marker '*so*' directed or redirected the flow of conversation without adding any significant paraphrased meaning to the discourse (Fraser 1999). Both phenomena, evident in Extracts 3 and 4 below, operated as a turn-holding device for the clinician, thus negating collaborative discussions around decision-making.

Extract 3. (consultation ID 11)

```
1   C:  There is a sma:ll cha:nce there
2       are micro:scopic cells left* (.) and if
3       we did nothing they will gro:w and
4       the cancer will come back-
5       (2.5)
6   C:  If↑ that is the ca:se (.) what can we
7       do n:ow to get rid of them?
8       (1.0)
9   C:  S:o (0.2) we think about thre:e areas
10      (1.0) to build a picture of risk-
```

At the start of consultation in Extract 3, the clinician begins by talking about the patient's current health status. Following some delicate and qualified talk about the risk of microscopic cancer cells still being present (line 6–7), a question is posed by the clinician about how these hypothetically could be removed. Epistemically, this is a question that the clinician rather than the patient is positioned to answer, and accordingly the patient treats it as rhetorical by not responding. The clinician takes his turn (line 9) by providing an answer, thereby not pursuing the unanswered question. This answer is constructed as a cumulative process to '*build a picture of risk*', opening with the clear boundary marker '*so*'. The use of this boundary marker signifies the start of a new phase of talk (i.e. the answer) and, therefore, instructs the patient to listen. The marker most importantly functions as a connection to what has come previously (i.e. the question) whilst opening further space for the clinician to maintain the conversation for an extended descriptive answer of the '*three areas*'.

This technique of questioning followed with '*so*' was manifest on several occasions with various patients. Extract 4 illustrates the complexity of this action in more detail with another patient.

Extract 4. (consultation ID 1)

```
1   C:  Is there a benefit to
2       chemotherapy?
3       (2.0)
4   C:  So- >percentage wise< there is
5       n:o benefit.
6       (0.1)
7   C:  it m:ay have some
8       detriment (.) >which is the
9       side-effects<
10      (3.0)
11  C:  S:o (1.5) <ho:w certain>
12      are we of this result?
13      (2.1)
14  C:  Well (.) it cou:ld be that there is↑
15      a small benefit of chemotherapy
16      (0.2)
17  C:  We thi:nk there is
18      absolutely non-↓
19      (2.0)
20  C:  Is this ok for yo:u?
21      (1.5)
22  P:  If you think so?
23      (1.0)
24  C:  I do↑
```

With this patient, the risks vs benefits of treatment are being discussed. A question which requires expert knowledge is stated by the clinician in line 1. Similar to Extract 3, the same effect is achieved as evidenced by no patient interaction, and therefore the next turn construction unit (TCU) is once again taken by the clinician (line 4). The clinician opens with '*so*' as a boundary marker, which is used to introduce the answer to the previous unanswered question: it is suggested that there is statistically '*no benefit*' to chemotherapy. The clinician strengthens this case further in lines 7–8, by stating that there is a '*detriment*', a major loss or damage to the self, as a result of the side-effects of chemotherapy. The patient does not respond, which indicates that up to this point the clinician has presented good clinical reasoning for not having chemotherapy.

The clinician starts the next TCU in line 11 with once again the boundary marker '*so*', which here indicates a conclusive result (at the discursive level of facts). Additionally, the clinician assesses the decision by once again asking a question about the certainty of the test results (lines 11–12). The same action by the patient is displayed, as there is no response, and instead the clinician provides an answer. The reasoning over treatment is then finally closed in lines 17–18, as the clinician

concludes that, in fact, the benefit is '*absolutely none*'.

The formulation of the direct question '*is it okay for you?*', with a prolonged '*you*', represents a request for patient permission. Thus, the clinician acknowledges the patient's choice to accept or reject this treatment suggestion. However, the interactional style used to present only one of the options displays a preference for a confirming response, thus adding pressure on the patient to affiliate with the clinician's expertise and role. This disaffiliative stance is further expressed by the patient's subsequent account of '*if you think so?*', which invites the clinician's medical opinion for practical efficiency to be the proper grounds for the decision.

4.3. *Theme 3: Utterances to initiate SDM*

Despite there being evidence of the clinician offering opportunities for SDM through sharing deontic responsibility (Extract 2) and making explicit reference to patient choice (Extracts 2 and 4), in these cases the patient is not sequentially positioned to participate interactionally. Extracts 5 and 6 demonstrate how further attempts are made to encourage patient participation, but the role of multi-turn utterances inhibits clear projections of a relevant second pair part (SPP), thereby leaving long periods of silence in the talk. It is only through direct first pair part (FFP) questioning that turn taking is acknowledged by the patient.

Extract 5. (Consultation ID: 14)

```
1   C:  >Firstly< we took a margin of normal
2       breast tissue for testing(.)
3       to see if it is hormone receptor
4       sensitive or positive
5       (1.8)
6   C:  After that(.) we tested it to see if it is
7       over producing the protein called
8       her2
9       (1.2)
10  C:  Indeed it was stron:gely hormone
11      receptive positive (.) >and that
12      good<↑
13      (3.6)
14  C:  That tells us hormone therapy (.)can
15      be used for part of the tre:atment.
16      (3.8)
17  C:  An:y questions so far on that- before
18      we move on to hormone treatment?
```

19   (4.7)
20 P: No
21   (3.1)
22 C: S:o (.)
23   (1.2)
24 C: Hor:mone treatment in↑volves tablets.

In this extract, the clinician is medically explaining why hormone treatment would be appropriate for the patient. It is noticeable that long periods of silence (particularly in lines 16 and 21) occur at the end of each completed TCU by the clinician. During these periods of silence, the clinician and the patient appear to do nothing, and no one talks. The silence could be as a result of the conversation format. For instance, each of the clinician's statements is not a clear FFP that signals an SPP response. This suggests that both speakers could legitimately speak, and the silence is not attributable to any particular speaker.

Also, the interactional features indicate to the patient that the clinician's explanation is not finished yet. For example, the clinician illustrates a turn-holding device by methodically introducing a diagnostic narrative through the use of sequential timing words (e.g. '*firstly*' in line 1 and '*after that*' in line 6). Another turn-holding device is the use of extended multi-turn utterances which do not mark a clear SPP and which make it relevant for the clinician to take the next turn in order to present his thoughts, and make transitions in talk from him to the patient harder.

Once the clinician's explanation and reasoning are fully presented, the patient is asked a direct question (lines 17–18), with a long gap of 4.7 seconds once having completed a TCU. Unlike the gaps earlier in the conversation, this long silence has occurred after the spoken FPP question to the patient. This therefore creates a TRP, in which the patient can interpret that an SPP is expected by them (achieved in line 20). Following the patient's minimal response, a prolonged pause in talk is once again presented (line 21). The clinician takes the turn with a stretched boundary marker of '*so*' (line 22) to display thinking through, and this also functions as a marker of connection to the patient's response. A TCU of 1.2 seconds is provided in line 23, which now deploys a stand-alone '*so*'. This is used to further prompt the patient to produce the next relevant response, and perhaps to elaborate on her minimal response of '*no*'. However, with

the turn not taken up by the patient, the term '*so*' therefore becomes used to preface a topic beginner.

Other interactional devices, besides direct FPP questioning, were also used by the clinician to attempt to scaffold the patient into SDM, as illustrated in Extract 6.

Extract 6. (consultation ID: 9)

1   C: <Do you want to> under those
2   circumstances?
3   (3.0)
4   C: For a small benefit
5   (3.5)
6   C: You might say right- I want
7   chemotherapy because I want that
8   small benefit (.)>or you might say<
9   (.) no I DO NOT even want to bother
10   as it's <such a small gain>
11   (3.8)
12 C: But we will be dealing with
13   philosophy of how you would want
14   to be treat:ed (.) rather than the
15   science
16   (2.0)
17 C: But with this onco-type test we can
18   actua:lly now drill down
19   >a little bit< further↑ (0.1) we now
20   move to the science which says that
21   NO ONE WANTS TO do it because
22   there is abs:olutel:y <no point>

In this extract, a conversation is taking place about the lack of benefits of chemotherapy as a treatment option. A direct question (lines 1–2) is asked to elicit the patient's views about chemotherapy. The term '*under those circumstances*' renders as a qualified question and could cause some difficulty in the patient answering, as it is tied to the technical knowledge previously given to the patient about side-effects of this treatment.

Unlike in the previous extracts, the clinician does not interpret the absence of response as a turn-holding device, but rather that there may be a problem with the prior direct question. To address this, an increment is added in line 4, to scaffold the patient towards medical evidence. This increment subsequently causes the silence to be an intra-turn silence, which in a sense undoes the fact that the patient is not speaking. By stating '*for a small benefit*', the nature of the initial question is changed, as the clinician is now apparently projecting for a particular response. More supportive attempts are presented by the clinician, in lines 6–10, to

facilitate SDM by modelling possible responses. To reduce the complexity of the process, the clinician hypothetically speaks on behalf of the patient. The patient is made aware that there is no right or wrong answer to the question, as the clinician presents two opposing types of answers. Despite these turns potentially supporting patient participation, the patient's response, however, remains absent (line 11).

Consequently, in lines 12–15 the conversation turns from the philosophical concept of '*reality*' to science and evidence-based decision making, whereby clinical results and numerical statistics are once again topicalised to provide the patient with what is regarded by the clinician as a preferred answer to the original question asked in line 1. The patient is presented with two extreme case formulations in lines 21–22, which state that '*no one wants to*' have chemotherapy, and that there is '*absolutely no point*' in having this treatment option. This reinforces the argument of a '*small benefit*' (initially presented in line 4), and, finally, provides the answer to the question initially outlined.

This extract illustrates a form of clinical reasoning and 'thinking out aloud' to present the clinician's viewpoint. Although the patient is provided opportunities to participate in talk, periods of long silence occur as the patient's interpretation is that she should wait for the clinician to come up with the conclusion rather than joining in.

5.   Discussion

The practice of SDM can be difficult in the context of breast cancer when there is some uncertainty and differing opinions about what the 'best' treatments may be. This study begins to identify the interactional details between one doctor and his patients during adjuvant treatment consultations, and foregrounds those conversational strategies that may be successful in hindering or enhancing patient participation in SDM. Overall, the findings suggest that sharing of treatment decision making in this clinical context does not happen with the ease implied by current models of SDM, maintaining a paternalist approach rather than one in which the patient is truly empowered and involved in partnership.

Linguistic and interactional practices revealed in these findings illustrate an asymmetry of power divisions that reinforce societal assumptions that 'doctors know best' and should make medical decisions on behalf of patients. The clinician in the present study at times sequentially positioned himself to convey medical authority and displayed an epistemic stance towards a suggested treatment through pronoun use, thereby generating territories of expertise and potentially reducing patient participation (Linell and Luckmann 1991; Skelton *et al.* 2002). However, the clinician also deferred deontic rights and responsibility to the patients through invitations to decide. It could be argued that contradicting deontic gradients may obscure the question of whose decision it is. However, the display of subordination may also be a way to promote one's own action-plans while maintaining the ideal of SDM, which requires commitment from both parties for reaching a decision (Stevanovic 2012).

Other distinct interactional barriers (e.g. boundary markers and rhetorical questioning) exacerbated the power asymmetry and complicated the required turn-taking needed for SDM. The idea that interaction between doctors and patients is 'asymmetrical' has been recognised by a sample of women with breast cancer (Mahmoodi and Sargeant 2017). However, whether asymmetry is necessarily a barrier to SDM is questionable: without an asymmetric interaction, two people are simply 'having a chat', which does not reflect the institutional roles of the doctor and the patient. From a constructivist perspective of what is appropriate communication in a medical consultation, a power imbalance may conceivably be encouraging. The patient brings the problem, the doctor brings rational expertise to help solve it and offers partnership in action. Asymmetry can be oppressive, but it can equally be enabling if the clinician is aware of this asymmetry and is using it for shared good to encourage SDM. More research is needed to interrogate what is thus far suggested here in broad terms.

Equally, it is important not to obscure our understanding of the positive interactional work that surfaced during these consultations to help promote SDM. Although some of the conversational features displayed in this study make it hard not to view the clinician's contributions as medical

paternalism, the deployment of other interactional strategies suggests a process of promoting the ideals of SDM and co-opting the patient to engage in shared responsibility of their treatment decisions. For example, many techniques were utilised to provide patients with appropriate knowledge architecture and to enhance their acquisition of health information, which has been described as an essential ingredient for SDM (Moumjid *et al.* 2007): the action of rhetorical questioning operated as a means to elaborate and inform; the use of scaffolding, which incrementally builds to a question, aimed to enhance knowledge; and understanding was further facilitated through the use of statistics and numbers to break down the complexity of medical jargon and language. Other techniques to encourage two-way exchange of information included the use of adjacency pairs, such as the use of FPP direct questions, which all patients successfully recognised as a cue in turn taking, and therefore showed an 'active', but minimalistic, participatory response (SPP). The subtler techniques included the use of preference organisation questions to help stir the patient towards a preferred response, and the use of sequential positioning of deontic stance as a sharing opportunity and invitation to participate in talk.

The overall picture, however, suggests that there is a misalignment between 'best practice' and pragmatism for SDM. Whilst opportunities for patient participation were presented in the conversations, the patients did not capitalise on these opportunities or conversational aids, which therefore resulted in sub-optimal two-way discussions about treatment choices. When stretches of talk for SDM were provided, the patients resisted responsibility in decision making by orienting to a lack of own knowledge (e.g. '*I don't know*') and the contested medical knowledge (Grimen 2009). Unless asked a direct FPP question, they did not initiate conversation about treatment options at these points of transition. However, it should be acknowledged that an absence of response can itself be a form of participation.

In this study, the patients appeared to have interpreted the clinician's turn-holding devices and sequential/epistemic positioning as a form of 'clinical reasoning'. Although they were provided with knowledge architecture (i.e. medical evidence)

and were informed about the options needed to make appropriate trade-offs about the decision, they however chose not to respond and waited for the clinician to come up with the conclusion rather than themselves joining in. Therefore, it would be irrelevant to imply that SDM is ineffective if there is no two-way exchange of conversation. Rather, we suggest that some of the existing cues and conversational formats for SDM that the clinician displayed are not necessarily the most appropriate cues to initiate patient responses.

6.　Conclusion

This paper highlights the utility of CA as an analytical method in revealing the kinds of interactional features that characterise adjuvant breast cancer treatment consultations, and the implications this might have on the materiality of SDM. Specific language usage can occasionally discourage patient participation and subsequently prevent meaningful SDM. However, increased awareness and training of both clinicians and patients on the dynamics of clinical conversations may increase patient participation. Communication skills training programmes, such as the 'Making Good Decisions in Collaboration' improvement programme (Health Foundation 2013), aim to support clinical teams to embed SDM into everyday practice by helping them to build coherence, improve conversational skills and promote positive attitudes (Elwyn *et al.* 2012; Joseph-Williams *et al.* 2017). To improve SDM implementation, the use of in-consultation evidence-based decision-support interventions – such as Option Grids (Elwyn *et al.* 2013), patient decision aids (Hargreaves and Montori 2014) and patient activation campaigns (Shepherd *et al.* 2011) – aims to better facilitate interaction between patients and clinicians.

These support tools do not replace communication skills, but rather enhance information transfer, help patients with a prompt list of questions for the clinician and empower them to be involved in conversations about what matters to them – the core of SDM. For the practice of SDM to have meaningful impact, we recommend interventions and communication skills programmes to further aid clinicians to better understand the actual mechanics and cyclic patterns behind ongoing

interaction and when to draw upon the appropriate evidence-based tool to promote collaboration. Rather than simply being trained in a list of competencies for SDM, clinicians may further benefit from having the skills to identify what is happening in conversation at a micro-analytic level; for example, learning to acknowledge and manage hesitations, silences and turn taking during consultations. Training programmes require some means of reflecting these conversational strategies and cues for SDM back to those involved – whether as part of established training procedures, or as a specific problem-focused approach. It may be of interest for future research to apply methods of CA to further evaluate communication skills training and interventions to improve communication for SDM.

This study is not without limitations. First, given the choice of a case-based study on one clinician, the generalisability of the findings is not supported, as the approach we see here may be a matter of this clinician's choices and interactional style. The findings also cannot be generalised at the level of patients, as they may be also seeing other health professionals in the clinic too, thus having opportunities across these different clinical encounters to express participation and take part in SDM sequences and activities. Although the data generated in this study will be used to inform a future larger study, one way to respond to the biases of a case-based study is by applying a multi-case approach or to track a single case study over time (Meyer 2001).

The second limitation is that only adjuvant treatment consultations were examined, and further longitudinal studies and qualitative interviews are needed in order to fully understand how the patients adjusted to their treatment and the presence of SDM over time. Finally, doctor–patient interaction was only examined among white, British middle-aged women patients and a male clinician. Doctor–patient gender and race concordance may influence attitudes and interactions, a possibility we have not addressed in this study.

Despite these limitations the study provides valuable insight about the specific conversational dynamics that enhance or hinder SDM, and identifies selected communicative strategies worthy of further exploration. The study contributes to a growing body of CA research on medical decision making in secondary care interactions. It also provides theoretical contribution to the field of CA research, by exploring some of the complex asymmetries between doctors and patients in an institutional setting of decision making for breast cancer care. Further studies can examine complexities and relations between these concepts in breast cancer care, as well as in other medical settings where decisions are made. Further CA research is recommended, with a larger sample of oncology clinicians with more diverse patient samples to explore whether our findings are evident beyond our case-based study observations. It is also important to understand how both patients and clinicians in these consultations view their respective contributions to the SDM process, and therefore subsequent semi-structured interviews would be a fruitful aspect of future research in this area.

Appendix: Transcription notation system for CA

Relative timing of utterances:

(0.5)	timings in whole and tenths of a second
(.)	a micro pause of less than two tenths of a second
=	no discernible interval between turns
[ ]	overlapping speech

Characteristics of speech delivery:

.	falling intonation
<u>here</u>	emphasis of words relative to surrounding talk
↑ or ↓	speech spoken with a high or low pitch relative to surrounding talk
°here°	speech that is quiet or soft relative to surrounding talk
>this<	talk speeded up or compressed relative to surrounding talk
<this>	talk slower or elongated relative to surrounding talk
.hhh	an in-breath (number of h's indicate length)
hhh.	an out-breath (number of h's indicate length)

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