A practitioner researcher's opportunities and challenges in accessing interpretive case participants in a public healthcare setting

Louise Doyle
Health Service Executive, Dublin, Ireland

Abstract

Purpose – The purpose of this paper is to document the opportunities and challenges of a practitioner researcher in accessing interpretive case participants in the public healthcare sector in Ireland.

Design/methodology/approach – The paper documents the research design and implementation phases of a longitudinal interpretive research project with specific focus on, research ethics, preparing for data collection, identifying and recruiting the research participants and analysis of the findings based on the specific nuances of the public health context and design considerations. Considerations as an insider researcher in a large public organisation are also presented.

Findings – Conducting interpretive research in a healthcare setting presents both opportunities and some challenges; key amongst these is agreed access to research participants. In addition, with research taking place in a healthcare environment, the potential for disclosure of information regarding something harmful to patients or of a criminal nature exists. This risk can be addressed through the ethical approval process documented in this paper. Insider researcher considerations are also explored focussing on the specific nuances affiliate to carrying out a longitudinal interpretive study in a public healthcare setting.

Research limitations/implications – Insights for those wishing to conduct longitudinal interpretive case research in the public healthcare setting are included. The implications for enhanced engagement with interpretive research in this context are addressed.

Originality/value – Through documenting the opportunities and challenges of a practitioner researcher in accessing research participants in the public healthcare sector, this paper discusses insider researcher considerations and seeks to address concerns in the literature regarding insufficient detail relating to interpretive research design and implementation in healthcare contexts.

Keywords Insider research, Reflection, Longitudinal, Public healthcare, Accessing research participants, Interpretive case study, Practitioner researcher

Paper type Technical paper

1. Introduction

As interpretive case research is an increasingly popular approach amongst qualitative researchers (Thomas, 2011), there are greater calls for researcher accounts on how to carry out these studies in the public healthcare sector (Crowe *et al.*, 2011; Hyett *et al.*, 2014). In particular, there is concern that insufficient detail is offered relating to consistent application of research design, data collection and data analysis in longitudinal interpretive studies (Barratt *et al.*, 2011; Franklin *et al.*, 2012), when the researcher is carrying out qualitative research in their own work setting (Asselin, 2003). This paper seeks to address this gap by documenting the opportunities and challenges of a practitioner researcher when

accessing research participants during the implementation of a single longitudinal interpretive case study in the public healthcare sector in Ireland. It acknowledges that those conducting research in healthcare settings face particular ethical rules and standards covered by both external and internal regulation (Franklin *et al.*, 2012) and considers the complex nature of qualitative research in this setting. It addresses the research design and implementation phases of an interpretive case, with specific focus on preparing for data collection and identifying and recruiting the research participants in this healthcare context. The researcher in this study can be conceived of as an "insider", as she is a member of the healthcare organisation she is studying (Dwyer and Buckle, 2009). As such, insider researcher considerations in carrying out an interpretive case study in a healthcare setting are also explored. As the paper documents a personal journey, the researcher refers to herself in the first person throughout.

While the research itself is beyond the realms of this paper, it is worth noting that the impetus for the study arose from an aspect of my professional experience, and as an aspect of my doctorate in business administration research. Having completed an extensive literature review on this topic, an interpretivist paradigm was adopted which was in sympathy with the social constructionist theoretical underpinnings of the study and the research aim. A single case study approach was utilised as a suitable method to investigate the proposed research, as it allowed for the subjective and contextual experiences of the participants to be incorporated. The research implementation involved a number of stages carried out over a 12-month period including; research design, obtaining ethical approval; development of a data collection protocol; participant identification and recruitment; data collection centred on a series of semi-structured interviews with individual participants; organisational document review; maintenance of a case study database and the maintenance of a reflective log. This paper provides an overview of the research design, including considerations as an insider researcher, followed by an exploration of preparation for data collection, obtaining ethical approval, identification and recruitment of research participants and analysis of the findings based on the specific nuances of the public health context and design considerations. It concludes with insights for those intending to carry out interpretive case study research in this setting and an outline of the research limitations affiliate to this method.

2. Research design

My study sought to shed light on how the multi-levels of individual learning and team learning interact in teams in public healthcare organisations. Having considered alternative methods, I used single case design with multiple embedded units of analysis, in the form of the participants (non-consultant hospital doctors (NCHDs)) working in the Irish public health service. Having an embedded design can avoid the case study becoming too abstract and can serve as a mechanism to focus the inquiry. It can also enhance the insights which arise from the case study (Meyer, 2001; Yin, 2014), offering greater contextual richness. This type of design fits the study of the interaction of the multi-levels of learning as it directs attention to the subunits in the study (Meyer, 2001), while also acknowledging learning as a process that can develop over time as opposed to a single instance (Kelliher, 2011).

2.1 Considerations as an insider researcher

While my role is now in Leadership, Education and Talent Development in the Irish Health Service Executive (HSE)[1], when I began the implementation of this study, I was working as a business manager in the National Doctors Training and Planning (NDTP) department of the HSE. Working in NDTP made it possible for me to seek volunteers from amongst NCHDs working in public hospitals in Ireland to participate in the research.

The benefits of being an insider include having understanding of the work environment including; power structures, what is valued, what it is feasible to do and the language used (Coghlan, 2001; Unluer, 2012). These can smooth the path for the researcher in gaining access and carrying out their research (Unluer, 2012). In my case, I felt that being an insider would give me very good levels of access to participants and relevant documentation.

However, gaining this level of access is not always more straight forward for an insider (Brannick and Coghlan, 2007), and that was my experience too. Given that the HSE is a very large employer being an insider is a relative term depending on where the researcher works in relation to the research participants. Being an insider in a large organisation did not give me access to communicate directly with the NCHDs, it did however, give me access to the Director of NDTP with whom I discussed options for accessing research participants. This led to the decision to seek research participants via the post-graduate medical training bodies. The Director of NDTP provided the introductions, which enabled me to engage directly with these organisations to seek volunteers for the study. This "gatekeeper" process (Franklin *et al.*, 2012; Reeves, 2010) raised unanticipated challenges in terms of distribution and follow-up of participation requests, discussed in further detail below.

My role as an insider in the HSE did, however, assist me with secondary access (Brannick and Coghlan, 2007) in another way, as it gave me insight into the types of publications and reports that existed regarding medical education and training, which were a very useful starting point for identifying sources for the documentary review aspect of the study. The ethics criteria relating to public healthcare investigation were reviewed to ensure the identified documentation did not infringe on either employee or patient rights (Franklin *et al.*, 2012).

In undertaking the study I had a certain level of pre-understanding (Brannick and Coghlan, 2007), which was drawn from my experience working as a learning and development professional in a large academic teaching hospital and then from my role as a business manager in the HSE. However, I was conscious not to assume I understood this context just because I was a member of the wider organisation (Asselin, 2003). Not being an NCHD myself I was also conscious that I was not a part of their sub-culture within the health service (Dwyer and Buckle, 2009). Therefore, I developed a literature-informed interview guide linked to literary themes. To assist in its refinement, I sought feedback on the questions from academic peers and a key informant in the HSE (Innes *et al.*, 2017). The value of this informant was that they could act as a proxy for NCHDs within the organisation, allowing me access to this perspective first hand before formally entering the primary data collection phase of the project.

I then piloted the interview guide with a medical professional working in a public hospital. The purpose of the pilot was to trial the interview procedure and to further refine and develop the questions to be used in interviews with participants (Yin, 2014). The data from the pilot were not used in the study. The benefit of piloting the interview guide in this way is that it provided an opportunity to see it in practice and to judge its suitability, whether any of the questions were too complicated or ambiguous and also to get feedback from the interviewee (Teijlingen van and Hundley, 2001). It allowed me to identify some areas of duplication and also deduce questions that required some re-phrasing. Once refined, the interview process included the opportunity to return to interviewees at interim points over the duration of the study, thereby offering learner insight over an extended period of time (Meyer, 2001).

Role duality is a further challenge that insider researchers may encounter (Brannick and Coghlan, 2007; Unluer, 2012), however, in my case this challenge was minimal as the research participants, in all but one instance, had not had any prior interaction with me, and

only interacted with me in my research capacity. From this perspective conducting research did not impinge on my role as a business manager. As the study took place in the hospital setting with participants involved in the delivery of front-line patient care, which is a different aspect of the overall organisation to my own, mitigation for dual role challenges are as an outsider. My research did, however, provide insights for me into the experiences of NCHDs in their work context which I would not have otherwise had and these insights did on occasion inform my work in NDTP.

2.2 Ethical considerations in a public healthcare environment
Given that the research took place in a public healthcare environment, the potential for disclosure of information regarding something harmful to patients, or of a criminal nature existed (Orb *et al.*, 2000) and could occur during the semi-structured interviews. To address this risk, I sought and obtained ethical approval for the study, incorporating completion of ethics approval paperwork and an interview with the Ethics Committee.

I applied specific guidance from the literature when constructing the informed consent form, filtering its contents under the "ethics as a process" lens (Franklin *et al.*, 2012, p. 1727). Due consideration was given to the notion that human subjects of research should be allowed to agree or refuse to participate in the light of comprehensive information concerning the nature and purpose of the research. The research description within the form helped research participants understand what the research was about and why they were undertaking it. Each potential participant was given time to consider the form before signing. When first developed, the form was overly long and included complex research terms. Following expert advice and key informant engagement (Innes *et al.*, 2017), the form was re-drafted to be clearer and more concise, with the specific research benefits clearly outlined.

Despite conducting the above due diligence, a key piece of guidance from the Ethics Committee was that the confidentiality section of the consent form must include a caveat to address any disclosure of criminal or harmful issues by the research participant during the semi-structured interviews. This experience led me to consider constructing this paper as a tool for others contemplating research in the healthcare context, echoing Miller and Boulton's (2007) contention that the research community should share their experiences from the field.

3. Design implementation
When I first embarked on the research study I had been working in a large academic teaching hospital, however, I moved role before the data collection. Had I still been working there in the data collection phase of the study, the research participants would have likely been drawn from employees of that hospital and it is likely that I would have been able to leverage my insider researcher role to gain the secondary access (Brannick and Coghlan, 2007) required for that phase of the study. My move to HSE–NDTP had implications for the study, most particularly that it allowed me the opportunity to involve research participants working in different hospitals in the health service rather than just the one hospital. It also opened up the opportunity to involve NCHDs in my study. However, a potential challenge as previously stated was that while now an insider in the HSE, my role was more distant from the potential research participants I hoped to access for my study. As a result, I began what was to become a laborious engagement process with a number of divisional gatekeepers in order to contact potential participants within the organisation (Franklin *et al.*, 2012; Reeves, 2010). As recommended by Miller and Boulton (2007), I have documented this experience as a lived example of the nuances and complexities affiliate to accessing and recruiting participants in a large public healthcare organisation, even when one is an organisational "insider" in the wider context. While "access" is increasingly being discussed within reflective accounts of research, it is still common for published empirical accounts to deal

only briefly with this issue, if at all (Reeves, 2010), reinforcing the value of the following account as an example in rather than of practice.

3.1 Accessing and recruiting participants: not as easy as it sounds

I had planned to recruit between 10 and 15 NCHDs as research participants. The selection of interviewees was non-random (Eisenhardt, 1989) and the selection criteria sought to recruit two NCHDs from each of the following specialties; surgery, anaesthesia, psychiatry and radiology, one to be in basic specialty training and one to be in higher specialty training or streamlined training if relevant alongside two participants undertaking their internship. Participants should ideally have been in the same work location/team for the entire duration of the study (one year), although this caveat was not always feasible in practice.

Having obtained support for the study from the Director of NDTP, who agreed to facilitate access to the relevant post-graduate medical training bodies/co-ordinators, I sought the necessary study volunteers/participants. The Director then contacted the four post-graduate medical (training bodies) and the intern network co-ordinators of the three Dublin-based intern networks to inform them of the study and to seek permission for me to contact relevant staff in each for assistance with seeking participants for the study. Each of the training bodies and intern network co-ordinators responded positively to the request. In the case of one training body they brought the request to the Council of the College, while in two other training bodies the request was referred to their respective training committees. The members of these training committees are NCHDs who meet at regular intervals to discuss a range of specialty-related training issues. In all three cases the responses were positive.

While arranging with one of the training bodies, Training Body 2[2], to circulate the study information to their NCHDs, the training manager asked if NCHDs from another specialty within the training body should receive the information about the study. I considered this in liaison with my academic peers and decided that as I did not know what level of interest there would be in the study by the targeted participants, it would be useful to include them too. Including this other specialty did result in one volunteer for the study. Gatekeeper input into the research design was not initially anticipated and following this experience, I would recommend actively seeking out feedback in pursuit of an optimum participant landscape.

I then provided the pre-prepared participant consent form in PDF format to the training bodies and intern networks so that they could use this documentation to inform their NCHDs of the study. In addition, while not in the original research design, I decided to limit the request for participants to Ireland's capital city (Dublin) based NCHDs in the first instance. This followed a discussion with a key informant in NDTP who stated that many of the NCHDs in the specialties I was seeking to include in my study are based in Dublin hospitals and as I was only seeking two from each specialty, the assumption was it would be feasible to obtain the required participants from those based in Dublin hospitals. The advantage of this approach was that with all Dublin-based participants the logistics involved in carrying out the research would be simpler and more time effective for me as I was also based in Dublin. However, as will be explained below a number of the eventual research participants were actually based in hospitals outside of Dublin.

Despite the positive response from the training bodies and intern networks, recruiting volunteers was a much slower process than I had envisaged and two weeks after the first call, only four participants had been recruited. I prepared a reminder e-mail, using the text from the letter of introduction, which could be circulated by the training bodies and intern networks. I decided to do this as I thought it might elicit a better response if the request could be read as soon as the e-mail was opened rather than as an attachment that had to be opened. Based on experience, this could be relevant given that many NCHDs access their e-mails on their phones or other devices and so reading attachments may be a bit more cumbersome than at a laptop or computer. Anyone who was interested in participating in

the study was asked to e-mail me directly at which point I e-mailed the consent form so they could read greater detail as to what was being asked of them. The process resulted in four additional recruits. Although I had initially restricted the call to Dublin-based NCHDs based on an (NDTP) informant's advice, Training Body 1 and Training Body 3 had distributed the call nationwide, another unanticipated consequence of gatekeeper involvement. Three weeks after the first call and still only having eight participants, I requested Training Body 2 to circulate the study details to NCHDs outside of Dublin again using the reminder e-mail format, resulting in five more potential participants over the next four weeks. It was originally anticipated that the time to recruit participants would be two weeks and the lapsed time to carry out the first round of interviews would be eight weeks. However, due to the unforeseen complexities in the process of identifying and accessing potential participants documented above, it took 11 weeks to recruit 13 NCHDs interested in participating in the study (Table I). I commenced the first round of interviews five weeks into the recruitment of participants and the interviews took nine weeks to complete.

Week	Date	Circulation of study details by training bodies/intern networks*	Responses from NCHDs
1	26 October 2015	Training bodies and intern networks informed of the study by Director NDTP	na
2	2 November 2015	Agreement to assist with study Training Body 1 approved the circulation to their trainees Training Body 2 circulated to their trainees Intern Network 1's network co-ordinator circulated to interns Intern Network 2's network co-ordinator agreed to assist with study, however, the intern network administrator did not agree to circulate the study details unless the researcher's study complied with a particular policy the administrator believed was relevant Intern Network 3's intern network co-ordinator circulated to interns	0
3	9 November 2015	Training Body 3's trainee sub-committee circulated to their trainees Intern Network 3 sent a reminder to their interns	1 Radiology
4	16 November 2015	Training Body 4's Trainee Committee agreed to assist with study and two members of the Committee volunteered to participate	1 Surgery 2 Psychiatry
5	23 November 2015	Request to circulate reminder e-mail Training Body 1 Training Body 2 Training Body 3 Intern Network 1 Intern Network 3 sent another reminder to their interns	3 Anaesthesia 1 Intern
6	30 November 2015	Researcher copied in a reminder e-mail circulated by Training Body 2	0
7	7 December 2015	No contact between researcher and training bodies/networks	0
8	14 December 2015	Training Body 2 asked to circulate study details to NCHDs outside of Dublin using reminder e-mail format; Offer by radiology participant to see if they had a colleague who would also participate in the study was accepted by researcher	2 Surgery 1 Emergency Medicine
9	21 December 2015	No contact between researcher and training bodies/networks	1 Emergency Medicine
10	28 December 2015	No contact between researcher and training bodies/networks	0
11	4 January 2016	No contact between researcher and training bodies/networks	1 Surgery

Note: *To preserve confidentially the names of the post-graduate medical training bodies and intern networks have not be used

Table I.
Circulation of study details by training bodies/intern networks and responses from NCHDs

Challenges relating to the participant recruitment were varied (Table I). Approximately 70 interns in Intern Network 1 received the communications about the study and no volunteers came forward. This had been anticipated by the administrator who advised that it was very difficult to get interns to volunteer, that they seldom respond to such requests and that the lack of response had nothing to do with study. In another case, the intern network administrator's interpretation of a policy regarding surveying interns led me to stall engagement with that network in the hope that intern participants would come from the other two networks. Ultimately, I did not re-engage with that network. The engagement with Training Body 1 also proved somewhat challenging, having been directed to the training body's training manager I explained the study and the training manager agreed to e-mail the introductory letter and consent form to the relevant NCHDs. After four days no volunteers had contacted me from Training Body 1 so I followed up to discover that the training manager had only sent the information to the training body's Training Committee rather than to the training body's NCHDs. The training manager agreed to follow-up and come back to me, however, it subsequently became difficult to contact the training manager despite several attempts over the next couple of weeks by phone and e-mail. Finally, I sent the reminder e-mail to the training manager asking for it to be circulated to the NCHDs. The following day the reminder e-mail was sent and three interested NCHDs e-mailed me that same day. Training Body 3 was helpful in circulating the information about the study, however, when contacted to send a reminder about the study a response was never received, so I am unsure whether the reminder e-mail was ever sent. Given the challenges I encountered in recruiting research participants, I had discussed with my academic peers the possibility of needing to use the "snowball" technique (Atkinson and Flint, 2001; Noy, 2008; Patton, 2015) as an additional means of seeking participants once the low response rate transpired. A radiology participant offered to circulate an e-mail about the study to NCHDs in their hospital, in keeping with this technique. At this point I had 13 potential participants and so thanked the radiology participant but advised that the recruitment process was complete.

4. Primary data collection: process, insights and reflection
Each participant was interviewed between one and up to three times over the forthcoming months. Of these 13 potential participants, 11 participated in the study. The remaining two participants, despite a number of communications did not ultimately agree a date to meet for the initial interview. In parallel with coding the first round of interviews I developed the interview guide for the second round of interviews. In total, 10 of the 11 participants participated in the second round of interviews. Despite communication about potential dates for the interview, one participant did not ultimately commit to meet for the second interview. The third round interview was a clarification interview because data crystallisation had been reached in the vast majority of themes by this stage in the interview cycle. Kosslyn (1978) refers to the concept of elegance in regards to optimised data collection and suggests that one reaches a point in the data collection process where common themes are reduced to where a single elegant explanation is possible. These interviews were therefore to confirm the intent of the participants, and were a form of reflexive practice for the participants as well as for myself. The ten participants that participated in the second round interviews were contacted and asked to participate in the clarification interview and eight of the participants participated. I assumed that the participant who did not participate in the second round interview did not wish to continue with the research and did not contact them to participate in the clarification interview. Table II provides a summary of the research participants.

Interview Rounds 1 and 2 took place either at my office, at the participants' place of work, at a training body's premises and in one case in a hotel and the clarification interviews

Specialty	Training level	1st interview	2nd interview	Clarification interview	Total length of interviews (minutes)	Reviewed transcripts	Gender
Anaesthesia	Higher specialist training equivalent	4 December 2015	14 April 2016	23 June 2016	112.87	Did not choose to review	Male
Anaesthesia	Basic specialist training	21 December 2015	18 April 2016	Did not participate	82.2	Chose to review – no edits	Male
Anaesthesia	Basic specialist training	15 January 2016	22 March 2016	7 July 2016	125.02	Chose to review – no edits	Female
Radiology	Higher specialist training	9 December 2015	18 April 2016	23 June 2016	118.71	Chose to review – no edits	Male
Psychiatry	Basic specialist training	27 November 2015	31 March 2016	21 June 2016	139.94	Chose to review – no edits	Female
Psychiatry	Higher specialist training	30 November 2015	22 March 2016	28 June 2016	105.02	Did not choose to review	Male
Emergency Medicine	Higher specialist training	17 December 2015	Did not participate	Did not participate	62.39	Chose to review – no edits	Male
Surgery	Streamline Training 2 higher specialist training	8 January 2016	15 April 2016	14 July 2016	87.55	Did not choose to review	Female
Surgery	Basic specialist training	21 January 2016	19 April 2016	Did not participate	68.9	Chose to review – no edits	Male
Surgery	Higher specialist training	25 January 2016	11 April 2016	1 July 2016	99.07	Did not choose to review	Female
Intern	na	10 December 2015	24 March 2016	25 July 2016	130.7	Chose to review first interview – edits returned Chose to review second interview – no edits Did not choose to review clarification interview	Female
Total					1,132.37		

Table II.
Summary of study
participants

took place over the telephone. Before each interview commenced all participants were offered a further opportunity to review the consent form and ask any questions prior to signing the form (Brinkmann and Kvale, 2015; Patton, 2015). Each was asked for their permission for the interviews to be recorded (Patton, 2015) and advised that all questions were voluntary; should they wish to skip any questions they could. The clarification (telephone) interviews were recorded using a speaker phone and a dictaphone and I also took copious notes, in case the telephone recording was not clear enough to allow for transcription. In all but one case the recording allowed me to transcribe the interview, and in that instance, I typed up the interview notes within 2 hours of the interview. All participants were offered the opportunity to review the transcript and make any amendments or clarifications that they wished. Following each interview, I captured my impressions and reflections on the interview (Brinkmann and Kvale, 2015; Carcary, 2009; Koch, 1994) and discussed them with my academic peers. Pre-understanding can bias an insider researcher, as understanding may be assumed, perhaps wrongly (Unluer, 2012), and they may not delve as deeply as necessary during the interview (Brannick and Coghlan, 2007). This is something that arose for me on a number of occasions and was something I needed to be vigilant against. For example, when reflecting on the second of the first round of interviews, I believed I was gathering good material, however, I wondered was I just hearing what fitted with my own thinking. On another occasion during a second round interview the interviewee spoke about informal learning and its role and how it was different in a way to more formal learning. When reflecting on this interview I noticed that I was very pleased when I heard this as it seemed to support one of my initial findings, again this was a point for me to recognise that I may have a bias here and may be placing more weight on this than on other parts of the interview. A further example occurred when a participant spoke about being in charge, other interviewees had not mentioned this and I debated about asking the other interviewees about this in a subsequent round of interviews. I thought that it may not be relevant to a number of them as they were in an earlier stage in their training, however, having reflected on this I decided to ask the question and was surprised that practically all the interviewees had had experience of this, and was very glad I had asked the question, rather than assuming I knew the answer. As an insider researcher I recognised that I needed to be aware of pre-understanding and potential biases and was conscious not to think that what I was hearing in each interview was more or less important than any other contribution so as to remain open to what was being said. Reflections post the interview and during transcription of the interviews helped me to identify any bias in this regard.

Having the opportunity to interview the research participants on more than one occasion allowed an opportunity to revisit any responses or questions from an earlier interview that warranted further exploration. My reflections also helped with refinement of the research instruments. For example, following the first two interviews of the second round interviews, I realised that the question sequence was a bit disjointed in parts and I made some changes to the guide to improve the flow. This allowed me to better signal to the participants what was coming next while we moved through the interview, resulting in an improved flow.

In addition to the semi-structured interviews, this study also included a documentary review as a means of increasing the trustworthiness of the case study (Carcary, 2009). In preparing to conduct the documentary review I was mindful that dependability in the design of a case study means another researcher could carry out the study in the same context with the same participants and methods and they would obtain similar results (Shenton, 2004). I was also conscious of my insider-outsider status, while I was a member of the wider organisation, I was not au fait with the NCHD sub-culture (Dwyer and Buckle, 2009). Developing a document protocol is one of the means of ensuring trustworthiness within the case study design, particularly when one is an insider (Asselin, 2003). In this study, the document protocol assisted with enhancing dependability as it provided a

standard means of reviewing documentation to determine the degree of relevance and significance it has to the study (Lincoln and Guba, 1985). I designed the document protocol using the key themes that were contained within the first round interview guide. These themes were derived from the preliminary conceptual framework which was developed through engagement with the relevant literature.

While the longitudinal nature of this study should elicit a great deal of data regarding learning as a process over a period of time (Kelliher, 2011), this data must be carefully managed and organised systematically to ensure its essence is not lost in the analysis. Furthermore, consistent application of the "ethics as a process" lens (Franklin *et al.*, 2012, p. 1727) echoes the iterative experience from the field (Miller and Boulton, 2007).

5. Analysing the findings – an iterative process

Given my insider-outsider status, as I began analysing the data it was important that I did not assume understanding (Holloway and Galvin, 2017). After transcribing each round of interviews, I familiarised myself with the data (Braun and Clarke, 2006) by reading, re-reading and comparing the participants answers to questions from the interview guide in order to develop an initial view of the emergent themes that stood out from the transcripts. The transcripts from each round of interviews were then imported into NVivo as a software support tool. As part of the process of coding each transcript I developed a code book, within which the code and its definition were recorded. In addition to creating the code book I kept a hand written copy of it for easy reference, so as to ensure the codes were used consistently as I worked through the various transcripts. I also used memoing to record thoughts and observations while coding the transcripts to provide insights to assist with analysis (Corbin and Strauss, 1990). From the beginning, the coding was an iterative process (Dey, 1993) where, in the process of coding one transcript I would recognise that a particular code could be relevant to a previous transcript. I would then go back and find the relevant section in that other transcript and code it also, thus some sections were coded with more than one code (Hewitt-Taylor, 2001; Miles and Huberman, 1994).

When the coding of each round of interviews was complete, I generated a number of reports in NVivo including a coding summary by node report which could be used as a means to review the coding. I then printed the report and cut up the hard copy by node and put the coded sections into bundles. The intention here was to make the process of detecting duplicates or codes that are very similar, or segments that have been miscoded easier. I reviewed the coded data and also reviewed the definitions of the codes. Data that I believed did not belong with a particular code were marked as "un-coded". I then investigated if this data could be coded to another code and the name of the new code was written beside it. If the name of the code needed to be changed I wrote the new name on the front of the bundle, and also added it to the NVivo node structure report. This allowed me to have a record of the new and old name, facilitating a cross-check with the code book for the definitions. The hard copy bundles provided a very good visual cue as to how important a code might be – the data for some codes were just a small slip of paper – whereas others were a little bundle so obviously had a lot more data coded to them. When the review of the codes was completed I updated NVivo with the changes and generated a new set of NVivo reports. This process allowed me to notice a series of emergent themes that became the sub-themes in the initial interrogation of the data. It was then possible to see how some of these themes might connect and relate to one another. The first cut of the themes was worked out on paper and then transferred into NVivo where the parent and child nodes that form the node hierarchy were created. In the days and weeks that followed I reflected on the themes with my academic peers and decided to make two changes to the theme hierarchy.

Following the coding of the second round of interviews, I again generated an NVivo report and compared sources and references for each node across both interviews and for the first and second round of interviews separately. A number of new codes were created as part of coding the second round interviews and I incorporated those nodes within the node hierarchy and into the code book. I then reviewed the generated themes to see whether saturation had been reached (Eisenhardt, 1989). The check for saturation levels included the codes from the first and second round interview and the document protocols (see documentary review below) which had also been coded. While conducting the second round of interviews I had noticed that some interviewees provided similar responses to what they had said in the first round of interviews. There were also similarities in the responses provided across interviewees to the interview questions, suggesting that saturation was likely being approached. I then examined the responses coded to each node in NVivo to decide whether or not the essence of what was coded to each was the same or if there were differences. The check for saturation took longer than I expected as this process led to additional coding, un-coding and recoding of data and refinement of some definitions. Reading through the data that had been coded to each node, sparked off other ideas about how some items could also be coded to other nodes, or how some items did not fit the node they were coded to. I also noticed occasions where the items coded to a node were all related to each other, but the definition of that node did not quite match up, so in those cases the definitions needed to be amended. Some nodes were renamed to make it clearer what the node is about, e.g. use expertise, became use expertise of colleagues, new ideas became new ideas figured out by team. I exported the node definition report into an excel spreadsheet and reviewed the number of sources and the number of references for each node and noted on it whether the node was at saturation, or whether it would need further clarification.

In parallel with conducting and transcribing the second round interviews I began reviewing the organisational documents that I had identified utilising the document protocol. The document protocol allowed me to create a summary of how each document was relevant to the study themes (Crossan and Berdrow, 2003; Miles and Huberman, 1994). Documents that were determined to be highly relevant, relevant or somewhat relevant were analysed in greater depth to determine whether they can corroborate or explain data collected from the interviews (Tamim and Grant, 2013) or shed additional light on the research questions. While I was not a full insider (Gair, 2011) as I was not a member of the NCHD sub-culture (Dwyer and Buckle, 2009) using my knowledge about NCHDs and training in the Irish health system and the HSE I identified 20 documents to be reviewed. This illustrates the insider-outsider continuum described by Holloway and Galvin (2017). Following this review only one document was deemed to be highly relevant and nine to be somewhat relevant. The document protocols for the ten relevant documents were analysed further using NVivo to determine whether they could corroborate or explain data collected from the interviews (Tamim and Grant, 2013). Ultimately eight document protocols were coded in NVivo.

Following the first two rounds of interviews and the documentary review, I concluded that there were eight nodes that required further follow-up and clarification with the participants. These nodes provided the areas from which the interview guide for the clarification interview was developed. Following the clarification interviews, these transcripts were imported into NVivo and coded. No new codes were created at this stage. Again, I used memos to record my observations and thoughts regarding coding these clarification interviews. I did make subsequent changes to the coding hierarchy. This occurred in the process of extracting the findings from the data, which resulted in some data being un-coded or recoded to particular nodes and to the decision to separate two themes. When the coding of the transcripts and the documents was complete I utilised an NVivo report to determine what themes appeared in both the interview transcripts and the documents and what themes only appeared in the documents.

I continued to maintain the case study database as a means of increasing the trustworthiness of the study (Carcary, 2009), additionally I recorded how the data collection actually transpired over the course of the study.

6. Insights for researchers in the public healthcare fora

Conducting research in a healthcare setting does present some challenges, key amongst these is access to research participants. As highlighted in this study, I was conceived of as an "insider", as a member of the healthcare organisation I was studying (Dwyer and Buckle, 2009). However, being an insider in a large organisation did not give me access to communicate directly with the NCHDs I sought as volunteers for my study and I had to seek introductions to post-graduate medical training bodies via the Director of NDTP. The nuances of gatekeeper engagement (Reeves, 2010) include both positives (suggested extension of disciplines and geographical reach) and challenges (dependence on the gatekeeper to distribute the participation requests). I learnt first hand that being an insider is not all encompassing, and it is more helpful to conceive of oneself as positioned somewhere on an insider/outsider continuum (Holloway and Galvin, 2017). Accessing doctors to participate in my study proved particularly challenging (Levinson *et al.*, 1998; McGowan *et al.*, 2013; VanGeest *et al.*, 2007), requiring both persistence and ingenuity to garner the appropriate number of participants. It also took far longer than anticipated to begin data collection, a challenge that should be incorporated into researcher-practitioner research plans when studying this environment. Once engaged, these participants proved very insightful as to their experiences as NCHDs, a worthwhile end to the journey of access as described in this paper.

Given that the research took place in a healthcare environment, the potential for disclosure of information regarding something harmful to patients, or of a criminal nature existed (Orb *et al.*, 2000) and could occur during the semi-structured interviews. To address this risk ethical approval for the study was obtained. Researchers wishing to undertake research in a healthcare context should seek out the appropriate ethical approval at an early stage so that the ethical processes are included in the research design for the study. Based on my experience, careful consideration of ethical rules and standards covered by both external and internal regulation (Franklin *et al.*, 2012) occurred at each juncture (design, participant selection, data collection, analysis and management).

I also found accessing NCHDs difficult given the very busy nature of their work and their requirement to rotate at frequent intervals to different hospitals, and finding an appropriate means of contacting a significant enough number of them to obtain research participants. While I am a member of staff of the organisation under study, my location within the corporate structure of the organisation meant that I was at a distance from the research participants who worked in hospitals and are involved in the front-line delivery of patient care. This is a likely challenge for other practitioner researchers, who anticipate a greater level of access than is forthcoming in practice in larger organisations of this nature. In this case, the post-graduate medical training bodies were used as the route to contact participants; however, if I was not working in HSE–NDTP at the time of recruiting research participants, it is unlikely that I could have secured access to the relevant post-graduate medical training bodies as easily. Researchers interested in doing similar research with NCHDs would need to consider these factors and ensure that they have adequate time allowed to obtain access, even if they perceive themselves to be "insiders".

As with any research participants, researchers carrying out research with doctors need to facilitate them regarding the time and place to collect the data. On occasions I carried out

the semi-structured interviews at the doctor's workplace, at the end of the research participant's shift or perhaps on a day when they were on-call on site. The researcher needs to be aware that in these circumstances the research participant can be tired, be called away thus interrupting the interview, may need to cut the interview short, or may not be available to do the interview at the arranged time. These issues are outside the control of the researcher and would have to be accepted as part of the research process. Researchers considering a longitudinal study should also bear in mind that not all participants may participate at all stages of the study. This may be due to busyness in their working lives that ultimately, despite their best intentions, prevent them from participating. Researchers need to consider the design of the study and the participant numbers so that if more than one data collection point is required that the study will still be possible to complete even if all participants do not provide data in each cycle of a multi-cycle study.

Finally, the time in which the research study must be undertaken and completed is often determined by the research timeframes and/or the agreed period of access. To successfully meet these timeframes the researcher must ensure that the scope of the study is feasible within the time permitted and that the level of access required to undertake the study will be available along with the time needed to analyse the data once gathered. The timeframe available may also limit which research methods can be utilised. If a longer duration were available to conduct the current study, additional elements could be included in the study design, for example, a greater number of research participants, additional research contexts and additional research methods. However, time is not the only limitation that prevented the research being of larger scope, this study was undertaken by a sole researcher, which again places limitations on the scope of what is achievable. Operating as a sole researcher, albeit it with the support of academic peers, limits the level of expertise available to design and undertake the research and analyse the data. It also means that at best a limited budget is available for the study. In this research study accessing participants via a third party (post-graduate medical training bodies or intern networks) limited the degree of persistence that I could employ in seeking potential volunteers to participate in the study.

7. Conclusion

In this paper, I have shared my experiences from the field (Miller and Boulton, 2007) in pursuit of new and refined understanding of longitudinal interpretive studies in the public healthcare sector. I have set out the opportunities and challenges encountered as a practitioner researcher in accessing research participants in the public healthcare context. The research design, preparations for data collection, including obtaining ethical approval and the identification and recruitment of research participants are recounted. I have documented my experience of "ethics as a process" (Franklin *et al.*, 2012, p. 1727) and contemplated the benefits and challenges of engaging divisional and discipline gatekeepers in a large organisation, even as an insider. Insider researcher considerations and their implications for the study are also explored and insights for those intending to carry out longitudinal interpretive case study research in this setting are included.

Through documenting the opportunities and challenges of a practitioner researcher in accessing research participants in the public healthcare sector, this paper discusses insider researcher considerations and seeks to address concerns in the literature regarding insufficient detail relating to interpretive research design and implementation in healthcare contexts. Insights for those wishing to conduct longitudinal interpretive case research in the public healthcare setting are; insider is a relative term in a large public healthcare organisation and as such, access to participants is a more complex activity than first anticipated, a reality compounded by the specific ethical considerations when researching

this environment. The implications for interpretive research are that some participants may not complete all stages of a longitudinal study, therefore the study's design and the number of participants included must accommodate this possibility to ensure the successful completion of interpretive longitudinal research.

Acknowledgement

Notes

1. The HSE was established in January 2005 as the statutory body with responsibility for managing and delivering public health services to the Irish population. It employs over 100,000 people and its budget in 2019 is over €16bn.

2. In the interests of confidentiality, I am not referring to the post-graduate medical training bodies, or the intern networks by name.

References

Asselin, M. (2003), "Insider research: issues to consider when doing qualitative research in your own setting", *Journal of Nurses in Staff Development*, Vol. 19 No. 2, pp. 99-103.

Atkinson, R. and Flint, J. (2001), "Accessing hidden and hard-to-reach populations: snowball research strategies", *Social Research Update*, No. 33, pp. 1-4, available at: http://sru.soc.surrey.ac.uk/SRU33.html

Barratt, M., Choi, T. and Li, M. (2011), "Qualitative case studies in operations management: trends, research outcomes and future research implications", *Journal of Operations Management*, No. 29, pp. 329-342.

Brannick, T. and Coghlan, D. (2007), "In defense of being 'native': the case for insider academic research", *Organizational Research Methods*, Vol. 10 No. 1, pp. 59-74.

Braun, V. and Clarke, V. (2006), "Using thematic analysis in psychology", *Qualitative Research in Psychology*, Vol. 3 No. 2, pp. 77-101.

Brinkmann, S. and Kvale, S. (2015), *Interviews: Learning the Craft of Qualitative Research Interviewing*, 3rd ed., Sage, Thousand Oaks, CA.

Carcary, M. (2009), "The research audit trail: enhancing trustworthiness in qualitative inquiry", *The Electronic Journal of Business Research Methods*, Vol. 7 No. 1, pp. 11-24.

Coghlan, D. (2001), "Insider action research projects: implications for practising managers", *Management Learning*, Vol. 32 No. 1, pp. 49-60.

Corbin, J. and Strauss, A. (1990), "Grounded theory research: procedures, canons, and evaluative criteria", *Qualitative Sociology*, Vol. 13 No. 1, pp. 3-21.

Crossan, M.M. and Berdrow, I. (2003), "Organizational learning and strategic renewal", *Strategic Management Journal*, Vol. 24 No. 11, pp. 1087-1105.

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A. and Sheikh, A. (2011), "The case study approach", *BMC Medical Research Methodology*, Vol. 11 No. 1, pp. 100-108.

Dey, I. (1993), *Qualitative Data Analysis: A User-Friendly Guide for Social Scientists*, Routledge, London.

Dwyer, S.C. and Buckle, J.L. (2009), "The space between: on being an insider-outsider in qualitative research", *International Journal of Qualitative Methods*, Vol. 8 No. 1, pp. 54-63.

Eisenhardt, K.M. (1989), "Building theory from case study research", *Academy of Management Review*, Vol. 14 No. 4, pp. 532-550.

Franklin, P., Rowland, E., Fox, R. and Nicolson, P. (2012), "Research ethics in accessing hospital staff and securing informed consent", *Qualitative Health Research*, Vol. 22 No. 12, pp. 1727-1738.

Gair, S. (2011), "Feeling their stories: contemplating empathy, insider/outsider positionings, and enriching qualitative research", *Qualitative Health Research*, Vol. 22 No. 1, pp. 134-143.

Hewitt-Taylor, J. (2001), "Use of constant comparative analysis in qualitative research", *Nursing Standard*, Vol. 15 No. 42, pp. 39-42.

Holloway, I. and Galvin, K. (2017), *Qualitative Research in Nursing and Healthcare*, 4th ed., Wiley Blackwell, Oxford.

Hyett, N., Kenny, A. and Dickson-Swift, V. (2014), "Methodology or method? A critical review of qualitative case study reports", *International Journal of Qualitative Studies on Health and Well-Being*, Vol. 9 No. 1, pp. 1-12.

Innes, K., Jackson, D., Plummer, V. and Elliott, D. (2017), "Emergency department waiting room nurse role: a key informant perspective", *Australasian Emergency Nursing Journal*, Vol. 20 No. 1, pp. 6-11.

Kelliher, F. (2011), "Interpretivism and the pursuit of research legitimisation: an integrated approach to single case design", in Bryant, A. (Ed.), *Leading Issues in Business Research Methods*, Academic Publishing International, Reading, pp. 44-61.

Koch, T. (1994), "Establishing rigour in qualitative research: the decision trail", *Journal of Advanced Nursing*, Vol. 19 No. 5, pp. 976-986.

Kosslyn, S.M. (1978), "Imagery and internal representation", in Rosch, E. and Lloyd, B. (Eds), *Cognition and Categorization*, Lawrence Erlbaum Associates, Hillsdale, NJ, pp. 217-257.

Levinson, W., Dull, V.T., Roter, D.L., Chaumeton, N. and Frankel, R.M. (1998), "Recruiting physicians for office-based research", *Medical Care*, Vol. 36 No. 6, pp. 934-937.

Lincoln, Y. and Guba, E. (1985), *Naturalistic Enquiry*, Sage, London.

McGowan, Y., Humphries, N., Burke, H., Conry, M. and Morgan, K. (2013), "Through doctors' eyes: a qualitative study of hospital doctor perspectives on their working conditions", *British Journal of Health Psychology*, Vol. 18 No. 4, pp. 874-891.

Meyer, C.B. (2001), "A case in case study methodology", *Field Methods*, Vol. 13 No. 4, pp. 329-352.

Miles, M.B. and Huberman, M.A. (1994), *Qualitative Data Analysis*, 2nd ed., Sage, Thousand Oaks, CA.

Miller, T. and Boulton, M. (2007), "Changing constructions of informed consent: qualitative research and complex social worlds", *Social Science & Medicine*, Vol. 65 No. 11, pp. 2199-2211.

Noy, C. (2008), "Sampling knowledge: the hermeneutics of snowball sampling in qualitative research", *International Journal of Social Research Methodology*, Vol. 11 No. 4, pp. 327-344.

Orb, A., Eisenhauer, L. and Wynaden, D. (2000), "Ethics in qualitative research", *Journal of Nursing Scholarship*, Vol. 33 No. 1, pp. 93-96.

Patton, M.Q. (2015), *Qualitative Research & Evaluation Methods*, 4th ed., Sage, Thousand Oaks, CA.

Reeves, C.L. (2010), "A difficult negotiation: fieldwork relations with gatekeepers", *Qualitative Research*, Vol. 10 No. 3, pp. 315-331.

Shenton, A.K. (2004), "Strategies for ensuring trustworthiness in qualitative research projects", *Education for Information*, Vol. 22 No. 2, pp. 63-75.

Tamim, S.R. and Grant, M.M. (2013), "Definitions and uses: case study of teachers implementing project-based learning", *Interdisciplinary Journal of Problem Based Learning*, Vol. 7 No. 2, pp. 72-101.

Teijlingen van, R.E. and Hundley, V. (2001), "The importance of pilot studies", *Social Research Update*, No. 35, pp. 1-4, available at: http://sru.soc.surrey.ac.uk/SRU35.html

Thomas, G. (2011), "A typology for the case study in social science following a review of definition, discourse, and structure", *Qualitative Inquiry*, Vol. 17 No. 6, pp. 511-521.

Unluer, S. (2012), "Being an insider researcher while conducting case study research", *The Qualitative Report*, Vol. 17 No. 29, pp. 1-14.

VanGeest, J.B., Johnson, T.P. and Welch, V.L. (2007), "Improving response rates in surveys of physicians", *Evaluation & the Health Professions*, Vol. 30 No. 4, pp. 303-321.

Yin, R.K. (2014), *Case Study Research: Design and Methods*, 5th ed., Sage, Thousand Oaks, CA.

About the author
Dr Louise Doyle is General Manager in Leadership, Education and Talent Development in the Health Service Executive in Ireland. Dr Louise Doyle can be contacted at: louise.doyle3@hse.ie