ABSTRACT

Background: Healthcare is a series of complex, interwoven systems in which any discontinuities of care may affect the safety of patients, who have been reported to perceive safety differently to clinicians. This study aimed to explore patient perceptions of safety and identify how they can be used to construct additional barriers to reduce safety incidents within organisational care transfers, which are known to be high in risk.

Design: Appreciative Inquiry (AI) methodology was used to develop semi-structured interviews, using the Discover and Dream processes of AI. Fourteen patients (four men, 10 women; average age 76.2 years) were purposively recruited from NHS community care teams, social care homes and private nursing homes based on their experience of going through organisational care transfers. Thematic analysis was used to highlight key themes, which participants verified.

Findings: Communication, responsiveness and avoidance of traditional safety risks were identified as being important for patients to feel safe. Communication and responsiveness were mapped onto the Swiss-Cheese model of safety, presenting two new barriers to safety incidents. Traditional risks and the role of trust are discussed in relation to patients feeling safe.

Conclusion: Perceptions of safety such as communication and responsiveness were similar to those found in previous studies. Mapping these perceptions onto the Swiss-Cheese model of safety identifies how further defences, barriers and safeguards can be constructed to make people feel safer by reinforcing communication and responsiveness. Traditional risks are widely published, but the identification by patients reinforces the role they can play in identifying and reporting these risks.

INTRODUCTION

Patient safety has received much attention since the publications of To Err is Human¹ and An Organisation with a Memory,² which identify that healthcare as a whole is intrinsically risky. The exploration and detection of gaps in healthcare, defined as discontinuities of care,³ can guide safety improvement efforts.

This is especially important in organisational care transfers (OCTs) with the rate of adverse events estimated to be approximately 20%,⁴–⁶ twice the rate of other healthcare settings.¹²⁷ Falls,¹⁰ medication errors¹¹ ¹² and interprofessional communication deficiencies¹³ ¹⁴ are the most common reported adverse events in OCTs.

Despite an increasing body of literature exploring safety in transfers, which ranged from individual handoffs¹⁵ ¹⁶ to organisational transfers,¹⁷ ¹⁸ there has been no research known to the authors that considers patient definitions of safety in OCTs. It is thought that patients can play a role in their own safety,¹⁹–²⁵ with their definitions of safety differing to those of clinicians.²⁶–²⁸

There has been no theoretical exploration of how patient perceptions contribute to established models of patient safety, such as the Swiss-Cheese model.²⁹ According to this model, hazards are a natural occurrence within healthcare that are continually changing and moving. To reduce the chances of a hazard leading to a patient safety incident, defences, barriers and safeguards are necessary. It is therefore necessary to identify different types of defences, barriers and safeguards that could be implemented into healthcare organisations to make them safer (box 1).
Box 1 Definition of an organisational care transfer

An organisational care transfer is defined within this study as the transfer of a patient from one setting to another, where either or both the organisations are healthcare providers. This includes the admission, journey and discharge processes, but not the full stay within the healthcare organisation.

As such, the aim of this study was to

▶ explore the concepts, explanations and terms used by patients when talking about safety in OCTs;
▶ explore how defences, barriers, and safeguards can be constructed in OCTs through the provision of patient-defined safe care.

Methodology

Appreciative Inquiry (AI) has been identified as a method of organisational development, but also as an interview tool that is effective at generating rich data both externally to and internally within healthcare. AI is based on the assumption that within any human system there is always something that works well but can be further improved, which in this study centres on an exploration of what makes people feel safe.

A semi-structured interview schedule was developed based on the Discover and Dream processes of AI which explored the past experiences and future needs of patients respectively. It is acknowledged that by using an interpretive methodology, participants may have their own perceptions of safety that have a negative focus, in particular as participants will be required to pay attention to negative experiences in order to identify what is a positive experience. It was therefore important not to disregard these negative experiences in the data analysis, but to build upon them to identify potential barriers.

The use of qualitative interviews also allows for new concepts to arise that have previously not been considered, and by conducting dyadic interviews, there is an opportunity to generate a richer understanding of needs and experiences than with single participants.

Participants

Fourteen participants were recruited from three community care teams spanning two NHS trusts (n=7), two City Council Resource Centres (n=3) and two private nursing and residential care homes (n=3). A further participant, who was not under the care of any of these organisations, was also recruited via snowball sampling. She was a family member of a current participant who, while acting in the capacity of a family member and carer during an interview, fulfilled the recruitment criteria and offered to share her own experiences of being transferred. The participants were aged between 56 and 88 years (mean age 76.2), of which 10 were women and four were men. All participants were white British. Information on the most recent transfer was not collected as it was important to capture the OCT that mattered most to the participants.

Recognising that the nature of care transfers means that often patients do not go through the process alone, participants were asked to invite family members, carers or advocates who experienced the journey with them to participate in the interview. This approach enabled them to remember aspects of certain events that the patient had not and to validate what the patients were reporting. Two participants had family members present, while one participant had a family friend present. Full consent was obtained from everyone who participated in the interview.

NHS community care teams were selected at the point of the NHS Research and Design (R&D) application by the respective R&D managers to purposively recruit patients based on the inclusion criteria (Table 1).

A further three participants were approached during the period of data collection prior to all 14 participants being recruited, but were not included in the study. Contact details were incorrect for one, another cancelled the interview due to illness and a third was deemed unable to give informed consent prior to the start of the interview.

Data collection

The data were collected through semi-structured interviews conducted between February and March 2010. Interviews lasted between 20 and 52 min, with an average length of 39 min. One participant requested that the interview was not recorded, and instead notes were taken and verified on interview completion. The interviews were conducted at a location convenient to the participants, which was always their current residence.

Table 1 Inclusion and exclusion criterion for participants in phase 1

<table>
<thead>
<tr>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
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<tbody>
<tr>
<td>Aged &gt;17</td>
<td>Aged &lt;18</td>
</tr>
<tr>
<td>Able to give informed consent</td>
<td>Unable to give informed consent</td>
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<tr>
<td>Undertaken an organisational care transfer in the last 6 months, or</td>
<td>No experience of organisational care transfers</td>
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<tr>
<td>Extensive experience of organisational care transfers (more than two in the last 5 years)</td>
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A topic guide was developed to give structure to the interviews. Questions were open ended and encompassed the principles of the AI methodology, particularly the Discover and Dream processes. The interview was structured to explore the following:

- the types of OCTs participants had been through;
- if participants felt safe during the OCTs;
- what safety means to participants;
- what would make participants feel safer in future OCTs.

Twenty interviews were anticipated at the outset; however data collection ceased after 14 interviews because recurrent themes were being supported rather than new themes being identified.

**Data analysis**

The interview recordings were transcribed verbatim, and NVivo 8 was used as a tool to systematically code and analyse the data into emergent themes. Although the interview was split into the Discover and Dream processes of AI, thematic analysis was used to highlight key themes from across the two processes. Connections between the top two levels of subcategories contributing to each theme were mapped based on interview data.

**Data verification and validity**

Participant verification has been identified as an appropriate method of verifying findings and assessing validity in qualitative research. Out of the 14 participants, six were revisited after data analysis had been completed. Each of the six verified that the themes that had been captured were accurate, and they felt that they did not have anything more to add. From the other eight participants, two preferred that the findings were posted out to them and six were not contactable via telephone. The findings were posted to their last known address with a letter explaining that if anything was incorrect then they should contact the researcher. No contact has been made in the 6 months since the letters were sent.

**FINDINGS**

Four key themes were identified: communication, responsiveness, trust and traditional safety risks. ‘Communication’ included being informed, having a means to contact a healthcare professional, being friendly and reassuring, apologising after an incident and listening. The role of communication is widely recognised in patient safety literature, particularly within human factors and the role that it plays in ensuring the safe transfer of patients. It has also been identified in previous research exploring patient perceptions of safety.

Listening was also an important component of ‘responsiveness’, which included responding to the individual needs of the patient, having short waiting times and making the transfer an easy process. Responding to individual needs is a central part of providing patient-centred care, which has been reported to improve health status and efficiency of care. Long waiting times have been reported to have a negative effect on healthcare, potentially relating to how safe patients feel, while overcrowding of emergency departments threatens patient safety.

‘Trust’ was inherent in participants regardless of experiences of care, originating intrinsically and from the knowledge that healthcare professionals were sufficiently trained. Another sign of trust was the participants’ inclination to make excuses for the healthcare professionals when something went wrong. Patients with high levels of trust in their healthcare professionals feel more safe, whereas patients with experience of an adverse event lose trust.

The ‘traditional safety risks’ discussed included physical safety during the transfer, falls, healthcare-acquired infections, receiving an adequate standard of care, missed diagnosis, medication concerns and excessively painful procedures. There is an extensive amount of literature exploring each of these issues, moving towards including them in a universal definition of safety.

**DISCUSSION**

Four dimensions of care related to safety have been identified when exploring how patients perceive safety in OCTs, including traditional safety risks, communication, responsiveness and trust. The use of the term ‘traditional safety risks’ is acknowledged to be a catch-all theme to further demonstrate that patients are able to identify some of the same hazards as clinicians, such as medication issues, falls and healthcare-acquired infections, which were recognised in other studies.

It has been identified that patient definitions of safety may be broader than clinician definitions. The findings from this study support recent evidence that communication and patient centredness are important in making people feel safe. It is proposed that communication and responsiveness are important components to providing safe care to the patient when going through an OCT, while there has been a call to apply theories more widely to patient safety practices. Applying communication and responsiveness to Reason’s Swiss-Cheese model of safety, additional defences, barriers or safeguards can be constructed so as to reduce the chances of a hazard resulting in an adverse event.
Within OCTs, clinicians should adhere to the individual elements of the communication and responsiveness themes identified in this study (figure 1), which would enable them to provide safer care by involving the patient as an extra safety buffer.20 More specifically, communicating with and being responsive to the patient can increase their involvement in their healthcare, thus encouraging them to become active participants rather than passive recipients, and subsequently increasing their safety. When clinicians do not adhere to these, holes in the Swiss-Cheese may open up, allowing for a hazard to become an adverse event.

The importance of having the patient as an additional buffer is emphasised in OCTs, where many gaps in safety occur,3 and there are fewer technical defences. However it must be remembered that not all patients are able or willing to be involved in their own safety,20 such as in emergency transfers.

The role of trust within safety has previously been seen to be an outcome of a patient safety incident, with patients potentially losing trust in their clinicians as a result of a safety incident,51 although this has been contested.52 The role of trust within this study was twofold. First, participants often made excuses for clinicians, possibly as a result of cognitive dissonance; a feeling of unease when considering the people trying to help them may in fact harm them, or it could be alluding to their ability to identify latent conditions in current healthcare systems, 29 for example, resource limitations, that have the potential to result in adverse events. If the last point is correct it supports the notion that patients can play a role in identifying and reporting safety incidents.19 24 27

Second, trust helped to make patients feel safer, which potentially acts as a hindrance towards becoming involved in their own safety. By applying communication and responsiveness to the Swiss-Cheese model of safety,

**Box 2** Some examples of how patients perceive safety.

### Communication

On that admissions ward they’re so busy they don’t have the time to come say to you every hour, every couple of hours that, “it shouldn’t be too much longer,” or, “it’s going to be a while.” Really just to keep you informed. [P13]

You do feel safe when you’re leaving your home if you’re with these people. It’s not as if they’re a stranger to you, they actually put you at your ease so [they] make you feel safe. [P08]

When I say I feel safe, I feel safe with them there so I can call them at any time, the rapid response team. [P14]

I try to find out as much as I could about where I was supposed to be going before I say I would go. [P04]

### Responsiveness

I felt that they felt “there’s nothing wrong with her” … they didn’t even open the back door … And bearing in mind I hadn’t a breath in me. And they’re saying “go on you can do it, go on you can do it.” Like you know, and I did, but when I got in he had to put an oxygen mask on me. [P14]

I feel quite safe in their hands. If I don’t I tell them, and whether they appreciate that or not, I don’t know. I just sort of say “well if I’m not very happy with that do you think we can do …” and we just have a little private conversation between the staff and me. And we arrive at what we both agree on. [P04]

We just had to call out and there’d be somebody there straight away if you needed them. Quite safe both in the ambulance and in the hospital. [P03]

### Trust

I just put myself in their hands. I know that they’ll get me there safely. I don’t know why, I just trust people. [P02]

I think that when you’re poorly you’re at your lowest ebb. And the reassurance in knowing that you have trained people with you, yes that does make you feel safe. [P10]

Being safe as I say, it’s just something that I assume. I mean, I presume I’m in capable hands, I presume they’re capable people that will get me from A to B in a comfortable manner. [P09]

I think they do as much as they can with the resources that they have. I don’t think they could do any more really. [P13]

### Traditional safety risks

I don’t think it should happen to anyone that is incapable of looking after themselves, to be sent home on their own to an empty house without any care support in. [P06]

I don’t feel safe in the house now because I’ve been taking epileptic fits … I can’t remember what tablets I’ve got to take or when I’ve got to take them. And if I’ve took them, have I took them? [P11]

The nurse or somebody helped [her daughter] to put her in the car, and she was yelping with the pain … they took her back to A and E only to find when she’d had that fall three weeks previous, she’d broke her hip. [P04’s carer]

**Figure 1** The patient’s role as a safety buffer in the Swiss-Cheese model of safety.29
it can be argued that patients can act as safety buffers in relation to these. Therefore the same components of the model, such as active failures and latent conditions, must also be applied to patient involvement in safety. Trust can be seen to be a latent condition, defined as an ‘inevitable resident pathogen’, which leads to holes or weaknesses in the defences, potential reducing how involved patients become in their safety and subsequently their safety itself. The exact relationship between trust as an outcome of as well as a hindrance to safety needs further exploration. In addition, the implications of trust being a latent condition that influences patient involvement in their own safety requires investigation.

The findings from this study will inform the development of a patient-reporting tool that will enable patients, family members, carers or advocates to report instances of safe and unsafe care during OCTs based on the reported perceptions. This will allow service users to become involved in identifying strengths and weaknesses in the communication and responsiveness barriers contributing to their safety in OCTs (box 3).

Limitations

Patients are not always able to see what occurs out of their sight, and therefore any perceptions that they do have of safety may not always reflect those of their clinicians. Further studies are required to help fill this knowledge gap and to explore how closely patient perceptions of safety are linked with clinician perceptions. This in turn may lead to an identification and reduction of potential organisational safety issues during patient transfers. However, regardless of any differences in perception, if patients perceive themselves to be unsafe then there is an issue that requires resolving.

A further limitation is that this study recruited from a small sample of older patients going through OCTs and therefore the findings may not be transferrable. Furthermore, the nature of the organisations that participants were recruited from meant that the average age of participants was higher than originally planned. Readers should take these limitations into consideration when deciding if the findings can be transferred to their own circumstances.

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Do older patients' perceptions of safety highlight barriers that could make their care safer during organisational care transfers?

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