

The contribution of ethnography to the evaluation of quality improvement in hospital settings: reflections on observing co-design in intensive care units and lung cancer pathways in the UK

Sofia Vougioukalou¹, Annette Boaz², Melanie Gager³, Louise Locock⁴

1. Research Associate, School of Healthcare Sciences, Cardiff University

2. Professor in Health Care Research, Centre for Health and Social Care Research, Faculty of Health, Social Care and Education, Kingston University and St. George's, University of London

3. Senior Sister, Intensive Care Unit, Royal Berkshire NHS Trust

4. Professor of Health Services Research, Health Services Research Unit, University of Aberdeen

Abstract

Ethnography is increasingly being used in the evaluation of quality improvement and change initiatives in healthcare settings, particularly in the form of 'focused' and 'rapid' ethnographies. This new ethnographic genre is tailored to suit narrower enquiries within clinical pathways. However, the application of ethnography to the evaluation of quality improvement is not straight-forward or free from reductionist bias, particularly in hospital settings where interventions take place during a limited period of time and instigate change in busy and sensitive settings. This paper discusses problems and emergent solutions involved in conducting an ethnographic process evaluation of co-design projects in lung-cancer and intensive care unit services in two hospitals in England. The mixed-methods ethnographic evaluation consisted of observations of the co-design process and triangulation of findings with interviews, questionnaires, participant reflective diaries and service improvement logs. Limitations of observational time and distance from 'the field' were overcome by making most of the pre- and post- event observational periods, situating quality improvement within the wider context of clinical practice, achieving attunement with local clinical cultures and engaging participants in collaboratively guiding observational and interview design. This approach led to a focused ethnographic evaluation that accommodated ethnographic principles to obtain rich insights into quality improvement processes despite the limitations of short-timeframes and the hospital setting.

Keywords: ethnography, evaluation, quality improvement, cancer, intensive care

Introduction

Ethnographic research in hospital settings has taken place over many decades and with varying degrees of complexity and controversy (Goffman 1961, Kleinman 1987, Braaf *et al.* 2013, Morgan-Trimmer and Wood 2016). More recently, shorter and narrower ethnographic enquiries are increasingly being used in applied projects in healthcare, particularly in healthcare delivery and organisation, providing rich insights into the views and concerns of healthcare professionals and patients (Pink *et al.* 2013, Vindrola-Pardos & Vindrola-Pardos 2017). Nursing research has widely adopted ethnography within specific enquiries on patient experiences in clearly defined clinical pathways (Savage 2000, Cruz & Higginbottom 2013). Ethnography has also been used in evaluation studies in education, development and healthcare settings (Greenhalgh and Swinglehurst 2011, Aveling *et al.* 2012). Using ethnography within evaluation often involves non-participant observation as a supplementary method to interviews and questionnaires (Agar 1996, Hamersley 1992, Finch *et al.* 2003). This new ethnographic genre is tailored to suit narrower enquiries within clinical pathways.

Wind (2008) argued that participant observation is not well-suited to highly specialised medicalised environments and proposed 'negotiated interactive observation' as a more appropriate term to describe ethnographic fieldwork in a setting such as the hospital or the clinic. Cruz and Higginbottom (2013) have argued that ethnographies of patient experience within specific clinical settings require shorter fieldwork periods and a narrower enquiry, and that a focused ethnography accommodates the methodological adaptations required by these environments. This is partly because the enquiry is tailored to a specific problem, experienced by a finite group of people, who are often situated in a specific location with limited public access. It is the specificity of the enquiry as well as the setting that positions focused ethnography within organisational ethnography as a narrower form of enquiry. Focused ethnography consists of ethnographic research in fields that are socially and functionally differentiated from contemporary society (Knoblauch 2005). A methodological consideration is that access to research in hospital settings requires a level of highly-structured permissions that are tied to a detailed research protocol. Conducting observations in this setting requires that each individual member of staff, patient or relative has formally and individually consented to be observed. This renders the nature of the observations as rather different to those taking place in a community setting.

In a similar fashion, rapid ethnographies consist of short cycles of in-depth interviews and observation at key contextual times. A systematic review of rapid ethnographies identified the following terms being used in applied health research contexts: 'quick ethnography', 'rapid ethnographic assessment', 'rapid assessment response and evaluation', 'rapid assessment procedures', 'focused rapid ethnographic procedures' (Vindrola-Padros and Vindrola-Padros 2017:5). Rapid ethnographies have been used in a very wide range of healthcare services across the world such as HIV/AIDS health intervention, cancer care, diarrhea management, intensive care, anesthesia record keeping, immunisation uptake, and clubfoot treatment adherence. The authors suggest that 'future rapid ethnographic research

needs to develop more robust processes for the reporting of study designs and findings and place greater emphasis on reflexivity' (ibid: 8).

However, focused and rapid-type ethnographies within applied health research have been criticised for reducing ethnography to a series of observations and not engaging deeply the socio-political dynamics of knowledge production (Rashid, Cain and Goetz 2015, Jowsey 2016). This type of brief enquiry has been previously critically described as 'airplane ethnography' (Bate 1997). Yanow, Ybema and Hulst (2012) have argued that the use of ethnography in organisational research is being dominated by positivist psychological and social-psychological approaches. Ingold has criticised the recent popularity and overuse of 'ethnographicness' and its conflation with observations because it undermines both the ontological commitment and the educational purpose of anthropology as a discipline, and its principal way of working, participant observation (Ingold 2014). In anthropological research practice, fieldwork involving prolonged participant observation is regarded as the foundation of producing a good ethnography. It involves sustained immersion in culture and the developing of theory from emerging observational patterns (Bernard 2002: 322-324, Watson 1999). Furthermore, it includes long-term and open-ended commitment, generous attentiveness, relational depth, and sensitivity to the cultural context and norms (Ingold 2014: 386).

Rashid, Cain and Goetz (2015: 11-13) have identified certain limitations in the application of ethnographic methods in health research such as inhibitions in being open about relationships on the field, limited epistemological engagement, lack of cultural contextualization, avoidance of discussing of ethical dilemmas and few opportunities for reflexivity and thick description. These identified limitations could be either attributed to institutional constraints when conducting observations, epistemological differences or variation in reporting requirements between academic disciplines. For example engaging with positionality and the concept of culture might be core for an audience of anthropology scholars whereas it might not be considered necessary by academics in public health evaluation and management. This epistemological friction lies at the heart of this unlikely marriage.

Ethnography has been framed by phenomenology, participant observation, and understanding 'emic' subjectivity whereas evaluation is grounded in empiricism, input-output-outcome models and an understanding of how interventions work through 'etic' objectivity. While ethnography and evaluation have been developed as two distinct fields, a theory and method for 'ethnographic evaluation' was proposed over 25 years ago in the field of educational anthropology by Dorr-Bremme. Five principles for 'ethnographic evaluation' were proposed: (i) treating the program's definition and boundaries as problematic, (ii) focusing inquiry on central interactional events, (iii) emphasizing ethnographic observation, (iv) using interviews to guide and explicate observation, and (v) using ethnographic rules of evidence (Dorr-Bremme 1985). Even though this framework hasn't been widely adopted by the research community, it raises valuable points on the process of adjusting ethnographic design to suit the programme that is being evaluated and tensions arising from this

‘adjustment’ particularly when publicly-funded evaluators evaluate publicly-funded programmes using ethnographic means.

It seems that much of the discussion on the application of ethnographic methods in healthcare evaluation is based around whether healthcare ethnography is/should be considered different to the study of social groupings where prolonged fieldwork is possible. Discussing the particularities of the hospital as ‘the field’, different authors have highlighted the similarities of hospital environments to small island communities as both are defined by isolation and cultural embeddedness (Long *et al.* 2008), and discussed the limitations of undertaking participant observation within highly specialised healthcare environments (Wind 2008). Some organisational anthropologists have argued that doing fieldwork in professionalised organisations is (or should be) no different to ‘traditional’ anthropological environments (Garsten and Nyqvist 2014) as organisations are the product of a complex social order with culture-specific organising principles and rules of behaviour. These arguments tend to differ between ‘purists’ and ‘pragmatists’: the former valuing what ‘ought’ to be done and the latter what ‘can’ be done (see for example discussion between Josey 2016, Sales and Iwashyna 2016, and Waring and Jones 2016 regarding what level of observational study design can be considered ethnographic). The challenge lies in preserving these qualities within shorter timeframes and narrower enquiries.

We seek to take on this challenge and discuss how we endeavoured to preserve ethnographicness within applied health research enquiry. We explicate the distinct contribution that an ethnographic approach can make to the evaluation of quality improvement initiatives, drawing on examples from an ethnographic evaluation of the impact of a participatory healthcare quality improvement intervention in Intensive Care Units (ICU) and lung cancer services in two hospitals in England. Reflections are provided by members of the research, evaluation and clinical teams to provide multiple insights into this process.

The intervention

The intervention under observation was a type of participatory service improvement called ‘Accelerated Experience-Based Co-Design (AEBCD)’. Key to this intervention was that patient, carer and staff experiences were used systematically and synergistically to co-design and improve services, and that patients and family members were involved as equal partners throughout. Part of the process includes staff and patients watching a film of patients talking about their experiences of care. This ‘trigger film’ aims to elicit discussion on priorities of improvement which are ranked using ‘emotional mapping’ to identify highs and lows in patient experience. Negative aspects of patient experience are prioritised for improvement. Mixed patient and staff groups tackle specific areas for improvement in co-design meetings over a period of 3-6 months (Bate and Robert 1997).

The AEBCD quality improvement intervention took place in two clinical services (intensive care and lung cancer) in two hospital sites: site 1 was a specialist hospital treating conditions

of a specific physiological system and site 2 was a local general hospital covering elective and emergency care. It involved two phases: the discovery phase of interviews and consensus events (three 2-3-hour events) and a co-design phase where staff and patients worked in partnership to design and implement service improvements which reflect patient experience priorities (four to ten 1-hour events). The detailed phases of the process and how the ethnographic methods were mapped onto the intervention activities are described in table 1.

[enter table 1 here]

The specifics of the intervention and its outcomes are described in further detail in Locock *et al.* (2014) and the roles that patients took in implementation are described in further detail in Boaz *et al.* (2015).

The ethnographic evaluation

An ethnographic process evaluation using multiple data sources was conducted alongside the implementation process. Ethical approval was obtained to observe the set-up period as well as the implementation phase that was organised in two pathways by the project facilitators. The evaluation used multiple data sources, including observation, interviews, documentary analysis and administrative data on costs. The ethnographer interviewed and observed all the key research team participants. All interviews were conducted using the principles of 'active interviewing' which considers interviewers and interviewees as equal partners in constructing meaning around an interview (Holstein and Gubrium 1995). Meetings of the core group and project advisory group were also included in observations. Within each trust, stakeholders were interviewed and observed including not just staff, patients and carers involved directly in the intervention, but also the service improvement facilitators and senior managers at each site. All staff and patient workshops and meeting associated with the co-design process were included in observations. Relevant board or other senior management committees were observed. Relevant members of staff were informed about observing routine day-to-day activities.

More specifically, all four improvement projects involved 96 staff members and 63 patients. Data collection took place over 12 months and included the compilation and analysis of 155 hours of observations of facilitator training sessions, staff and patient workshops, joint events, co-design meetings and celebration events, project steering group and core group meetings; 29 NHS staff and manager interviews; two group interviews with patient participants to discuss their involvement and perceptions of the process during each step of the intervention; and service improvement logs listing local improvement activities completed by the locally employed quality improvement facilitators). Interviews, training sessions and events were audio-recorded and transcribed. Observations, brief conversations and informal interviews were recorded as field notes and 22 reflective diaries were completed by staff members to gather direct information and reflections on issues and concerns regarding the day-to-day running of the project. This paper is written in the third-person because the authors did not all have the same first-hand experiences. Instead specific

examples are mentioned which indicate who took part, observed or reflected on which activity.

Positioning the ethnographer within the clinical setting

The quality improvement activities took place over a total of 15 months in four clinical pathways. Observations were conducted on activities which took place in different sites over the same period. Accessing each site involved a 2-hour commute each way. Clinical staff returned to their clinical work once quality improvement activities were over. Follow-ups and interview arrangements were made to make most of each visit. Therefore, opportunities for prolonged ethnographic immersion were limited. Nevertheless, significant familiarity with key participants was achieved through maximising opportunities for engagement before and after co-design events and informal discussions on their experiences of participation. This led to a deeper understanding of the realities of delivering user-centred quality improvement in each pathway. Building a close relationship with the quality improvement facilitators was important in understanding who were the key actors behind the scenes. Participating in project activities as a helper – for example helping the facilitators set up the room, distribute information sheets, clear up– built rapport and provided an insight into the challenges of enabling participatory quality improvement in hospital settings.

Project facilitators introduced the scope of the ethnography and facilitated access to the site. Observations were coupled with interviews in an iterative enquiry circle which provided progressive contextualisation. Meeting people regularly over six months helped establish rapport and enabled more personalised conversations. These informal layers of engagement provided progressive social approval by project participants. The project facilitator described in a reflective account after the end of the project how patients and staff experienced having an ethnographer around:

'I had explained to all participating staff and patients about the presence of an ethnographer. Both ICU and cancer patients are very vulnerable because they have been through life-threatening situations. Staff also work in pressing environments and both groups shared experiences that were very close to their heart. They would only be able to share those private experiences if they felt they were in a safe space. They were not prevented from sharing because they felt they could trust [the ethnographer]. It wasn't just that [the ethnographer's] presence was gentle and unassuming but also the fact that [the ethnographer] was prepared to listen to their stories and was genuinely interested in what they had to say. In some way staff wanted to test [the ethnographer] personally to see if [she] would earn their trust and [she] did achieve that.' (reflective account, ICU and lung cancer, project facilitator)

The process of acceptance was gradual yet important in not disturbing the project flow. Conducting a focused ethnographic evaluation required navigating distance and closeness. Distance was there because the intervention was finite in character, taking place over a series of 1-3-hour meetings after which participants returned to their jobs or homes. Also, the

ethnographer did not have clinical training and or experiences as an ICU or cancer care patient or relative. Closeness was achieved through progressively getting to know participants and understanding their experiences.

Making sense of the project in collaboration with participants helped gain participants' trust. Former patients involved in quality improvement were informed at the beginning of each session about the role of the ethnographer observing the sessions and how fieldnotes would be used in the research process. Informal conversations before and after co-design events enabled rapport to be established and trust to be built around confidentiality and the research process. Most participants were motivated to participate to 'give something back' to the service and lead to quality improvement and there was a shared sense of purpose by everyone in the room that there was joint working to achieve this goal. Reflecting on the process of shared learning, the facilitator mentioned:

'The presence of an ethnographer throughout the whole process enabled all participants (staff, patients, carers, facilitators) to move from a place of caution/mistrust to accepting as a member of the 'club'. This place of acceptance of the ethnographer dovetailed into the process of creating a safe, social space which was a by-product of the dynamics of the EBCD process. This observation and insight into each other's worlds generated a culture of enquiry and understanding. Both sides were trying to make sense of each other's experiences; simultaneously being involved in the AEBCD process, and layered on top of that the interviews by the ethnographer enables further enquiry – deeper thinking and reflections – which then led to a richer insight – a real crystallisation of an observation/insight/understanding ' (reflective diary, ICU and lung cancer, project facilitator)

This non-threatening position of observing co-production provided a vantage point to understand the ways that participants engaged with this process. The observations were based around 'how' people made sense of co-production, why people chose to participate and how their views changed the project. The ethnographic account provided an interpretivist view of 'project reality' triangulated with patient and staff perspectives. Engaging participants in an ongoing dialogue about the ethnographer's observations helped contextualise emergent themes such as increased clinical workloads and emotional labour and burnout experienced by professionals in ICU and cancer clinical care. Fieldnotes were supplemented with reflective diaries provided by key participants. This allowed key participants to contribute directly (and regularly) to data generation accounts of their own experiences written on their own terms. This form of dialogic ethnography, both inductive and deductive in nature, also included service improvement logs and project summaries produced by NHS staff. These were valuable to understand what happens between co-production events when researchers are not there to observe.

Achieving attunement with patient and professional groups

Significant effort was placed on relationship-building and spending time with project facilitators and understanding their needs and concerns with project implementation. In therapeutic encounters, 'attunement' and particularly 'empathetic attunement' is considered a key process of understanding and resonating with the service users' personal and often uncomfortable experiences (Finlay 2015). Ingold acknowledges 'gradual attunement of movement and perception' as key to learning and being able to perform certain tasks within an ever-shifting environment (Ingold 2000: 357). The concept of attunement is used here as a process of getting to know the host clinical culture, their challenges and ways of doing things. It describes an intentional, gradual and mutual learning process of getting to know participants' experiences and world views, and becoming known too.

It was observed that different professional groups had their own norms and ways of doing things and that participatory quality improvement temporarily disrupted these norms by offering a small window for reflection and change. This was a time when staff often felt vulnerable and exposed. Being attuned and responsive to participants' emotional states was key in timing data collection. In this project, the ethnographer's position was not just that of the observer, but also included practical support as described above. The project facilitator offered a reflection on the role of the ethnographer:

'I think also that your role was really pivotal. So, it was really good to have met up with the investigators, and do the advisory and the core group meetings, and they were really important. I think they were really useful because you were kind of looking back but looking forward to, and it was important to re-focus on the purpose of the research. So they were really important, but for me to have you, kind of, there, especially in the beginning, to help and be supportive, because we're learning so much, so quickly, and particularly with the co-design group, it was just really, really useful. But also, it gave the opportunity to think about what we're doing and talk about the culture, to be honest with somebody outside of the Trust, do you know what I mean? So, I think, I was trying to imagine what this would have been like without you, and I think it would have been pretty unbearable! Just because we had the opportunities, you were like the go-between, do you know?' (exit interview, ICU, project facilitator)

These were emerged roles that fitted within the enactment of the intervention within the remits the ethical permissions acquired. Harklau and Norwood (2005:280) note that evaluators take multiple positions such as critical friend, co-investigator or facilitator. Other authors have identified the following roles: 'problem solver' (Weiss 1998:98), 'negotiator' (Greene 1999), or coach, facilitator, and trainer (Fetterman 2000:4).

The ethnographic process evolved synergistically with the intervention. Engagement varied between sites and mirrored the implementation process. The ethnography provided a framework to understand of the subtle power dynamics that quality improvement upsets. For example, for patients, success meant having their suggestions taken on board and seeing their experiences lead to tangible service improvement. For staff, success meant a more efficient

way of working that freed up clinical time. For managers, success meant improved patient experience survey scores, less complaints and lowered litigation costs. Attuned ethnography provided a reflective space for facilitators, participants and researchers to reflect on what success in quality improvement looks like for everybody. One facilitator noted:

'The focused ethnography generated reflection, enquiry, insight, trying to make sense of the new order. It provided a platform to observe and scrutinize the everyday world that healthcare professionals come to accept and normalise – when it is far from normal. It enabled facing the reality of internal politics, game players and hierarchical power struggles.' (reflective piece, ICU, facilitator).

As the project progressed, the organising principles of each pathway and the implementation process within each pathway became clearer. For example, intensive care units are organised as small compact services with a limited number of very specialised staff members. Patients were usually treated in the unit for a period of a few days. By contrast, the lung cancer pathway involved many teams, which did not regularly meet, and patients who are treated over much longer periods of time. Therefore, the social organisation of the two pathways varied significantly not only in terms of staff participants but also in terms of patient participants. Understanding the organisational context within which quality improvement takes place played a role in contextualising barriers to recruitment and variation in outcomes at the end of the project.

Attunement to clinical cultures also helped understand the barriers and enablers to participation. For example, staff were allowed to take part in experience-based co-design during clinical time and were offered remuneration when attending meetings during their days off. Nevertheless, staff regularly attended meetings on days off or at the end of their shift. They mentioned that this arrangement guaranteed their participation as very often their clinical duties did not allow them to attend meetings even if they would have liked to be able to do so. Observations also enabled a progressive understanding of the organisational backdrop against which quality improvement happens such as for example the limited time availability that no-one seemed to be talking about:

'It has come to my attention that even though staff are formally allowed to attend co-design meetings within work hours, they almost never do because they are always busy. They either come to early morning meetings straight after their night shift or during their days off. I can even tell who has worked through the night because they are paler than usual and the lines on their face are deeper. The ones that come on their days off wear 'civilian' clothes' (fieldnote excerpt, ICU, month 6)

Understanding organisational limitations was key to understanding the process and outcomes of co-design. It also helped explain elements of the intervention that appeared unusual. This was further complemented by engaging co-design participants in collaborative enquiry.

Engaging professionals in guiding observational and interview design

Interviews and observations were not treated as the end-points of data collection but rather the starting points on an ongoing and sustained dialogue that shaped the nature of enquiry. Using ethnographic principles in evaluation acknowledges informants as actors with agency that shape the process of research production, not as passive actors that simply get interviewed or observed.

In each of the four interventions, observations were 'sandwiched' between baseline and end-of-project interviews. The first round of interviews aimed at staff perception of co-design and participatory improvement. End-of-project interviews aimed at understanding the perceived contribution of this intervention to improved services and patient experience. The first round of interviews also helped understand professional relationships within the clinical pathways and the symbolic meaning of this intervention through opening up dialogue with individual participants. Through this process interviewees were asked to suggest activities to observe. This way they were encouraged to shape the data collection process. They embraced this opportunity as they wanted to share the aspects of their professional environment that troubled them the most.

The level of interaction between the ethnographer and the research participants who took part in the intervention varied significantly throughout the project. Clinicians, former and current patients, relatives and researchers moved between active and passive roles at different stages of the project. The following example describes what happened when clinical staff found the ethnographer's mundane observations interesting:

'Doing research in hospital settings requires a lot of patience. I have spent a lot of time waiting for people to turn up for their interviews. At least I get to wait in waiting rooms so I get to observe what's going on. In a funny way my ad hoc observations ended up contributing (indirectly) to the intervention. I spent nearly one hour in the main waiting area where there was a fish tank. There was nothing else to look at so I spent a lot of time observing the fish, which I found (to my surprise) quite a calming experience. It was a very different experience from waiting at the chemotherapy clinic waiting room. There was nothing to look at apart from clutter, old notices on the wall and magazine piles on the tables. I gathered my courage and mentioned that to the senior nurse. She was a bit surprised to hear my observations because she had never waited in the chemo waiting room for a long time. So they decided that as part of the co-design group that looked into the 'breaking bad news environment' we would do a tour of all the areas where patients wait. So this little group consisting of three nurses (who were also project facilitators), two patients and myself visited all the waiting areas, sat on the chairs for 5 minutes, looked around and discussed our impressions. They too liked the calming effect of the fish tank. It turned out that the fish tanks were donated by a local pet shop and they were able to acquire a couple more for other waiting areas.' (fieldnote excerpt, lung cancer month 4).

This example highlights the value of non-prescribed observations and how they might be of interest and use to 'insiders' who might not take particular notice as they operate daily in that environment. This particular intervention provided an equalising space and in doing so allowed different forms of knowledge to be created and synergistically developed. Themes emerging in observations and informal conversations were triangulated and explicated in conversation with the participants involved. This collective learning journey perhaps was enabled because of the participatory nature of the intervention where staff and patient experiences were openly shared. Should the intervention not been participatory in nature, a different type of ethnographic engagement might have developed.

Discussion

This paper highlights the distinct contribution that ethnographic approaches offer to the evaluation of quality improvement and address the practicalities of ethnographic research when it's not possible to spend much time in the field and when that field is a hospital. We suggest that a meaningful ethnography within a short timeframe can be achieved by engaging participants in collaborative enquiry, inviting participants to contribute their own reflective accounts, engaging participants to guide observational design and maximising contact time before and after intervention events. These 'methodological hacks' enabled the preservation of the following ethnographic qualities irrespective of the shorter timeframe: inductive enquiry, respect for organisational cultures, collaborative ethos, observations guiding interviews and emphasis on thick description.

Overall, the nature of this ethnography required a focused approach to data collection as it was mainly concerned with the process of applying an accelerated form of quality improvement to intensive care unit and lung cancer pathways. Furthermore, the observational remit was tied to the intervention activities and participants were mostly available during quality improvement activities. Observations, interviews and interpretations emerged through immersion and attunement to clinical cultures that led to an understanding of the varied ways of 'doing' quality improvement. A focused ethnographic evaluation approach highlighted how service improvement was embraced differently by staff and patients and was enacted according to local organisational cultures. The flexibility that this adapted ethnographic approach provided throughout the research process enabled documentation of the intricate and highly personalised facets of participatory health service design within very different complex adaptive clinical environments.

Orton *et al.* (2016) and Mackenzie (1994) have noted that the non-linear process of ethnographic design provides flexibility of method that allows changes in direction as the research proceeds. This change in direction however in applied health services research can only take place within the pre-agreed boundaries of the approved research protocol. Yet ethnographic research might point to elements of clinical social organisation that might have not been previously acknowledged as important, generate research questions that have not been previously considered and identify participants that have not been previously included as relevant. Flexibility in change of research direction might be more feasible in community settings than in hospital-settings.

Our focused ethnographic evaluation approach acknowledges that employing ethnographic methods in acute hospital-based settings is different from community-based settings due to the intensity of patient experience, boundaries of quality improvement interventions, intensive clinical work schedules and ethical and R&D approval procedures. Even though observational design patterns were governed by a research ethics protocol and pre-negotiated access arrangements, the pattern of observation was nevertheless tailored to the culture of clinical pathways involved and availability for research participation. Some of these challenges are inherent to doing ethnography in hospital settings. The relationship between ethnographers and their clinical communities can be highly complex because relationships with healthcare professionals, particularly senior colleagues, are entangled within professional hierarchies and fear of public scrutiny. Studying in knowledge-enfranchised communities challenges the way relationships with informants are taken for granted (Nader 1996). Oliver has argued that powerful people have an understanding of research and the means to abstain from its scrutiny (Oliver 2007). Perhaps some clinical professionals *chose* to abstain from the co-design process to avoid being scrutinised.

Using ethnography in evaluating quality improvement provided adaptive and responsive approaches that captured the diversity and complexity of perceptions of this new intervention among a range of participants such as terminally ill patients, survivors of rare medical conditions, clinical staff, hospital managers, academics and researchers. Specifically ethnographic methods helped us to understand the tangible contribution of illness narratives and participation to service improvement, address organisational cultural variation and power dynamics, fine tune interview and questionnaire design, provide evidence of implementation processes, capture variation in participant perspectives and understand barriers and enablers to innovation from different participant' vantage points.

Searching for recurring patterns and themes allows ethnographers to reach conclusions on the applications of particular principles of social organisation. In a hospital setting, understanding organisational patterns of clinical cultures was not always easy due to the high workload of healthcare professionals and their limited availability for 'hanging out'. In this case as the process of co-design was devolved to healthcare professionals and there was significant local variation in the processes they employed. Therefore, in order to capture this diversity and to enhance our understanding of the reasons behind locally-made decisions observations and data collection through other sources occurred in an iterative cycle: observations led to unstructured data collection which fed into research design which led to structured data being collected (interviews, questionnaires, focus groups) which then led to more tailored observations.

Bringing adverse patient experience into service improvement is a process that requires not only skills in change management but also sensitivity as it could be perceived as a threatening process to staff engaged in service delivery. Adopting a 'customer-centred' approach to improving and evaluating healthcare is one way of improving services, yet the dimensions of this approach are complex as they swing between neoliberal values of the centrality of the market and individual choice as well as democratic principles of equity and advocacy (Ward et al. 2010: 66). Surveys and structured interviews alone would not have allowed an understanding of the dynamics of project implementation as these processes were often expressed in an unpredictable and unstructured way. Data was collected and elicited through

naturalistic enquiry that involved progressively prolonged contact time with participants as the project unfolded. For projects involving patients in participatory healthcare improvement a methodological toolkit that documents how participants view not only the intervention but the processes of involvement could provide key information on the views of service users who in this case are both customers and funders of public health services.

The professional relationship between researchers and research participants is particularly sensitive in health services research because the research examines the relationship between patients in vulnerable physical states and their healthcare providers. This relationship is complex as it can be entangled with feelings of gratitude, remorse, trying to make sense of treatment and its aftermath and other deep-seated feelings relating to the outcomes of the clinical encounter. Quality improvement provides participants with an opportunity to directly critique the healthcare they received which as a process has the potential to change the power dynamic of the healthcare provision pathway (Hrisos and Thompson 2013). This renders the setting of quality improvement into a potential minefield when dissatisfied patients and relatives choose to voice their concerns on poor care, medical negligence and ineffective communication through this platform. Observing this process in a research capacity could make staff participants particularly nervous as they would not be able to control the type of information being disclosed by patient participants. Alternately, patient and carer participants can become nervous about their ability to meaningfully contribute to research on healthcare delivery as 'lay' participants. It is these sensitive dimensions that ethnography helps document and understand.

Hulst, Ybema and Yanow (2015) have illustrated how organisational ethnography – through the researcher's immersion in, and analysis of, the field setting – is able to capture the unfolding of organisational life and its dynamism in two different ways: taking 'long shots' by following developments over an extended period of time (long-term dynamics), and making 'close-ups' of the micro-dynamics of day-to-day organizational life (short-term dynamics). As emerging healthcare service improvement paradigms have moved away from top-down interventions with limited patient and public participation, there is scope for evaluation models to follow suit and capture different dimensions of bottom-up patient-centred participation processes using a focused ethnographic evaluation approach. Greenhalgh and Swinglehurst have suggested that 'it is time for research sponsors, researchers, journal editors, trainers and practitioners to move beyond the assumption that whatever the research question, a large, controlled, technology-on- versus-technology-off experiment will necessarily provide better evidence than a small-scale, carefully conducted ethnographic case study' (Greenhalgh and Swinglehurst 2011: 51). Focused and rapid ethnographies of health services and improvement interventions have provided effective ways to identify problematic organisational practices and pathways to quality improvement (Vindrola-Padros and Vindrola-Padros 2017). This does not mean that ethnographies should be conducted superficially and reduced to series of time-limited observations as Ingold (2014) Rashid et al. (2015) and Jowsey (2016) have pointed out. By engaging participants in an inclusive research design, ethnographers can harness the potential of a naturalistic enquiry that is participatory in nature and targeted in its approach. A focused ethnographic evaluation in hospital settings

can be a jointly shaped process that can account for the intricate and highly personalised facets of participatory quality improvement as well as contribute to organisational change.

Acknowledgements: This project was funded by the UK National Institute for Health Research Health Services and Delivery Research Programme (Project Number 10/1009/14). This study was approved by the National Research Ethics Committee North West, reference 11/NW/0653. At the time of writing Louise Locock was supported by the NIHR Oxford Biomedical Research Centre. The views and opinions expressed therein are those of the authors and do not necessarily reflect those of the HS & DR Programme, NIHR, NHS or the Department of Health.

References

- Alcorn, T.E., Opryszko M.C. & Schwab K.J. 2011. Formative ethnographic research to improve evaluation of a novel water system in Ghana. *American Journal of Tropical Medical Hygiene*, 84: 801-805 doi: 10.4269/ajtmh.2011.10-0460
- Aveling, E.L., Martin G, Jiménez García S., Martin L., Herbert G., Armstrong N., Dixon-Woods M. and Woodhouse I. 2012. Reciprocal peer review for quality improvement: an ethnographic case study of the Improving Lung Cancer Outcomes Project. *BMJ Quality and Safety*, 21:1034–41. doi:10.1136/bmjqs-2012-000944
- Bate, S. P. 1997. Whatever happened to organizational anthropology? *Human Relations*, 50: 1147-71.
- Bate, P. & Robert G. (2007) *Bringing user Experience to Healthcare Improvement: the concepts, methods and practices of experience-based design*. Oxford: Radcliffe Publishing, Oxford
- Bernard, R. 2002 *Research methods in anthropology*. Lanham and Oxford: AltaMira Press
- Bell, S.A. & Aggleton P. 2012. Integrating ethnographic principles in NGO monitoring and impact evaluation. *Journal of International Development*, 24, 795-807 DOI: 10.1002/jid
- Boaz, A., Robert G., Locock L., Sturmey G, Gager G., Vougioukalou S., Ziebland S., Fielden J. 2016. What patients do and their impact on implementation: An ethnographic study of participatory quality improvement projects in English acute hospitals, *Journal of Health Organization and Management*, 30: 258-278 <https://doi.org/10.1108/JHOM-02-2015-0027>

Braaf, S., Manias E., Riley R. 2013. The 'time-out' procedure: an institutional ethnography of how it is conducted in actual clinical practice. *BMJ Quality and Safety*;22: 647–55. DOI: 10.1136/bmjqs-2012-001702

Chambers, E. 2000. *Applied ethnography*. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (second edition). Thousand Oaks, CA: Sage.

Cruz, E.V. and Higginbottom G. 2013. The use of focused ethnography in nursing research. *Nurse Researcher*. 20, 4: 36-43.doi: 10.7748/nr2013.03.20.4.36.e305

Dixon-Woods M and Shojania KG. 2016. Ethnography as a methodological descriptor: the editors' reply. *BMJ Quality and Safety*, 25(7): 555-6 doi: 10.1136/bmjqs-2015-005117

Dorr-Bremme, D.W. 1985. Ethnographic Evaluation: A Theory and Method. *Educational Evaluation and Policy Analysis*, 7: 65-83

Finch, T. L., May C.R., Mair F.A., Mort M., Gask L. 2003. Integrating service development with evaluation in telehealthcare: an ethnographic study. *British Medical Journal*, 327 doi.org/10.1136/bmj.327.7425.1205

Finlay, L. 2015. *Relational Integrative Psychotherapy: Process and Theory in Practice*, Chichester, Sussex: Wiley.

Goffman, E. 1959. *The presentation of self in everyday life*. Garden City, NY: Doubleday.

Goffman, E. 1961. *Asylums*. Garden City, NY: Anchor

Fetterman, David M. 2000. *Foundations of Empowerment Evaluation*. Thousand Oaks, CA: Sage.

Greene, J. C.1999. *Understanding Social Programs through Evaluation*. In *Handbook of Qualitative Research*. Norman K. Denzin and Yvonna S. Lincoln, eds. 981–999. Thousand Oaks, CA: Sage.

Greenhalgh, T. & Swinglehirst D. 2011. Studying technology use as social practice: the untapped potential of ethnography. *BMC Medicine*, 9:45 doi.org/10.1186/1741-7015-9-45

Hammersley, M. 1992. *What's wrong with ethnography?* London: Routledge

Harklau, L. & Norwood R. 2005. Negotiating Researcher Roles in Ethnographic Program Evaluation: A Postmodern Lens. *Anthropology & Education Quarterly*, 36. 279 - 290 DOI: 10.1525/aeq.2005.36.3.278

Holstein, J. A. & Gubrium, J. F. 1995. *Qualitative Research Methods: The active interview* Thousand Oaks, CA: SAGE Publications Ltd doi: 10.4135/9781412986120

Hrisos, S, Thomson R. 2013. Seeing It from Both Sides: Do Approaches to Involving Patients in Improving Their Safety Risk Damaging the Trust between Patients and Healthcare

Professionals? An Interview Study. PLoS ONE 8(11): e80759. doi: 10.1371/journal.pone.0080759

Iedema, R., Merrick E., Piper D., Britton K., Gray J., Verma R. and Manning N. 2010. Codesigning as discursive practice in emergency health services: the architecture of deliberation. *The Journal of Applied Behavioral Science*. 46 (1): 73 -90 [doi/abs/10.1177/0021886309357544](https://doi.org/10.1177/0021886309357544)

Ingold T. 2000. *The perception of the environment. Essays on livelihood, dwelling and skill*. London: Routledge

Ingold, T. 2014. That's enough about ethnography! *Hau: Journal of Ethnographic Theory* 4 (1): 383–395 [dx.doi.org/10.14318/hau4.1.021](https://doi.org/10.14318/hau4.1.021)

Jowsey, T. 2016. Watering down ethnography. *BMJ Quality and Safety*, 25:7 554-555 [dx.doi.org/10.1136/bmjqs-2015-005062](https://doi.org/10.1136/bmjqs-2015-005062)

Kleinman, A. 1987. Anthropology and psychiatry: The role of culture in cross-cultural research on illness. *The British Journal of Psychiatry*, 151, 447-454 <https://www.ncbi.nlm.nih.gov/pubmed/3447661>

Knoblauch, H. 2005. Focused ethnography. *Forum: Qualitative Social Research*. 6, 3, 44 <http://www.qualitative-research.net/index.php/fqs/article/view/20/43>

Lassiter, L.E. 2005. Collaborative ethnography and public anthropology. *Current Anthropology*, 46, 83-105

Locock, L., Robert G. , Boaz A., Vougioukalou S., Shuldham C., Fielden, J., Zieblan S., Gager M., Tolleyfield R., Pearcey J. 2014. Using a national archive of patient experience narratives to promote local patient-centred quality improvement: an ethnographic process evaluation of 'accelerated' Experience-based Co-design. *Journal of Health Services Research and Policy*, 19 (4), 200–207. doi.org/10.1177/1355819614531565

Mackenzie, A.E. 1994 Evaluating ethnography: considerations for analysis. *Journal of Advanced Nursing*, 19, 774-781 [doi/10.1111/j.1365-2648.1994.tb01150.x](https://doi.org/10.1111/j.1365-2648.1994.tb01150.x)

Morgan-Trimmer S. & Wood F. 2016. Ethnographic methods for process evaluations of complex health behaviour interventions. *Trials*, 17:232

Moss, D. 2006. Anti-Social Anthropology? Objectivity, Objection, and the Ethnography of Public Policy and Professional Communities, *The Journal of the Royal Anthropological Institute*, 12, 935-956

Nader, L. 1996. *Naked science: anthropological inquiry into boundaries, power, and knowledge*. New York: Routledge

Oliver, M. 2007. Changing the social relations of research production? *Disability, handicap & Society*, 7,101-114 doi/abs/10.1080/02674649266780141

Orton L., Halliday E., Collins M., Egan M., Lewis S., Ponsford R., Powell K., Salway S., Townsend A., Whitehead M. & Popay J. 2017. Putting context centre stage: evidence from a systems evaluation of an area based empowerment initiative in England. *Critical Public Health*, 27, 477-489 doi/full/10.1080/09581596.2016.1250868

Pink, S. and Morgan J. 2013. Short-term ethnography: intense routes to knowing. *Symbolic Interaction*, 36, 351–61. DOI: 10.1002/symb.66

Rashid, M., Caine V. and Goetz H. 2015. The encounters and challenges of ethnography as methodology in health research. *International Journal of Qualitative Methods*, 1-16 <http://journals.sagepub.com/doi/full/10.1177/1609406915621421>

Sales, A. and Iwashyna T.J. 2016. Comment on ‘Ethnography as a methodological descriptor: the editors reply’, 25:7 558 doi:10.1136/bmjqs-2016-005385

Savage, J. 2006. Ethnographic evidence: The value of applied ethnography in healthcare. *Journal of Research in Nursing*, 11, 383–393. doi/abs/10.1177/1744987106068297

Vindrola-Padros, C. and Vindrola-Padros B. 2017. Quick and dirty? A systematic review of the use of rapid ethnographies in healthcare organisation and delivery. *BMJ Quality and Safety*, 0:1–10. doi:10.1136/bmjqs-2017-007226

Waring, J. and Jones L. 2016. Maintaining the link between methodology and method in ethnographic health research, *BMJ Quality and Safety*, 25, 7, 556-557 dx.doi.org/10.1136/bmjqs-2016-005325

Watson W. 1999. *Being There. Fieldwork in Anthropology*. London: Pluto

Wind, G. 2008. Negotiated interactive observation: Doing fieldwork in hospital settings, *Anthropology & Medicine*, 15:2, 79-89 doi: 10.1080/13648470802127098

Yanow, D., Ybema S., and van Hulst, M. 2012. ‘Practising organizational ethnography’, in G. Symon and C. Cassell (eds.), *Qualitative Organizational Research*. London: Sage. pp. 331-350.

Ybema, S., Yanow, D., Wels, H., et al. 2009. Studying everyday organisational life. In S. Ybema, D. Yanow, H. Wels et al. (Eds), *Organizational ethnography: Studying the complexity of everyday life*. London: Sage. 1-20

Table 1

	Month	AEBCD Intervention (quality improvement)	Focused ethnographic evaluation
Research Phase 1	0	Patient and staff recruitment	Observations of meetings, informal interviews to understand QI initiation, engagement with gatekeepers
	1	Interviews	Collation and analysis of project documents, informal interviews on experiences of staff participation
	2	Patient event and staff event	Observations of key events, collection of facilitator reflective diaries, semi-structured baseline interviews with participating staff and patients
	3	Joint staff-patient event	Observations of key events, end-of-event questionnaires, facilitator reflective diaries
Research Phase 2	4	Co-design group meetings	Observations of co-design meetings, facilitator reflective diaries, informal interviews
	5	Co-design group meetings	Observations, questionnaires, reflective diaries, informal interviews
	6	Co-design group meetings, testing improvements and celebration event	Observations, end-of-project patient focus groups, reflective diaries, end-of-project semi-structured staff interviews
Implementation	7-9	Application of service improvements and monitoring	End-of-project semi-structured staff interviews, cost analysis, service improvement logs to evidence theory of change, documentary analysis, informal interviews

Table 1: Key activities and methodologies in AEBCD research and evaluation using an indicative timeframe (NB: these activities took place over a total of 15 months for all 4 projects concerned as project start dates were phased and there was also variation in duration between sites)