How do nurses in the acute surgical setting make sense of the care that they provide?

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Abstract

Introduction – This study seeks to explore how nurses sensemake the reality of the care they provide, including understanding the influences on how they make sense of their care. Few studies have explored how nurses sensemake the care they provide, focusing instead on how nurses understand, plan and deliver their care.

Methodology – The study uses ethnomethodology to explicate how members of a particular social group, nurses in an acute hospital ward, create and maintain a sense of order in social life and how they shape, construct, and maintain their everyday worlds. To gain greater insight into the practice of caring, Sensemaking Theory (Weick, 1997) influenced the data analysis, discussion and understanding. Data collection was carried out in two surgical wards in an acute hospital, to triangulate different constructions of reality and generate a broader understanding. Methods used were the shadowing of eight nursing shifts, followed by semi-structured interviews with six registered nurses and a review of the nursing section of the hospital's Electronic Patient Record (EPR) system. Data analysis was an iterative process, with the data collected from each phase coded to identify the key areas of understanding.

Findings – The main finding is that nurses do not have one single understanding of nursing care. Instead, they construct and maintain multiple realities of care to give structure to how they deliver care. This finding suggests that nurses move seamlessly and unknowingly through these realities; this is supported by their use of specific language that they can effortlessly adopt.

Dual processes of care were also identified, namely the activities involved in meeting a patient's care needs alongside a parallel process of delivering care the nurse needs to provide.

The exploration of the EPR found that the full complexity of nursing care was not appreciated or captured. In addition, the language used by nurses to create and maintain their realities was influenced by the EPR

Conclusion – In appreciating the complexity of the realities of nursing care, this study has shown that nurses construct and maintain multiple realities; and that nurses have not been adequately prepared to manage these multiple realities in practice.

Policy needs to reflect the work involved in managing these different realities in order to capture the quantum of nursing care required. Without this appreciation, nurses will remain ill prepared and attempts to determine the resource required will fail to reflect the complexity of care that nurses provide. Workforce planning and staffing calculation are based on a single reality, therefore underappreciating the impact and value of nursing care.

The EPR focuses on capturing the physical interventions of care, and this caused frustration for the nurses using it.

1. Introduction

The purpose of this research is to gain an understanding of how nurses make sense of the care they provide in an acute care setting.

1.1. Context

Following the publication of the landmark report from the Commission on Nursing (Government of Ireland, 1998), the nursing and midwifery professions have undergone substantial reform and change. These changes include the transfer of education from hospital-based schools of nursing and midwifery into the higher education sector (universities and technological universities), the development of specialist and advanced practice roles, the extension of practices such as medicinal prescribing and requesting of X-rays by nurses and midwives, the development of nurse and midwife-led services, and the increased utilisation of research evidence in the provision of high-quality patient care. In addition, the last twenty years have also seen the development of multidisciplinary teams in which nurses and midwives are central to the provision of care to populations with diverse and increasingly complex healthcare needs.

Internationally, there have been many reports where the patients suffered harm or neglect when an organisation's focus was economic and performance outcomes. Key to the Francis Report (2013) was highlighting the serious failures within a Trust to respond to complaints of poor care resulting from high levels of unexpected mortality (Francis, 2013). The Report noted chronic understaffing as a key issue and the role and value of the nurse in providing care and raising concerns when their capacity to deliver the required care was challenged. While some of the recommendations of the Report have been actioned, the fundamental understanding and acknowledgement of the complexity of nursing care remain absent.

Over the next decade, there will be many changes and challenges in healthcare, including an increase in the provision of integrated care, through Slaintécare (Department of Health, 2019), an ageing population and a higher prevalence of people living with complex and long-term illnesses. There is also the possibility of the need to increasingly deal with wide-scale health emergencies such as that seen as a consequence of the Covid-19 pandemic. In addition, in relation to the nursing and midwifery workforces, further challenges will continue in the recruitment and retention of healthcare staff. There will be a move from hospital-based to community-focused healthcare. These challenges will require new approaches to education, a re-examination of the entry routes to the nursing and midwifery professions, and the further facilitation of nurses and midwives to provide a high level of care within the community and primary care settings.

1.2. Background

The decision to undertake this research stems from some of the researcher's Master's thesis project outcomes. The Master's project was focused on introducing a patient dependency measurement tool to try and determine the nursing resource required. There was already significant research available to quantify nursing care and align it to patient dependency (Scott *et al.*, 2013). However, there was very little in the implementation of a dependency measure into staffing requirements. Part of the Masters project was to convert the dependency score into a weighting that could then be calculated into a whole-time staff equivalent.

During the project, there was an opportunity to include other supportive measures of care needs, for example, Kalisch's work on Care Left Undone (Dabney and Kalisch, 2015; Kalisch *et al.*, 2013). The concept that 'care undone' can be determined and quantified led to the researcher's original doctoral proposal to explore the idea of capturing care left undone as a mechanism to determine the staffing resource required by a clinical area. This would, in effect, reverse engineer a staffing model based on the deficiencies in care identified.

However, when this option was being explored, the researcher observed that the evidence regarding capturing care left undone was limited, and significant assumptions were made about how care left undone could be classified. This point later informed the research's direction, the fact that care left undone is drawn from an EPR and not from the care nurses would have liked to have provided. The available research assumed that nurses could, and do, identify care and care left undone in similar ways.

1.2.1. Defining Nursing Care

The Royal College of Nursing (RCN) in the UK undertook a project to define nursing and its core characteristics (Royal College of Nursing, 2003)(pg3). The RCN described nursing as:

The use of clinical judgement in the provision of care to enable people to improve, maintain, or recover health, to cope with health problems, and to achieve the best possible quality of life, whatever their disease or disability, until death

In 2016, in collaboration with the Nursing and Midwifery Board of Ireland (NMBI) and the Health Service Executive (HSE), the Chief Nursing Officer undertook a project to determine the values of nurses and midwives across Ireland. Through a series of surveys, interviews and focus groups, the key values of care, compassion and commitment emerged (Department of Health, 2016c).

The struggle to define nursing care is not new. The term 'nurse; originated from the Latin word "nutire", which means to nourish (Scanlan, 1991). Historically, nursing care was administered in the home as part of a woman's unpaid domestic duties. When the provision of care was integrated with religion and providing care became established in the church, women lost all administrative control of the care they provided. Care was seen as a by-product of a woman's duty (Rutty, 2010)

Not only is the core concept of nursing care challenging to capture in a single definition, but the elements influencing the description are also difficult to define. Florence Nightingale faced similar challenges in her time. Notes on Nursing, first published in 1860, acknowledged that "The elements of nursing care are all but unknown" (Nightingale, 1969) (pg12).

Providing care requires a compassionate balancing of art and science, focusing on the patient's needs (Henderson, 2006). Theories of nursing have existed for decades and span the spectrum from the abstract to the practical (Alligood, 2007; Bassett, 2004). These theories provide a platform upon which further research has been undertaken to identify what constitutes nursing care and how nurses are educated (Ball, 1984; Ball *et al.*, 2016; Parr *et al.*, 2018). These theories and the research they have generated have addressed some of the most fundamental issues of nursing, but few so far have explored the nurses' understanding and definition of care for themselves. Some research undertaken to date has focused on the individual nurse's perspective of seen and unseen work, relating the perceived higher value in nurses' 'seen' work over the unseen (Wakefield, 1998)

The abstract and decontextualised nature of the definitions of nursing and care created a gap between theory and practice. Nurse academics and theorists addressed this gap by developing models of care to provide accessible understanding and structure to how care should be provided in accordance with the respective theory. These models usually identified several core components or factors which could be translated into an action or activity by the nurse.

Watson (1999) developed the 'Human Caring Theory', based on ten curative factors referred to as the core of nursing (Watson *et al.*, 1999). These factors included dimensions of spiritual care and love as well as clinical care (Cook *et al.*, 2003). Orem's Self-Care Deficit Theory and Model (1987) similarly identify nurses' roles in returning a patient back to the condition of self-caring or independent living (Alligood, 2014). Using Orem's model, when it is identified that a patient is unable to meet their own self-care requirements, it is the nurse's role to assess these deficits and support the return to independent living. This is an idealised model; in practice, external pressures make it hard to enact, and therefore nurses must sense make the situation and apply a pragmatic model informed by theory, not driven by it.

Roper (1994) continued with her examination of what nursing and care are by constructing a model of nursing care to assist a nurse in caring for the 'whole' person (Roper, 1994), later becoming the Roper Logan Tierney Model. This movement, again, conceptualised nursing as a process of tasks to be achieved for or with the patient. Roper used the phrase "nursing activity" as she was appalled by the idea of a task list:

> *"I was horrified when I saw a list of tasks that could be carried out by the new care assistants. I have felt that there is only one criterion for the grade of a nurse carrying out a task, and that is the condition of the patient"* (Roper, 1994)

The distinction between a nursing activity and a task of care is not fully explained or explored by Roper in her theoretical modelling or in the later Roper, Logan and Tierney

(RLT) model of care (Murphy *et al.*, 2000). From the interacting components of the Roper, Logan and Tierney model, the nurse-initiated part of nursing is helping patients prevent, alleviate, solve, or cope with problems (actual or potential) related to their activities of living (Roper, 1994; Tierney, 1998).

More recently, research has begun into using patient experiences and quality indicators to inform how nursing should be defined (Larrabee and Bolden, 2001). This reverse-engineered approach to a definition holds the patient at the centre but uses corporate and management structures to inform a nurse's outputs.

There is a presumption in nursing theories and practices that all, especially nurses, understand a universal, academic concept of care. This assumption of understanding of care in nursing has not been explored to date (Granero-Molina *et al.*, 2017; Wilkin, 2003). The concept of care is complex and multifaceted. Recent research has been undertaken into patients' perspectives of care, and this has further exposed other gaps in the field (Wood *et al.*, 2014). Papastavrou (2011) undertook a systematic review of the research literature available pertaining to both nurses' and patients' perceptions of care which outlines the lack of congruent perceptions of what caring or caring behaviours are (Papastavrou *et al.*, 2011). Rather than limit the research by describing how nurses view care, a more meaningful approach would be to explore how nurses sensemake care as a concept. McCrae (2012) presented a discussion of the role of nursing models and theory in the modern clinical environment. This paper challenges the need for many theories of nursing, referencing their lack of appreciation for the complexity of providing care (Mc Crae, 2012).

Current practice and understanding of care have evolved from the models described above but are contextualised to acknowledge the increased pressure to perform and measure the outputs of care. This has reinforced the interventionalist perspective of nursing care, where nursing care is only accounted for when a physical intervention can be measured. This view of nursing is a far cry from some of the original theorists, who identified nursing's uniqueness as borne from the capacity to be agents of change to both a system and an individual. The devolved view that nursing care as a set of tasks to be achieved removes the complexity. It also furthers the consideration that nursing care is a linear process, devoid of intricacy and complication innate in care.

1.3. Research Area

The final research question was determined after completing the literature review (Chapter 2). However, the initial questions were based on constructing an understanding of defining care from the perspective of nurses as the primary care providers.

Throughout the early phases of this research process, the research question went through many different stages of development and intention, as reflected by many rapid literature reviews.

As the research question was developed, the research's aims and objectives also evolved in line with the various approaches. After reviewing the appropriate literature, the finalised research aims are detailed in Chapter 2.

The research question is: how do nurses in the acute surgical setting sensemake the care that they provide?

1.3.1. Aims

The research aims underpin the primary research questions and provide a broader scope for understanding. While the research question sets the ultimate direction of the process, additional aims can facilitate more expansive learning and knowledge generation at later project stages, encompassing some of the long-term research outcomes.

The aims of this research are:

- To understand what influences how nurses have shaped their understanding of care.
- To understand the effect of language on how nurses sustain their understanding of care.
- To understand how nurses maintain their definition of care in practice, acknowledging the contrast of theoretical definition against a working definition.
- To understand how the nurses' concept of care may impact how care is provided.

These aims provide for the broader understanding needed when exploring the complex research question and allow scope for new or additional areas of understanding to be uncovered during the data analysis. In acknowledging the complexity of understanding the social constructs of nursing care, this research will take a qualitative approach, as outlined in Chapter 3.

1.4. Sensemaking approach

Sensemaking is an approach to giving meaning to collective experiences. Developed initially from organisational psychology, it developed to provide understanding to employees of complex or unfamiliar tasks. Using sensemaking enables researchers to describe and interpret the order of the ordinary. Sensemaking has been used in a variety of research settings, from business to healthcare. Weick notes, "it is the job of the sensemaker to convert a world of experience into an intelligible concept" pg.9 (Weick, 2011).

For this research, sensemaking provides a useful lens through which to review the data collected to gain an understanding of how nurses view and interpret the way they deliver and coordinate care. Sensemaking also marries very well with this research's

methodology, ethnomethodology. Both focus on gaining an understanding of the everyday and ordinary that is taken for granted, and in understanding the ordinary, the context and mechanisms of the ordinary, can understand what the rules of maintaining this order are. The process of sensemaking is detailed in subsequent chapters.

Sensemaking is not often applied to healthcare research; it has been broadly adopted into business and organisational psychology research and is a key approach to organisational understanding and helps with future planning. However, the flexibility of sensemaking has recently been demonstrated by its application during the COVID-19 pandemic by supporting researchers in understanding how people respond and change in the new and challenging environments created (Christianson and Barton, 2021).

1.5. Thesis Structure

The thesis is structured over six chapters set in an order to guide the reader through the research process. The chapters include:

- Chapter 1 – Introduction – This chapter outlines the research project's background, purpose, aims, and timelines.
- Chapter 2 – Literature Review – This chapter provides an overview of the available literature to support the research question's development and sensemaking approach to understanding.
- Chapter 3 – Methodology – This chapter steps through the research process, from data collection to analysis.
- Chapter 4 – Findings – This chapter provides the main and sub-findings from the data collection, with supportive quotes from the data collected.
- Chapter 5 – Discussion – the main and sub-findings of the research are discussed to generate the in-depth understanding required to answer the research questions and research aims.
- Chapter 6 – This chapter summarises the research process, findings, interpretations and implications and provides recommendations for future research.

1.6. Timeline

The research began with the Professional Doctorate programme in 2015, completing the taught modules by 2017. The initial research questions were developed towards the end of the taught portion of the doctoral programme so that in 2018 early literature reviews could be undertaken with the guidance of the supervision team to identify and refine the research question.

Data collection

The data collection began with pilot shadowing shifts in late 2018, and based on the feedback from the supervisory team, actual shadowing data collection started in early 2019. The first significant interruption was the commencement of industrial action from the nursing union in early 2019, which manifested in a series of work-to-rule and strike days in February, March and April 2019. Given the tension and disharmony this was causing, and following a discussion with the ward managers, it was felt that the research should be paused until the industrial dispute was resolved, which happened in April 2019.

The shadowing data collection was re-commenced over the summer of 2019 and concluded in late 2019. The interviews began in the first ward in Autumn 2019 and continued into early 2020, with the last two interviews moving to a virtual platform in light of the pandemic.

COVID-19

The WHO declared the pandemic on the 11th of March, and Ireland announced the same on the 12th of March, with immediate lock-downs and restrictions in place. This resulted in the suspension of all the researcher's data collection and interactions with the sites as they were under extreme pressure to prepare a pandemic response. The researcher's workload increased significantly, with no time available to continue with all additional research work. The supervisory meetings were also paused until late 2020, until the researcher had time available to dedicate to the research. The participating hospital could grant remote access to their test environment drafting of the data analysis, interpretation of the findings and thesis drafting continued throughout 2020 into 2021 before mock viva in 2021, followed by complete thesis submission in January 2022.

1.7. Conclusion

This research was initiated following the identification of a gap in commonly used staffing models identified during the researcher's Master's thesis. Upon further exploration, the genesis of this gap is based on broad presumptions of understanding, especially on how nurses sensemake the care they deliver. These presumptions are widely used across staffing models, workforce planning and other national policy positions. This chapter sets out the research process undertaken to address this knowledge gap and understand how nurses do sensemake the care they provide. The next chapter will outline the literature reviewed to inform the research process.

2. Literature Review

2.1. Introduction

Epistemologically, some qualitative researchers were dissuaded from undertaking a literature review as it was asserted that reviewing the literature would inform the researcher and direct their study to a different course (Charmaz, 2008). Morse (1994) argued the opposite, cautioning that without a prior review of the literature, researchers were doomed to 're-invent the wheel' when an explanation of the phenomenon may already exist (Morse, 1994). Therefore, this literature review has been conducted to generate an overview of what is already known and what is unknown about how nurses sensemake care, and using a critical realist approach, the literature review was used to devise deductive propositions, which were then set alongside the inductive propositions arising from the study. The literature review informed the research design but did not limit it. Propositions arose from the literature but also inductively from the data collection.

This literature review informs not only the topic of research that could be undertaken but also the aims and objectives and gives consideration to a methodology that could best be used to address the research gap. This literature review will outline the search terms used, the inclusion criteria, the studies that were identified and how they were scrutinised in order to identify an area of research to be conducted.

As the literature review is an essential step in the research process, adopting the correct approach is vital. In considering which approach to take, the researcher had two options, a systematic review or a narrative review. The main objective of a systematic review is to define a well-structured research question and provide determined analyses of the relevant evidence, followed or not by a meta-analysis. A narrative approach is a comprehensive, critical and objective analysis of the relevant literature available on a topic (Green *et al.*, 2006). The narrative approach can address one or more questions, and the selection criteria for inclusion of the articles may not be specified explicitly (Ferrari, 2015). Given the complexity of the research area and already acknowledged dearth of research, the selection of the narrative approach to review the literature was the best choice.

The researcher's interest is in the variability of definitions of care, how nurses make sense of their care, and what influences this sensemaking process. Undertaking a literature review of these three broad and varied topics eventually led to a gap in the research available being identified.

This review examined the literature available to understand how nurses sensemake care in the acute care setting and what influences this process. Two strands of literature were reviewed: the first focusing on the existing knowledge and definitions of nursing care, care pathways and models of nursing care; the second strand focused on the literature concerned with sensemaking as a cognitive process and how that might be utilised to facilitate the research into the gap identified. Throughout this chapter, both strands will be discussed separately.

- Strand 1: nursing care and,
- Strand 2: sensemaking of care.

The literature review revealed 387 articles associated with the search terms and with the inclusion and exclusion criteria during the initial search. This total number of articles is a combined figure from all the resources searched. Figure 1 outlines that of the 387 articles found, only 74 had data relevant to this literature review based on further application of the inclusion and exclusion criteria to the content of the research. These 74 articles also had a level of duplication, leaving only 40 articles left that were relevant to both strands of this literature review. Of the 40, 30 relate to nursing care and 10 to sensemaking care. Additionally, non-research publications (i.e. policies or strategy documents) were also excluded, reducing the number of studies included to 35. Given the complex nature of healthcare research, additional searches were performed using colloquial phrases and languages to ensure the review was complete. These additional searches did not yield any new articles. Tables 2 & 3 provide a listing of the articles found for both Strand 1 and Strand 2 based on inclusion and exclusion criteria.

In conducting a literature review, the initial challenge was establishing a clear list of words associated with nursing care and sensemaking care that would furnish the appropriate search terms. Choosing a specific and defined search term would significantly limit the amount of literature available for review and therefore affect the accuracy and relevancy of the articles (Gibson and Brown, 2009). It is important to note that most words associated with nursing care refer to planned care or care provided in practice (Darawsheh, 2014).

Of the 35 papers identified, 18 were qualitative research, with the remaining being mixed methods or published books. Four directly focused only on sensemaking in some form, mostly using sensemaking to explore a nursing process (Colón-Emeric *et al.*, 2005; Davidson and Zisook, 2017; Hoff, 2013; Vogelsmeier *et al.*, 2017a). The other articles included are associated with defining nursing, nursing roles, fundamental care and sensemaking. All the articles included are from peer-reviewed journals (Fig 1).

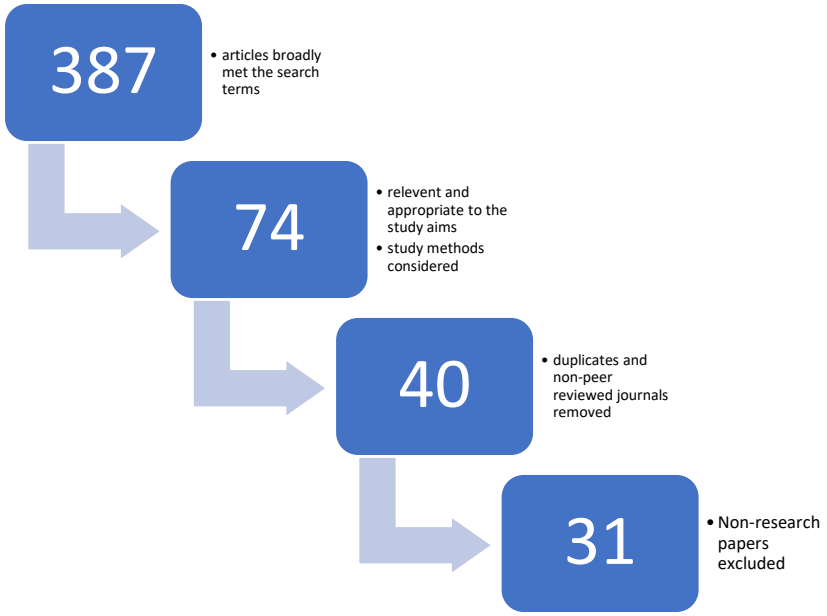

Figure 1 – Literature Review Search Pathway

Strand 1 – Literature Regarding Nursing Care

2.1. Method

A search of the literature was conducted from May 2016-December 2021, using a narrative approach. The search was limited to articles in English and from peer-reviewed journals. Due to the small amount of available literature, no date restriction was imposed. Inclusion and exclusion criteria are set out in the table below. The review used Cumulative Index to Nursing and Allied Health Literature (CINAHL) and Medline as the primary search engines with the search terms outlined above; additional searches were undertaken on Ovid, Science Direct and the Sigma Repository but did not yield any applicable results. Figure 1 outlines the search process with the number of results achieved. Open Grey (opengrey.eu) was also searched to explore any grey material but did not yield any results in line with the inclusion and exclusion criteria. The reference lists of all articles included were also reviewed for additional literature that had not been revealed through the search engines.

The inclusion and exclusion criteria:

Table 1 – Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
• From a peer-reviewed journal • Included concepts related to missed care, concepts of care and models of care as outlined above	• Non-English articles • Research from non-peer-reviewed sources • Anecdotal articles

• Included analysis of terms related to missed care • Report of or original research into patterns, prevalence or incidence of missed care • From Peer-reviewed journals and books on sensemaking	• Reports or original research relating to a specific incidence of defining nursing or nursing care, i.e. where the research is so specific that the learning would not be applicable • Policy and strategy documents

2.2. Results of Strand 1 Review

Table 2 – Literature Review results related to Nursing Care (Strand 1)

1	Abel, E.K. & Ungerson, C., 2006. Policy Is Personal: Sex, Gender, and Informal Care. *Contemporary Sociology*, 17(5), p.659.
2	Aiken, L.H. et al., 2013. Nurses' reports of working conditions and hospital quality of care in 12 countries in Europe. *International Journal of Nursing Studies*, 50(2), pp.143–153.
3	Alligood, M.R., 2007. Nursing Theorists and Their Work (6th edn). *Contemporary Nurse*, 24(1), pp.106–106.
4	Allmark, P., 1995. Can there be an ethics of care? *Journal of medical ethics*, 21(1), pp.19–24.
5	Ball, J. et al., 2016. A cross-sectional study of "care left undone" on nursing shifts in hospitals. *Journal of Advanced Nursing*, 72(9), pp.2086–2097.
6	Cook, T.H., Gilmer, M.J. & Bess, C.J., 2003. Students' Definitions of Nursing. , 42(7), pp.311–318.
7	Feo, R. et al., 2017. Towards a standardised definition for fundamental care: a modified Delphi study. *Journal of Clinical Nursing*.
8	Feo, R. & Kitson, A., 2016. Promoting patient-centred fundamental care in acute healthcare systems. International Journal of Nursing Studies, 57, pp.1–11
9	Granero-Molina, J. et al., 2017. Fundamental care and knowledge interests: Implications for nursing science. *Journal of Clinical Nursing*, (November 2017), pp.1–7
10	Green, C., 2018. A Philosophical Model of the Nature of Nursing. *Nursing Research*, 67(2), pp.93–98. Available at: http://insights.ovid.com/crossref?an=00006199-201803000-00006
11	Henderson, V., 2006. The Concept of Nursing. *Journal of Advanced Nursing*, 53(1), pp.21–34.
12	James, N., 1992. Care = organisation + physical labour + emotional labour. *Sociology of Health & Illness*, 14(4), pp.488–509.
13	Kalisch, B., 2006. Missed Nursing Care: A Qualitative Study. *Journal of Nursing Care Quality October*, 21(4), pp.306–313.
14	Kitson, A.L., 2018. The Fundamentals of Care Framework as a Point-of-Care Nursing Theory. *Nursing Research*, 67(2), pp.99–107.
15	Larrabee, J. & Bolden, L., 2001. Defining patient-perceived quality of nursing care. *Journal of Nursing Care Quality*, 16(1), pp.34–75.
16	McCormack, B. & McCance, T. V., 2006. Development of a framework for person-centred nursing. *Journal of Advanced Nursing*, 56(5), pp.472–479.

17	Murphy, K. et al., 2000. The Roper, Logan and Tierney (1996) Model: perceptions and operationalisation of the model in psychiatric nursing within a Health Board in Ireland. *Journal of Advanced Nursing*, 31(6), pp.1333–1341.
18	Needleman, J., 2016. The Economic Case for Fundamental Nursing Care. *Nursing Leadership (1910-622X)*, 29(1), pp.2
19	Papastavrou, E., Efstathiou, G. & Charalambous, A., 2011. Nurses' and patients' perceptions of caring behaviours: Quantitative systematic review of comparative studies. *Journal of Advanced Nursing*, 67(6), pp.1191–1205.
20	Roper, N., 1994. Definition of Nursing. Parts 1&2. *British Journal of Nursing*, 3(9), pp.460–462.
21	Tierney, A.J., 1998. Nursing models: extant or extinct? *Journal of Advanced Nursing*, 28(1), pp.77–85. Available at: http://doi.wiley.com/10.1046/j.1365-2648.1998.00766
22	VanFosson, C.A., Jones, T.L. & Yoder, L.H., 2016. Unfinished nursing care: An important performance measure for nursing care systems. *Nursing Outlook*, 64(2), pp.124–136.

2.2.1. Reviewing the Literature of Nursing Care

In the initial scoping exercise, each piece of research that met the criteria was evaluated to assess for usefulness with this topic. This tool allowed for a brief assessment of the quality and worthiness of the article. The next stage was to review the research's outcomes and study designs by applying an adapted framework from the Centre for Evidence-Based Healthcare (Greenhalgh and Taylor, 2012). This framework works to assess papers by reviewing their findings, sample, methodology and analysis. Using this approach, the remaining articles could be systematically evaluated to identify areas of comparability and difference while also assuring the articles' research rigour

Given the focused nature of the literature review, very few articles on the subject matter were found in the trade magazines or as opinion pieces. Articles included also represent some of the more published researchers on the search topics.

The articles included on the nursing care topic range from original nursing theorists and historic descriptors to new models of care. In each piece of research, a perception, concept or definition of care is revealed or tested. This variety of research provides rich insight into the challenge that exists in trying to understand and make sense of what care is, especially from the provider's point of view.

Search terms included in the literature review strands used: nurs*, nurs* care, defin* of nurs*, perception of nurs*, care models, conceptualis* of nurs*, nurs* process.

2.3. The Ideology of Care

2.3.1. Context

James (1992) points out that there is a confused rhetoric surrounding the term 'care'. This confusion spans formal and informal language to the extent that 'care' is a uniquely variable concept. Sociologists have used it in relation to nurturing, theorists in relation to treatment (Alligood, 2014; Papastavrou *et al.*, 2011), and it can be used to describe custody (Healy, 2016) or how an organisation looks after its employees (Buchan, 2004), policy writers use it in describing an overview of services (Francis, 2013; HIQA, 2012) even politicians deploy 'care' in order to seem better than their opponent and connect with the voters (Hochschild, 2003). For the purposes of this literature, searches were limited to care associated with healthcare, or more specifically, nursing care.

As the ideology of care is so fragmented, so too are any concepts of "carer". This can extend from paid and trained professionals to volunteers or family members. Edwards (2001) compares the difference between two previous approaches to exploring care: intentional and ontological care (Benner and Wrubel, 1989), which distinguishes between care as a deliberate and purposeful act, and care that is required when being part of wider society (Edwards, 2001). It is recognised that to care for someone is an active relationship; people are "cared for", thus introducing another level of complexity to the definitions as this existing provision of care will be shaped by the influences of culture, sex and politics, too (Abel and Ungerson, 2006; James, 1992). Combining these factors into a comprehensive literature review requires a significant of work in defining the search terms

The literature surrounding the nature and definition of care is as broad as it is varied. Beginning with dictionary definitions of nursing, they all include the term care. There is an inherent presumption that care is clearly and generally understood by all. Nursing theorists and academics have provided many definitions of nursing in the past. When reviewing the available literature, there was an evident dearth of research associated with nurses' sensemaking of care. Most of the literature reviewed used the terms conception and perception synonymously, and many focused on new processes of care or enhanced practices, i.e., nurses' perception of burnout in the ICU. Six articles were found that used sensemaking and nursing; they all related to using sensemaking as a process to understand or introduce a new deliberate practice, nearly all to a nursing home environment. There was no research available linking how nurses sensemake a general concept of care. One article describes using sensemaking to explore how a patient-centred approach was introduced to a care facility, and this will be discussed further below (Hoff, 2013).

2.3.2. Introduction

No articles were discovered to address how nurses thought, processed or self-defined care. Nor were there articles surrounding what influences nurses' definition of care. The variability of search terms compounds this dearth of research. Searching for

“definition of nursing” reveals articles associated with the definition of care, which includes various nursing practices and specialities, and also the meaning of nursing terms used in practice. Still, none go to define nursing or care in a more general sense. In all articles, there is an underlying presumption of understanding of nursing care or, indeed, how nurses make sense of the care they provide.

It is important to note that the distinction between nursing and nursing care did not appear significant during the review of the literature for this paper. Every definition of nursing includes the term *care,* so the concept of nursing is a subset of the concept of nursing care. Roper (1994) noted that The word 'care' is implicit in nursing, and therefore 'nursing care' is a tautology (Roper, 1994). The synonymity between nursing care, nursing and care was confirmed by the low number of articles identified when the terms were interchanged.

The researcher also searched for a definition of the opposite perspective, missed care. The theory and conceptualisation of missed care are relatively new and are still being explored fully to ascertain its impact. While operational definitions are available and used to outline what to capture in quantitative research, there is no theoretical or complete definition (Aiken *et al.*, 2013; Alligood, 2014).

Seeking the definition of care is much like reviewing the history of nursing; the two are intertwined. Although nursing dates back millennia, modern nursing care can be acknowledged from the 1800s on. Although a controversial figure, Florence Nightingale did provide momentum to the professionalism of nurses by setting about roles and rules for good nursing care. However, even she struggled with a clear definition of nursing. The popular image of nursing, which she bequeathed, is that of gentle ladies tending to sick and wounded soldiers (Roper, 1994). Nightingale noted that nurses need to concern themselves with

- The requirements of the sick
- The environment they are caring in
- The skill of observation would make a good nurse

Over 100 years later, some of these recommendations remain true, and it is easy to see how they have shaped the perception of nursing.

Nursing care is associated with everyday living activities required by patients, wherever they are in the health service and medical diagnosis. Henderson defined nursing care as assisting the individual, sick or well, in the performance of those activities contributing to health or its recovery (or peaceful death) that they would perform unaided if they had the necessary strength, will or knowledge (Henderson, 1982). Henderson’s focus is on the nurse’s activities and in supporting a patient to return to their former baseline; in her definition, the nurse-initiated care to prevent, alleviate or solve problems (actual or potential) related to their activities of living. In contrast, Henderson’s view of nursing challenges some of the pre-existing theories, usually based on Nightingale’s definitions. Nightingale’s definitions of nursing were based on data captured from the physical intervention she could observe, and her notoriety came from correlating correct and rigorous nursing interventions to improve

patient outcomes. She was, in effect, an early nursing interventionist in that her focus was on the physical interventions that nurses can make to improve their patients' care.

2.4. Findings of the Literature Review of Nursing Care

The results of the literature review are discussed below. In discussing nursing care, the context must first be established; as nursing care transcends all care sectors and areas, it is important that the context in focus is discussed.

A significant number of the literature included in the review could be considered as older or benchmark research. The benchmark literature, including the research undertaken by researchers such as Kalisch, Roper or Ball, set a direction for future research and policy development which broadly accepted that nursing could be measured by the interventions undertaken when providing care (Ball, 1984; Kalisch, 2006; Roper, 1994). As an example, Kalisch's benchmarking research in 2006 focused on surveying nurses to determine and quantify missed care in a clinical setting. While the work has been adopted, adapted and critiqued many times since the fundamental presumption that there was a common and uniform definition of care has not been tested, the potential understanding that could be gained is the primary objective of this research.

Most of the referenced material refers to missed care as antipodal to care. The presumption that the absence of care or care deliberately left undone is the opposite to care provided further reinforces the misunderstanding of what care is. Placing care and missed care as opposing views reinforces the idea that care is based only on the physical interventions performed and does not allow for the complexity of non-physical and psycho-social elements of care. This research puts both points on the spectrum of care.

2.4.1. Reviewing the Literature of Care

James (1992) describes care using the formula:

"care= organisation + physical labour + emotional labour"

This formula takes a very different approach to the other models of care, as discussed. This definition is not focused solely on nursing care. It relates to all definitions of care. The literature available on care builds on the theories and models of care described above. One of the most recent and significant discussions in the literature has been to address fundamental care (Feo *et al.*, 2017; Feo and Kitson, 2016; Papastavrou *et al.*, 2011). Interestingly, the fundamental care movement postures that nurses should return to address the fundamental care ascribed by Nightingale, Henderson, and Orem above. They recognise that once fundamental care is addressed at the bedside, then non-physical and psycho-social areas of care are more easily addressed. There is not any reason for why or evidence that nurses may have moved away from providing

basic care to patients at the bedside but instead suggest that care should be reframed(Fernandez *et al.*, 2012). The need to return to 'basic care' is referred to across several of the articles in some way. Most argue that the movement was to drive the return to an intervention-based care model as a reaction to the absence of thorough and relatable theories of nursing (Feo *et al.*, 2017; Kitson, 2018; Needleman, 2016). Their proposition is that the abstract, academic and theories associated with nursing care have caused a vacuum in the definition of what care is and how it should be provided (Kitson, 2018). The Fundamentals of Care (FOC) framework is presented as an answer as it promotes nursing to return to routine and bedside care (Kitson, 2018). There is supportive data suggesting the efficacy of the FOC approach can be measured by improved patient and organisational outcomes (Needleman, 2016).

The FOC researchers note that the current provision of care has been devalued to involve simple tasks and portrayed as simple and unskilled tasks that are perceived to require little skill to execute (Feo and Kitson, 2016). Feo (2016) contends that the routine care being provided by nurses has been devalued because of the strength and identity, and dominance of the biomedical model of healthcare. Green (2018) notes that nursing is now more complex and demanding than it has ever been; nurses are expected to manage enormous stores of information and data while also performing complex interventions and tasks (Green, 2018). All the research available recognises the significant shift that has brought nursing into the modern era and that the historical models and attitudes towards care may no longer apply. None of the available research addresses this perceived lack of a relatable definition of nursing is exploring how nurses realise the care they are providing.

While the FOC and other new models of care approaches also make reasonable arguments to address to changing role of the nurse as the primary care provider, it does not delve into the deeper levels of what care needs to be, how the role of the nurse is perceived or how care is constructed in the minds of the nurses providing it. These would seem fundamental areas to be addressed before constructing a new model of care aimed at challenging the existing theories.

Recent research and national policies have identified that healthcare practitioners should embark on 'person-centred care' (PCC) when planning and delivering care (McCormack and McCance, 2006). This paradigm puts the person (usually the patient) at the centre of all aspects of their care planning, with their wishes and needs taken into account. The latest FOC model now incorporates PPC to create the person-centred fundamental care model (Kitson, 2018). While this is not necessarily a model of nursing care, it has been adopted as a model of healthcare delivery by the Health Service Executive (HSE) and Dept of Health (Ireland) since 2016 (Department of Health, 2016a, 2017). PCC does promote compassion, dignity and respect in all aspects of care delivery. A significant critique of the implementation of PPC has been the variation in the interpretation of PCC leading to inconsistencies in the rollout. Variations can be founded in the differing definitions and understanding of what nurses do in providing care, and organisations can have differing views and interpretations of the role and function of nurses. This reinforces the argument that the underlying concept of care to those delivering it needs to be further explored.

2.4.2. Care as a Social Construct

The social construction of illness has been well researched and documented. Conrad (2010) noted three observations of the social construction of illnesses:

1. Some illnesses can be heavily influenced by cultural norms, which can shape how a society responds to those afflicted and how they experience the illness
2. Illnesses are social constructs based on experiential learning of how people live and learn about the illness
3. Knowledge about illness and disease is not necessarily given by nature but is constructed and developed by claims-makers and interested parties.

The notable research already undertaken in exploring the nature of the social construction of illnesses has not extended into care. While care can easily be understood as a socially constructed concept, there is a dearth of clarifying research into the influences and effects of this construct. It is essential to recognise the social constructs surrounding illness and ill health to acknowledge that care itself is a social construct (Bobb, 2016).

The line between care as a construct is dependent on the population that creates it, and care as a defined object that can be transacted and manipulated as required is usually lost. As discussed, the sociological status of the construct is clear, but when applied to nursing theory, models or broader healthcare research care, a clear understanding is assumed.

James (1992) noted that care is a social formula, requiring organisation, physical labour and emotional labour. While the two latter components can be explored separately, the understanding of 'organisation' ranges from the management and provision of care to the broader social contracts and social relationships that are needed in order to define care. These contracts and relationships range from familial and domestic care to workplace understandings of care. The social constructs are pervasive in society as they can be formed as adapted as care needs to be. The additional complexity of the constructs can be added when divisions of labour are included when considering 'caring' as opposed to 'caring for', which becomes more acute when considering the work of a nurse (Bassett, 2004; James, 1992).

2.4.3. How Nurses Identify Care

While new models, theories and definitions are emerging from the literature, there is also work undertaken exploring how perceptions of nursing and care are also evolving. Nursing identity is intrinsically linked with perceptions and values. Cook (2003) researched to explore students' definitions of nursing and how they saw the professional identity (Cook *et al.*, 2003). Using a series of iterative interviews and open-ended questions, the researchers reviewed the answers and extracted some learning. Similarly, in the arguments made by the FOC, Cook found that half of the

students identified ‘nursing’ as a verb, and a quarter identified it as a transactional term. The findings from the interviews show that most of the terms associated with nursing are caring, implementing, analysing, advocating and managing. Equally, Larrabee (2001) undertook a similar study from the point of view of patients. There too, the top two characteristics of ‘good’ nursing were “providing for my needs” and “taking care of me” (Larrabee and Bolden, 2001). Unfortunately, there was no opportunity for the researchers to explore further what “taking care of me” constituted in this survey research. The presumption that care meant the same to the patient, nurse and researchers is not explored (Papastavrou *et al.*, 2011). While there was research available that focused on the perspective of nursing from students’ and patients’ points of view, no research was discovered that focused on the nurses’ perspective of nursing.

While care remains a problematic idea to define thoroughly, the concept of missed care has gathered more attention in the last fifteen years. Kalisch (2006) began to define missed care using a qualitative process of asking nurses to identify which tasks of care are most frequently missed (Kalisch, 2006). Most researchers widely adopted the premise that care is a series of tasks. This is the basis of the missed care quantitative research going forward (Kalisch *et al.*, 2011, 2012). At the same time, very similar concepts of rationed care and care left undone were also being researched (Ball *et al.*, 2014; VanFosson *et al.*, 2016). The RN4CAST widely tried to capture the extent and influences of missed care in hundreds of hospitals across Europe (Scott *et al.*, 2013). One of the most recent uses of measuring care left undone events (CLUEs) has been in the latest Department of Health publication, where CLUEs are used to measure safe staffing in various inpatient settings (Department of Health, 2016b).

The move to use missed care as a measure of care being provided reinforces the importance of understanding what nursing care actually is. The major critique of using missed care as a measurement is that it presumes that nurses have a thorough, objective and robust definition of care so that they can quickly identify missed care. Identifying, capturing and quantifying missed care to be used in research and resource planning requires a more robust understanding of how nurses conceptualise the care they provide. Understanding this will provide better insight into the phenomenon of missed care.

Strand 2 – Literature Regarding Sensemaking Care

The research papers identified in the sensemaking phase of the review have a micro-level approach to the use of sensemaking in healthcare research. Each piece of research uses sensemaking as a tool to understand or improve a small and deliberate area of concern. When compared with the original ideals of Weick (1997) and other sensemaking theorists (Christianson and Barton, 2021; Klein and Moon, 2006; Mark Lycett and Alaa Marshan, 2016), this approach does not realise the full potential and

philosophy of sensemaking. Additional sources were referenced in order to contextualise the literature review and the research identified. These are not included in the 30 articles as they do not meet the inclusion criteria but were useful to inform the process.

2.5. Methods

As described above, both strands of literature reviews were run simultaneously from May 2016- December 2021.

The search was limited to articles in English and from peer-reviewed journals. Due to the small amount of available literature, no date restriction was imposed. Inclusion and exclusion criteria are set out in the table below. The review used Cumulative Index to Nursing and Allied Health Literature (CINAHL) and Medline as the primary search engines with the search terms outlined above; additional searches were undertaken on Ovid, Science Direct and the Sigma Repository but did not yield any applicable results. The reference lists of all articles included were also reviewed for additional literature that had not been revealed through the search engines.

Search terms included in the literature review strands: sensemake*, sensemak* nurs*, sensemake* care.

The inclusion and exclusion criteria:

Table 3 – Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
• From a peer-reviewed journal • Included concepts related to missed care, concepts of care and models of care as outlined above • Included analysis of terms related to missed care • Report of or original research into patterns, prevalence or incidence of missed care • From Peer-reviewed journals and books on sensemaking	• Non-English articles • Research from non-peer-reviewed sources • Anecdotal articles • Reports or original research relating to a specific incidence of defining nursing or nursing care, i.e. where the research is so specific that the learning would not be applicable • Policy and strategy documents

2.6. Results of Strand 2 Review

Table 4 – Literature Review Results for Sensemaking Care (Review 2)

1	Battles, J. et al., 2006. Sensemaking of patient safety risks and hazards. *Health Services Research*, 41(4P2), pp.1555–1575.

2	Colville, I., Brown, A.D. & Pye, A., 2012. Simplexity: Sensemaking, organising and storytelling for our time. *Human Relations*, 65(1), pp.5–15
3	Davidson, J.E. & Zisook, S., 2017. Implementing Family-Centered Care Through Facilitated Sensemaking. *AACN Advanced Critical Care*, 28(2), pp.200–209.
4	Dervin, B., 1998a. Theory and practice: an overview of user interests in knowledge seeking and use. *Journal of Knowledge Management*, 2(2), pp.36–46.
5	Helms Mills, J., Thurlow, A. & Mills, A.J., 2010. Making sense of sensemaking: the critical sensemaking approach. *Qualitative Research organisations and Management: An International Journal*, 5(2), pp.182–195
6	Hoff, T., 2013. Medical home implementation: A sensemaking taxonomy of hard and soft best practices. *Milbank Quarterly*, 91(4), pp.771–810.
8	Weick, 2011. *Making Sense of the Organization*, Blackwell Publishing Ltd.
9	Vogelsmeier, A. et al., 2017. A qualitative study describing nursing home nurses sensemaking to detect medication order discrepancies. *BMC Health Services Research*, 17(1

2.6.1. Defining Sensemaking

Wieck is credited with coining the term ‘sensemaking’ in 1967 while explaining the functional difference between how an individual in an organisation reacts and responds to their reality (Weick, 1997). Weick maintained that sensemaking is fundamentally different from the normal process of understanding a person's cognitive process; he argues that sensemaking is a complete mechanism. He put it more simply as “the making of sense” (Weick, 1997).

Ancona (2012) identifies that sensemaking can be used to help make a complicated situation more simple (Ancona, 2012). When an individual makes sense of their environment and reality, the interpretation is translated into a construct by their behaviour. This occurs when an environment is rapidly changing or does not have a clear and fixed genesis to support future development.

Morgan, Frost and Pondy (1986) later created a more practical model of sensemaking that identified some of the core properties they felt defined the process. However, this model held that individuals were much more retrospective in how they interpreted their reality. This meant that individuals were not seen as living in the present and reacting to their reality but rather creating images of their presence through the prism of their own past (Pondy *et al.*, 2006). Later work by Weick criticises this model as it suggests individuals heavily rely on symbolism and ‘hidden meaning’ of patterns they witness (Colville *et al.*, 2012; Weick, 1997). Weick later went on further clarify the core process that an individual or group of individuals utilises when sensemaking; these include:

- Reality is an accomplishment
- Individuals attempt to create order
- Sensemaking is a retrospective process
- Individuals attempt to make situations rationally accountable
- Symbolic processes are central in sensemaking
- Individuals create and sustain images of a broader reality

- Images rationalise what individuals are doing

Weick called this the model of committed interpretation of sensemaking, as small-scale behavioural commitments can have macro consequences or interpretations (Weick, 2011). This model favourable translates from individuals to collective structure, which is crucial when trying to explore how nurses, as a collective, sensemake care.

Understanding how nurses sensemake care will involve focusing on the actions which identify their most robust commitments. All actions have meanings; the importance of these is subjective to the individual or group and can depend on the context or properties as identified above.

2.6.2. Reviewing the Literature of Sensemaking and Care

The dearth of research that focuses on how nurses sensemake a concept such as care is evident. One quantitative piece of research focused on the economic benefits of fundamental care (Needleman, 2016).

Weick defines sensemaking as a cognitive process in which individuals construct mental models that they, in turn, use to interpret and assign meaning to unexpected events (Weick, 1997). Sensemaking is the information task of creating an understanding of a concept, knowledge area, situation, problem, or work task (application task; for definitions of information task and work task (Battles *et al.*, 2006; Bystrom and Hansen, 2005) often to inform action. Sensemaking is a prerequisite for many work tasks, such as problem-solving, decision-making, planning, and executing a plan. Weick's theory outlines seven properties of sensemaking which he states distinguish it from other cognitive processes to facilitate understanding of how meaning is assigned (Vogelsmeier *et al.*, 2017b; Weick, 1997).

Table 5 – Sensemaking Properties

Sensemaking Property	Explanation
Identity Construction	Members of an organisation or grouping come to know themselves through interactions with other members of the same organisation or group
Retrospective	Individuals make sense of events that have occurred
Enactment	Individuals assist in creating the environment they encounter based on their own expectations/anticipations

Social	Individuals are influenced by relationships with others
Ongoing	An event's history and context influence the understanding and sensemaking of future events
Extracted Clues	Individuals identify known points of reference to extract clues to assure familiarity with an event or situation.
Plausibility rather than accuracy	Individuals try to behave in a reasonable fashion within the context of the unexpected event so they can move quickly past it

Sensemaking theory and properties have been used in identifying nurses' understanding of clinical risk and medication safety (Battles *et al.*, 2006; Vogelsmeier *et al.*, 2017b). The sensemaking properties were used in guiding the analysis of the data collected from interviews of nursing staff. Individuals do not just make sense of events but use conversations, interactions and engagements to shape their own reality. Therefore to 'make sense' is not to find the right or wrong answer but to identify a pattern or understanding, albeit brief, that gives meaning to the group or individuals (Battles *et al.*, 2006).

Dervin's sensemaking framework runs contrary to Weick's, focusing on the individual rather than the societal group or organisation (Dervin, 1998a). Dervin's theoretical assumption is that individuals sensemake and un-sensemake their reality; she defined this as individuals' experiences and observe their world differently and need to create meaning or make sense or make un-sense of their world (Dervin, 1998b).

From the research available, the link between sensemaking and care is still very new and not fully explored. Hoff's (2013) research used sensemaking to assess the care practices after the implementation of a patient-centred medical home (PCMH) model of care in several nursing homes across the USA (Hoff, 2013). The PCMH model has many similarities to both the FoC and PCC models described above, focusing just on the care being provided in a medical home. A sensemaking view on the implementation structured by the researchers to include the language, communication and organisations as part of the data collection. This research allowed nursing home providers greater insight into the experiences of the staff after the implementation of the new model of care. The researchers chose to use sensemaking as they recognised that care, and the provision of care, can be very subjective and requires a focused approach that assumes new knowledge of "how things work" and "how things should work" with respect to the care being provided comes from the social actors (care providers) themselves who have interpreted it (i.e. made sense of) for their own understanding (Hoff, 2013; Weick, 2012). Hoff identified two themes of practices in the results: hard and soft. A synopsis of the results is provided in Table 5.

Table 6 – Example of Hard and Soft Practices (Hoff 2013)

Hard Practices	**Soft Practices**
Redistribution of tasks – delegation	"Knowing the patients"
Reporting	Communicating with families
Formally assessing patients	Tailored communication with patients

The results above show a clear delineation in the taxonomy of care as reported by those providing it. The language and phrases used by staff to describe the different kinds of care practices are evident. Both sides of the results demonstrate attention to the patient care needs, but having sensemaking as the approach to understanding the research was able to theme them. The results from the interviews undertaken in the research also demonstrate the subjective nature of the care and the complexity of trying to define, conceptualise or make sense of it. Hoff's conclusion recognises the complex functional nature of unravelling the theory and practice of care. Their research was done post-implementation of a new model of care. It was not designed to explore how care providers made sense of care in general, regardless of the model of care in place.

Other articles were found that used sensemaking in relation to understanding some functional aspects of care. Davidson (2017) used a sensemaking approach to facilitate the implementation of a family-centred care model in an ICU (Davidson and Zisook, 2017). This novel approach used sensemaking to identify the care needs of families with relatives in ICU so that a new model of care could be developed. Similar to Hoff's work, sensemaking facilitated the research team to examine the language, communication and experience of the family but also identified the agency and presence of family members in ICU as being a significant issue, particularly around decision making (Davidson and Zisook, 2017).

2.7. Discussion

2.7.1. Limitations of the literature review

Maintaining the fixed focus of this literature review on exploring the definition and models of care recognises that other areas associated with this phenomenon are omitted. On a larger scale, this literature review has only focused on the care provided by nurses, ignoring the same phenomenon that has been reported in other health care professions, most notably with delayed diagnosis among medical doctors (Bradford *et al.*, 2009). This literature focused on nursing as it is the author's professional experience and the most advanced area of research into care.

A limitation of this review is the lack of common terminology to describe the phenomenon in the previously published research, journals and books that the researcher relied upon; the availability of these studies using the inclusion and exclusion criteria outlined in Table 1. Another challenge of this literature review was the high number of articles found during the initial search period that did not meet the inclusion criteria due to the many different uses of the term 'care'.

The limitations of this study are discussed fully in Chapter 5. However, when just considering the literature review, the dearth of connecting research, and research that can link theory to practice, therefore validating the concepts, was also a challenge. The ability to capture care is self-limiting if research has not been undertaken to utilise the data gathered. As has been discussed, the PIRNCA and RN4CAST were the first tools to combine missed care with other factors that would affect the patient's outcome. However, many more possible links and connections exist and must be explored. With further validation and evolution of the tools developed to capture the very nature of the phenomenon, richer contributions can be made by associating it with other already explored fields such as; organisational culture, multidisciplinary communication, leadership and management.

2.7.2. Discussion of the findings

Reviewing the literature on defining nursing care has provided some insights and identified an area for research.

The struggle to clearly define care is not new; as has been described, the context of care has significant influences. The literature notes the different settings in which care can be understood. The focus of this literature review has been on how nurses sensemake care in terms of the care they provide to their patients in a healthcare setting. The general dearth of research on this topic only reinforces how difficult a subject matter it is to define but does not diminish how vital any research on this topic would be.

The slow movement of nurses to acknowledge a more task-oriented approach to care is not novel but is only started to be captured in the current literature. It could be argued that the introduction of some models of care has oversimplified the concept of care and brought it down to a checklist of activities rather than moving through person-centred care or providing competent care based on compassion and commitment. Task-oriented care is believed to be easier for nurses as it is simpler to quantify and assure (VanFosson *et al.*, 2016). The current trend in research is to quantify the episodes and extent of missed care without addressing what the 'care' being provided actually is or how it is perceived by those administering it. While exploring missed care is worthwhile, without a thorough basis of understanding of how nurses conceptualise the care they are or are not delivering, then missed care can never be fully addressed (Wakefield, 2013). The existing conflict exists in trying to gain insight into how nurses sensemake care. Care is such a dynamic process between nurse and patient that there will always be a fine line between the nurse's role and the

patient's needs. The models and definitions reviewed focus on defining nursing on the basis of providing the best for an individual patient. It could be argued that a nurse-centric definition would provide nurses with a stronger position with which they could model their care for entire populations rather than single individuals (Allmark, 1995).

The literature also references a move to develop new models of care, integrating the patient in the care provision, planning and administration. Models such as patient-centred care and fundamentals of care are examples of new models that have been developed in an effort to integrate all aspects of care while working with a fundamental presumption of what care is. Exploring how nurses understand care would provide a vital insight into how care can be delivered, planned and modelled in the future. Despite the complexity of trying to gain insight into how nurses sensemake care, the learning from doing so would be invaluable.

When considering the literature review from a Critical Realist perspective, it appears that the epistemologies of the literature included are either empirical (focused on measuring care or the impact of nursing) or social constructionist (addressing the experiences or qualifying theories of nursing). No literature focused on understanding or deconstructing the realities of care. Fundamental to the Critical Realist evaluation is appreciating the dynamics and complexities in any research context (Pawson and Tilley, 1997). Taking the utility of Critical Realism, which focuses on the middle ground between empirical evidence and constructionism, this aligns with this research's aim and purpose to understand how nurses make sense of the care they are providing. Pawson and Tilley's (1997) contribution to methodology has been the development of the Context-Methodology-Outcome hypothesis, the utility of which is discussed in the methodology chapter.

Exploring how nurses sensemake care, rather than the limit to other cognitive processes, provides an opportunity to capture the influencers and contexts too. Sensemaking as a discipline is focused on converting a world of experience into understandable ideas. The researcher's role is to capture how nurses use their reality to sensemake the social construct of care (Weick, 2011). How nurses make sense of the care they provide is fundamental to understanding how and why they provide it. This, in turn, provides insight into many other aspects of care planning and policymaking.

2.8. Identified Gap in Literature

The notable dearth in the literature of how nurses conceptualise care is apparent. Research into missed care is attempting to address this gap but can only partially do so. New models and theories of care are being developed with the presumptive core understanding of care.

Developing an appropriate conceptual framework and methodology would allow for meaningful research to be undertaken in this area. The framework would acknowledge the research gap that has been identified in this literature review, in combination with the sensemaking perspective, which is suited to explore the topic

thoroughly. Utilising the properties of Weick's sensemaking would provide the researcher with a unique perspective on the social construct of care. Sensemaking has anecdotally been described as a cartography of understanding but with an endless possibility of maps. It is ideally positioned to provide the structure and insight into how nurses utilise their experience and reality to form a concept of the care they deliver.

The primary aim of the research proposed would be to explore how nurses sensemake care in an acute healthcare setting. With this approach, a secondary objective could include assessing the impact of various influences on how care is interpreted. Not only would an understanding of how nurses construe care be essential but identifying any factors which significantly impact that process would be equally beneficial.

In reviewing the literature available and acknowledging the gaps and dearth in research, the research question can be generated. It is clear that a number of theories and models of care have been developed; this has married emerging research to qualify and quantify care; but without credence given to understanding how nurses, as the primary care giver, make sense of their care. In attempting to understand how nurses make sense of the care they provide, the key to this would be acknowledging what influences their sensemaking of care.

2.9. Research question and aims

Terms such as 'nursing' and 'care' were used interchangeably, reflecting the different simultaneous realities in many of the research studies identified in the review (Boykin *et al.*, 2003; Sapountzi-Krepia *et al.*, 2007). The review of the literature showed a focus on models of care, i.e. what nurses should do, but a gap exists in how they make sense of their role. The literature review chapter outlined the findings from previous studies, with the main gap shaped into the research question; how do nurses in the acute surgical setting sensemake the care that they provide?

There are many ways to explore the gap identified in the literature, namely, to identify a methodology that will enable a thorough exploration, while also maintaining academic rigour. If care cannot be concisely defined, then the gap created has been filled by the care being defined by what is administered and influenced by various care models. The lack of a consensus on the definition of 'care' that nurses provide underlies a fundamental question, how do nurses make sense of it in their day-to-day work? Therefore, the research aims are:

- To understand what influences how nurses have shaped their understanding of care.
- To understand the effect of language on how nurses sustain their understanding of care.
- To understand how nurses maintain their definition of care in practice, acknowledging the contrast of theoretical definition against a working definition.
- To understand how the nurses' concept of care may impact how care is provided.

2.10. Conclusion

The focus of an evidence-based approach to healthcare demands that succinct data be provided before any changes are made. While the research done so far has made significant strides in defining, categorising and capturing the phenomenon of care is dynamic and context-dependent, and so the definition is fluid, however understanding the factors that determine how nurses make sense in a given circumstance would enhance the research and management of nursing, but research may benefit in understanding how it is conceptualised by those delivering it.

The rate of new models of care being developed and published without considering the underlying constructs of ‘care’ is concerning and a driving force for this literature review. The complex nature of defining or understanding any concept is a challenge; this is magnified several times because of the contextual, subjective and situational nature of care. Regardless of the complexity, it remains fundamental for all care providers, researchers and healthcare managers to understand what care means to those who are providing it. More so, not just what it means but how it is made sense of and what influences this process.

This continued expansion would hugely benefit from research already done into the many other areas affected by inconsistently defined care. The data gathered would provide vital information to healthcare managers and planners. Including this research could lead to the development of a differently focused organisational culture, progressive workforce planning or outcome-driven patient care strategies.

3. Methodology Chapter

3.1. Introduction

The previous chapter presented a literature review that identified a gap in understanding how nurses make sense of the care they provide. This chapter will state the principal research question and aims of the present doctoral research study and discuss the methodology and methods used to address these. The overall purpose of the chapter is to describe what happened during the conduct of the research and why particular decisions were taken.

The chosen methodology for this research study is ethnomethodology, and given that ethnomethodology provides an understanding of how groups collectively construct social orders, it is a clear fit with sensemaking. To understand this further, this chapter will set out the ontology and epistemology as well as the research methods. While the chapter is presented in a step-by-step order, the research process it describes is not linear. Rather, in line with the chosen methodology (ethnomethodology), there was a constant movement back and forth between the different elements of the research process as the study progressed.

3.2. Epistemological and ontological perspectives

Ontological clarity is key in outlining the research position, from the ontology to the meta-theoretical concepts of epistemology and methodology and built (Fleetwood, 2013). Ontology examines the nature of being or reality, and different paradigms are developed through which a concept of reality can be examined. The spectrum of ontology is bound on one end by positivism and on the other by relativism (Easton, 2010). Positivism postulates that the universe is comprised of a single observable truth to be discovered. These exist as empirical entities, on their own, independent of the observer's appreciation of them. Positivism argues that the world exists without needing to be witnessed. On the other end of ontology is relativism. Simply put, relativism argues that existence is relative to those who experience it and, therefore, a subjective construct of the mind (Goles and Hirschheim, 2000). Deciding where to place this research on the ontology spectrum is critical; a positivist ontology would accept one reality to exist, and therefore the research's epistemology would focus on capturing it. Taking a relativist approach forgoes any presumption of a universally experienced reality, therefore requiring an epistemology that allows for the subjective nature and acknowledges the social influences (Fleetwood, 2013).

Along the spectrum of ontological positions, critical realism is the branch of philosophy that distinguishes between the ‘real’ world and the ‘observable’ (Appleton and King,

2002). It acknowledges both positivism and interpretivism ontologies. At the core of critical realism is the perspective of ontological realism; it asserts that much of reality exists and operates independently of our awareness or knowledge of it. Critical Realism states that the ontological reality is distinguished from what it is possible to know about it. Reality, in social practice, is an unobservable mechanism; the actual observable reality is the interactions between the mechanisms and the empirical. Critical realism differs from other methods in that its ontology is positivist, but its epistemology is partially relativist.

Critical realism is concerned with the nature of causation, agency, structure, and relations. Critical realists are concerned with mapping the ontological character of social reality: those realities which produce the facts and events that can be experienced and empirically examined. However, critical realists approach causation critically, using the partial regularities, facts, and events we encounter in the social world as a springboard or gateway to understanding the complex, layered, and contingent processes or structures that cause those regularities, facts, and events (Maxwell *et al.*, 2013).

As described, epistemology is not a dichotomy, and more recently, the idea of taking a solely positivist or relativist approach would be seen to limit the research potential (Matua and Van Der Wal, 2015). During the enlightenment, the focus on empiricism led to the dominance of positivism, and it delivered mathematics, engineering and physics, while relativism was seconded to the arts. Recently, positivist approaches have suffered criticism, and further consideration has been given to how subjective experiences of an objective reality have led to many post-positivist approaches and even anti-positivist in a steadfast denial of a universal truth (Easton, 2010; Fleetwood, 2013; Goles and Hirschheim, 2000). The objective of a positivist ontology research is to provide prediction, and once a phenomenon has been understood, then it is universally generalised without variation.

The position taken in this thesis is a critical realist one. Critical realism differs from other methods in that its ontology is positivist, but its epistemology is relativist. On the ontology spectrum, critical realism is towards the positivist end but acknowledges that there is not a single reality with multiple interpretations. That is, the understanding gained from the study is contextual and specific to the historical, social and cultural context of the research setting. The objective of this epistemology is to understand how individuals and groups see a truth from different lenses. Understanding of the complex process of developing and sustaining a social construct from a discrete set of social actors required the triangulation of data collection methods. Rather, the stance was one in which the experiences and perspectives related by the participants were believed to stem from their reality, acknowledging it is one that was difficult to understand. The data were viewed as reflecting, even if imperfectly, at least something of the participants' real experience of the construct. The position adopted in this study, therefore, was one of critical realism.

Epistemology is the theory of knowledge, understanding its sources, components and limits (Houghton *et al.*, 2013). Ragin (1996) defined social research as the dialogue between ideas and evidence (Benford and Ragin, 1996); in general, quantitative research is designed to test existing knowledge, whereas qualitative research aims to generate theories or greater understanding through exploration or experiences or interpretations (Charmaz, 1995). There are many schools of philosophy in generating new knowledge, positivism and interpretivism (Crotty, 1998; Fleetwood, 2013; Matua and Van Der Wal, 2015). To this end, empiricism is defined by its dependence on *Natural Phenomena*, their properties and relations (Hall *et al.*, 2013). The positivist approach relies on the proposition of natural laws to define reality, and the purpose of the research is to test these propositions to identify further relationships.

From the broader epistemological school, other sub-schools have emerged, e.g. logic-positivism, but all adhere to the fundamental understanding that testing reality can only be measured through the human senses, this school outright objects to the ideas of metaphysical theories. Positivists maintained that reality could be observed, replicated and rationalised consistently so that all understandings maintain rigour.

3.3. Choosing Ethnomethodology

Garfinkel proposed that all social research needs to be based on concrete social facts, but in the case of ethnomethodology, these ‘social facts' are complex social practices enacted to maintain a social order (Garfinkel, 1996; Garfinkel and Rawls, 2002). While ethnomethodology does try to create 'social facts', it does so through understanding how the actors develop and maintain a social construct or theory and therefore is better placed in the epistemological school of interpretivism (ten Have, 2010). Garfinkel (1996) defined ethnomethodology as a

> *"distinct approach to sociological inquiry, one that analyses and describes the various methods by which members of a social group maintain the orderliness and sensibility of their worlds." (Pg 5)*

This model of social research notes the significant distance between abstract ideas and evidence. Bridging the gap between abstract and empirical involves the construct of analytic frames and images, the combination of which creates a representation of social life. Analytic frames are the deductive reasoning of abstract ideas; images are the inductive explorations of evidence (ten Have, 2010). This simplified model of social research gave a common basis in which broader ethnomethodological research methods could be discussed. Knowledge of the social world is still regarded as incomplete and needs exploration for more understanding; social researchers and sociologists recognise the importance of capturing and acknowledging the 'context' of the social facts. Therefore data collected from people, regardless of the intent, must be interpreted for what it means, not the face value of the description (Charmaz and

Belgrave, 2015). Interpretivism is focused on understanding rather than measuring and rationalising.

Despite the weighting of social objects, ethnomethodology sits comfortably within the remit of interpretivism and not positivism, as does this research orientation (Garfinkel and Rawls, 2002; Linstead, 2006). The primary research question is focused on an understanding of a social construct; it is open to exploration and examining nurses' reality. It is not focused on testing a theory or hypothesis for confirmation or replication but on understanding the social norms as maintained by the actors.

Keeping true to the EM methodology, the research focuses on understanding the process and contextual influences of understanding care. Therefore, the study plan, sample selection and data collection will all be guided by EM. Sensemaking theory influenced the data analysis, discussion and understanding generation by incorporating different theoretical underpinnings. For sensemaking, this would involve the Dervin model (Dervin, 1998a). Dervin instructed researchers to pay attention to the heart, and in 2005, Weick noted that his treatment of sensemaking lacked the development of the role of emotions (Dervin, 1998a; Weick *et al.*, 2005). Utilising sensemaking theory allows for the research to capture the full explicability of the process. This information can then be added to the discussion and theory generation.

Interestingly, the rigour and reliability of positivist epistemology attracted early sociologists such as Émile Durkheim. Durkheim depended on the rationalised approach to research to validate his sociological projections and understandings, noting that validation is a positivist term and not relevant within other ontologies. In his seminal work *Suicide,* he used a quantitative approach to delineate the difference in suicide rates between Catholics and protestants and rebuke the traditional ideas associated with just psychological research. Durkheim endeavoured to develop "social facts", which he thought to be a pure, rationalised and objective measure to determine the health of a social population. This approach to generating knowledge helps bridge the gap between positivism and interpretivism. While positivism relies on human senses to observe natural phenomena, interpretivism follows how people interact, perceive and understand their reality to a subjective or metaphysical level. Harold Garfinkel was a student and believer in Durkheim's ontology of social research. When Garfinkel split his sociology ontology away from the traditional Parsonian school of thought, he used Durkheim's research structures as a basis to justify the need for new views of sociology. In Durkheim's Aphorism, Rawls (2002) outlines how Garfinkel insisted on focusing on fundamental sociology issues and argues that understanding social facts from the perspective of the actors that created them are all forces of equality, which Durkheim accepted and adapted as a positivist approach when studying broader populations.

Ethnomethodology was developed to explicate how collectively, members create and maintain a sense of order in social life. It emerged as a new perspective of social research from the work of Harold Garfinkel (Garfinkel, 1967). Garfinkel was originally researching using the traditional schools of social understanding based on Husserl,

Durkheim and Schutz (Garfinkel, 1996). These schools of social interpretation are concerned with exploring 'social facts', which are understood to have been produced through members' practical activities and previously understood to be positivist facts (vom Lehn and Dingwall, 2014). In Garfinkel's ethnomethodology (EM), the focus is on the explication of the construct of social facts and how they came into being (ten Have, 2010). Garfinkel defines EM as "*refer to the investigation of the rational properties of indexical expressions and other practical actions as contingent ongoing accomplishments of organised artful practices of everyday life*" (Garfinkel, 1967). This congruence of the rational process while acknowledging the indexical (contextual) expressions is ideally suited to the research topic and objectives.

Although ethnomethodology is based on the traditional social inquiry of ethnography, it remains very different (Dowling, 2007). Ethnomethodology would focus on what constitutes 'care' and/or how various sources of information (documents, colleagues, models) influence the collective construct of care that is being delivered.

Some methodologies have associated preferences of data collection methods, whereas EM can utilise almost any data collection method once it remains congruent with the methodology and speaks to the research's aim. While this may offer practical advantages, it also risks diminishing the rigour of the research if not well justified and managed.

Adapting the theoretical framework of ethnomethodology to include guidance from sensemaking theory recognises some of the weaknesses of the sociological underpinnings. Ethnomethodology may provide an interpretation and insight into the nurses' process for understanding, but that interpretation might be forced into rationalising by the methodologies discipline (Carter and Little, 2007; Linstead, 2006). Adding the guidance of sensemaking facilitates the inclusion of emotional processes into the interpretation (Carter and Little, 2007; Dervin, 1998a; Weick *et al.*, 2005).

3.3.1. Other methodologies considered

3.3.1.1 Phenomenology

The other methodology most closely aligned to the research's aims was grounded theory. Grounded theory was first described in The Discovery of Grounded Theory (Glaser and Strauss, 1967). Glaser and Strauss proposed that the aim of the approach was to develop an abstract theory or general framework about a concept or process from the bottom up. In the Grounded Theory approach, data can only be collected from the field, most commonly through observations and interviews, and the theory is then generated from the analysis of these data while suspending any a priori assumptions. The development of grounded theory was, in part, a reaction against the perceived bias in sociology at the time toward verifying hypotheses from existing "grand" theories of "great men" of sociology rather than generating new theories inductively from data (Glaser and Strauss, 1967). Similarly to the divergence of ethnomethodology from the traditional sociology process, Grounded Theory sought to

generate theory from a blank canvas, whereas ethnomethodology does not require suspension of assumptions as it does not generate theory, only further understanding.

Grounded theory was considered a potential methodology for this research as it holds a close epistemology and ontology demanded by the research's aims and objectives. As mentioned above, this research sits within the interpretivist epistemology, with the main aim to generate an understanding of their social construct. The primary reason for not using grounded theory is that the focus of the research is on sense-making and gaining an understanding of the specific acute care setting rather than generating a new theory.

3.3.1.2 Critical realism

Critical realism (CR) is not a research method per se but a philosophical approach which can inform a wide variety of research designs to seek to understand a phenomenon. Critical realism focuses on the evidence we can observe but acknowledges it is always a fallible and subjective account of reality. While not the primary methodology, CR does closely align with EM in that it challenges the researcher to examine the normal and ordinary in order to understand how realities are developed and constructed. Throughout this research, a CR perspective was also taken to supplement the EM approach.

The CR epistemology is broad; however, the researcher deliberately did not choose a methodology closely aligned with CR, for example, the Context-Mechanism-Outcome (CMO) approach that is widely used in CR studies, including in healthcare research (Public Health England, 2021). CMO is a methodology developed by Pawson and Tilley (1997) to evaluate whether an intended outcome was achieved. This study seeks to understand a process and is exploratory, and that is why Realist evaluation would not align with the research aims of this study. EM is more appropriate as a methodology to support understanding how a group create a reality, not how a reality changes subject to intervention, as is the case with COM.

3.4. Setting and Participants

A description of the research setting is now provided to give context to the study. The research was undertaken in a major teaching hospital in Ireland. It serves a population across the urban city centre, suburban and rural areas and with a wide range of ages, ethnic diversity and socio-economic challenges.

Two wards were selected for the research setting; both of these wards are in the surgical directorate, with predominately surgical patient caseloads. The decision to limit the research to surgical wards was for three reasons:

1. The researcher's own clinical background was in surgical care. This choice of setting would provide the researcher with a degree of familiarity with the routines

and jargon used; hence more open to question the assumptions proposed. Using a clinical setting that was not familiar to the researcher would risk some of the nuances being missed over the time of the shadowing or interviews. Being on a surgical ward also meant that questions asked during the shadowing were more pointed and deliberate and not just for clarification or context. From an ethnomethodological point of view, having knowledge of a context is helpful in identifying and understanding normal routines (Coulon, 1995).

2. Having a similar clinical background also allowed the staff to have confidence in the researcher, as the researcher's background was explained to the participants. This was explained to the participants so that during the shadowing data collection, they did not feel they had to explain their basic actions and reactions as they felt it was understood.
3. The surgical care environment is noted for its transactional nature, where patients are admitted for a specific disease or treatment option, usually receive surgery, are recovered and are discharged (Jangland and Muntlin Athlin, 2017). Some literature suggests this precludes surgical wards from delivering task-based care more than other care environments (Blackman *et al.*, 2015; Pua and Ong, 2014). This presumption was considered in the proposition posed for a greater understanding of the nurse's construct of care.

Ward A is a vascular and colorectal surgery ward with 26 inpatient beds. It is slightly smaller than other wards in the hospital as one bay has been converted to a High Dependency Unit, but this is independent of the rest of the ward, and it is staffed separately. This bay was not included in the research. The rest of the ward is based on the main corridor with the nurses' station in the middle. There are three patient bays with six beds, each on one side of the corridor and eight side rooms with single bed occupancy on the opposite side. There are separate medications and clinical storerooms, and at the end of the corridor, there is a large day room used for a variety of purposes, both clinical and non-clinical. There are two side rooms opposite the nurses' station for a patient requiring additional nursing care. Two of the patient bays are dedicated to male patients, with the third bay for females. The typical daily staffing complement was four nurses, one healthcare assistant, one Clinical Nurse Manager 1 and one Clinical Nurse Manager 2. While the ward was busy, the staff appeared to be able to meet their patients' care requirements.

Ward B has the same layout except with four patient bays, not three. The clinical specialities cared for include patients with Ear, Nose and Throat or gynaecological conditions. The patient profile of the latter means that three of the four patient bays are dedicated to female patients. Both wards noted that they had busy "theatre days" when their speciality had a busier surgical list in the operating theatre. Both wards usually had a 95% bed occupancy level, which reduced slightly at the weekend. Both wards had a very small number of patients who had been inpatients for a protracted period of time, in excess of 30 days. The staff in Ward B also noted that some of the patients who required gynaecological care might have frequent or regular admissions and have built up a relationship over time. The typical daily staffing complement was more than ward A as there were more beds. Typically, there were five nurses, one or two healthcare assistants, one Clinical Nurse Manager 1 and one Clinical Nurse

Manager 2. While the ward was busy, the staff appeared to be able to meet their patients' care requirements. On both wards, neither the Clinical Nurse Manager 1 nor 2 would routinely carry a patient caseload.

3.4.1. Ethics

Ethical approval was sought from two organisations. The first was the School Ethics Panel of the School of Health and Social Care in London South Bank University (HSCSEP/18/11), which was approved on the 4th of September 2018 (Appendix 1)). The second was through the Joint Research Ethics Committee for the hospital site (2019-02/04), which was approved in February 2019 (Appendix 2). Permission to undertake interviews in the hospital was also sought from the Deputy CEO as part of the ethics application process (Appendix 3). The application also had to be approved by the Hospital's Nursing Research Access Committee; while not an ethics body, it maintains oversight of any research that involves nurses being undertaken in the hospital.

The primary ethical concerns were that during the interview process, there is potential for a participant to become distressed or for the disclosure of a patient safety concern. At no point during any interview process did a participant become upset or distressed or ask for the interview to stop. After each interview was over, the researcher confirmed that the participant had a copy of the PIS, should they have any further questions of the researcher or wish to contact the EAP. The interview process was risk assessed using the hospital risk assessment framework, which compares impact versus the likelihood of recurrence to determine the mitigation required (Health Service Executive, 2018).

Secondary to the above were the potential interactions with patients while shadowing on the wards. The researcher was not present at the point of patient care, but there was the potential for interactions while the researcher was on the main corridor or at the nurses' station. Only one interaction arose when a patient approached the researcher asking for his nurses, the researcher clarified which bed the patient was in so that they could find the patient's nurse and direct them to him.

3.4.2. Ethical Considerations

Under the submission for ethical approvals, because of the nature of the research and data collection, several areas required specific consideration:

- **Participants**

The ward managers remained the gatekeepers to the interview and shadowing data collection participation. All staff on the wards included in the shadowing part of the data collection were invited to participate in the interview part of the data collection. All staff that meet the inclusion and exclusion criteria were provided with the PIS

(Appendix 4&5) and asked to contact the researcher if they were interested in participating in the interview part of the data collection. Ward managers circulated the information regarding the interviews and participants. Ward managers could not be included in the interviews as the focus of this research is on nurses who provide direct patient care. The Nurse Managers in this hospital were supernumerary from the direct care complement of staff. All nurses on the surgical ward selected were invited to interview without bias.

Any participants can withdraw from the interview at any time without consequence. Interviews were held onsite at a time that was convenient for the participant, with the final interview moved online to comply with public health guidance. Interview participants were required to sign a consent before the interview could begin (Appendix 6 & 7).

During the interview part of the data collection process, there is potential for a participant to become distressed or for the disclosure of a patient safety concern. In the event of a participant becoming upset or distressed during the interview, the interview will cease immediately, and the participant will be referred to the employee assistance programme (EAP) within the Hospital for support. The EAP will be contacted in advance of the data collection and briefed on the nature of the research so that they are aware of the potential for referrals. Staff can also self-refer to the programme at any point should they wish. The researcher will have the contact details for the EAP and can provide them to any participant and to the gatekeepers; contact details were also provided on the PIS.

- **Data protection**

During the shadowing, field notes were recorded in a dedicated notebook, which was stored securely. After each shadowing shift was complete, the field notes and data collected were transcribed and the data saved onto a dedicated and encrypted memory drive. The field notes were then destroyed. Data analysis occurred in the researcher's home or university library. No data were stored on the researcher's laptop; all data were saved to the dedicated and encrypted memory drive. Encrypted data were backed up to a dedicated server on the university's shared drive.

Similar to the shadowing data collection, the confidentially of participants must be assured. All participants' data were recorded under an individual codified identifier. The interview data were recorded on a dedicated digital voice recorder. Once the interview was complete, the digital file was transferred to a secure and encrypted memory drive, and the memory of the voice recorder was erased. All interview notes were transcribed and stored in a digital file. The identifiable codes and participant names were stored separately on the encrypted memory drive that was password protected and secured at all times.

All remaining data will be destroyed once the final thesis has been written and submitted to London South Bank University.

- Data Sharing

During all phases of the data collection, the researcher stayed in regular contact with the supervisory team. The Team offered guidance and support should challenges or issues arise. Identifiable data were not shared with the supervisory team.

- Escalation of concerns

Should the researcher have uncovered information that directly comprised a patient's safety, the existing escalation pathway within the hospital would have been followed. Participants were made aware of this (it is written in the PIS). Every attempt would be made to maintain the confidentiality of the participants in such a situation, but patient safety remained the priority.

- **Risk of psychological intrusion to participants**

The researcher was acutely aware of the potential to cause psychological intrusion during both the shadowing and the interview data collection processes. During the shadowing data collection, the researcher had to be constantly vigilant not to interfere with the nurses' care process and be mindful of asking questions so as not be appear patronising or critiquing their decision-making. Similarly, by having semi-structured questions prepared in advance of the interview process, the researcher could stay with the aims and objectives of the research and steer clear of potentially intrusive questions. The focus of the research is on nurses' sensemaking of care; therefore, the researcher did not explore issues of practice or competency. At any time, either during the shadowing or interviews, could have been ceased and the participants directed to support services available.

- **Misunderstanding of social/cultural boundaries**

There was potential for misunderstandings or upset to occur in both the shadowing and interview process. To mitigate this, the researcher undertook several actions:

- Visited the data collection sites prior to data collection to assess possible risks associated with the built and social environment
- Use the site visit information to plan the shadowing shits and the interactions with staff
- Allowed extra time to familiarise participants with the researcher and ask any questions they might have
- Provided contact details and means of making timely contact with support or debriefing to all participants

- **Compromising professional boundaries**

There were two parts to this risk A) the professional boundaries between the researcher and the participants and B) the disclosure of unprofessional practice or practice that compromises patient safety. The mitigating factors are:

- A) The professional boundaries between the researcher and the staff participating in the research. The researcher was a senior manager in the organisation, and therefore there was the potential for there to be power dynamic issues relating to both the shadowing and interview data

collection. The researcher was not directly responsible for any of the surgical inpatient care wards or the direct line manager for these wards. The PISs made it clear that the focus of the research is on how nurses conceptualise care and that the researcher is not there to audit, supervise or witness the nurses' practices.

- B) The disclosure of unprofessional practice or practice that compromises patient safety. It was the researcher's responsibility to ensure that all verbal and written information indicating the response to a disclosure that suggested patient safety was compromised would be escalated in accordance with the Hospital's guidelines. Every effort would be made to maintain the confidentiality of the participants but not to the point of jeopardising patient safety.

The next section will discuss the different stages of the data collection: shadowing, interviews and Electronic Patient Record (EPR) data capture.

3.4.3. Ethical Principles

The following fundamental principles were applied throughout the research project:

- Respect for persons - autonomy and protecting those with diminished autonomy: all participant engagement with the research must be voluntary, without any undue influence or coercion. Additional safeguards would be put in place should any participants have diminished capacity for decision-making.
- Beneficence and non-maleficence: the risk-benefit balance must be considered at all points of the planning, data collection and analysis. The researcher will take all necessary steps to minimise potential harm to participants and themselves.
- Justice: the research will be just at its core, with all participants treated equally and without discrimination. The selection of participants must be scrutinised to ensure no classes, minorities or ethnic groups are unduly represented.
- Informed consent: participants must be given appropriate information in advance of affirming consent, without duress or inducement.
- Confidentiality and data protection: All necessary steps must be taken to protect the participants' data and confidentiality, in line with the university data protection rules.
- Conflict of interest: the researcher did not have any obligations that could be considered a conflict of interest or compromise their ethical approach to the research.

3.4.4. Participant Engagement and Recruitment

The researcher met with the ward managers before commencing any shadowing shifts to outline the purpose of the research, answer any questions they had and gain their cooperation. They were given copies of the participant information sheets (Appendices 4 & 5) for their own reference. The meeting was also an opportunity for the researcher to set out some of the safety measures surrounding the shadowing process:

- Dates for the shadowing shifts were sought from the ward managers in advance;
- The researcher contacted the ward manager the day before to confirm it was appropriate and gave them the option to reschedule. Several shifts had to be rescheduled due to staff changes or sick leave;
- On the morning of the shadowing shift, the researcher re-confirmed with the ward manager that it was appropriate to be on the ward. The appropriateness was judged on whether there was sufficient staff on the ward, if there were particularly challenging patients, complex clinical situations, or any other condition to which having researching making observations may be detrimental;
- An information poster was displayed on the ward noticeboard in advance of the shadowing days;
- The researcher introduced themselves at the morning handover and gave a brief explanation of the research aims. Consent forms were distributed quickly so as not to delay the handover. The forms were then completed with the individuals after the handover, which left time to address any questions or clarifications the participants might have.
- The researcher checked in with the ward manager at regular intervals during break times to make sure the shadowing could continue.
- The researcher also checked in with the ward manager at any time when there was a concern or incident on the ward.

The appendices include an ethical approval letter from the Joint Ethical Committee (Appendix 1), a letter for support from the deputy CEO of the data collection site (Appendix 3), a participant information sheet (Appendix 4 and 5), a copy of the consent (Appendices 6 and 7)

On the morning of the shadowing, once the ward manager confirmed that the researcher could proceed, formal written consent was taken from each staff nurse on the shift.

3.4.4.1 Global Consent

Global consent for the research study was obtained via the university's ethics approval process, alongside the local (hospital) ethics board approval. This reassured the university and hospital site that the research undertaken met the required standards and requirements.

Additionally, the gatekeepers to each ward were briefed by the researcher, with written information provided (Appendix 4 and 6). Posters were placed on both wards informing all staff of the research's aim and data collection methods.

Consent was obtained from all those involved in the data collection. Consent for the shadowing data collection was taken from all staff on duty on the day of each of the data collection. All participants were provided with the PIL (Appendix 4 and 6), and their signed consent was taken.

All interview participants provided informed consent before the interview process. All participants were provided with the PIL and consent form (Appendix 5 and 7) at the time the interview was scheduled so they could have an opportunity to read it and ask any questions they may have in advance of the interview. The consent was confirmed and signed before the interview began.

Consent was not obtained from those outside the remit of the research, e.g. other healthcare professionals on the wards or patients. Their data were not collected in any way. Processing personal data without consent is prohibited; however, given the context of the study, wider permissions were needed. Shadowing entails a researcher closely following a subject over a period of time to investigate what people actually do in the course of their everyday work. Researchers report that the process of getting ethical approval, access, and consent can be hard as shadowing asks for a much longer term (and less conventional) involvement with participants compared to other methods (Van Der Weele and Bredewold, 2021).

3.4.5. Inclusion and Exclusion Criteria

The focus of the study was on the social construct of care as maintained by nurses, specifically staff nurses on the identified surgical wards. To this end, the following inclusion criteria were applied:

- Registered General Nurses
- An employee of the hospital
- Contracted to the acute surgical ward, as their usual place of practice
- Participants are on the ward during the shadowing period
- Participants that have given consent

The exclusion criteria were:

- Student nurses
- Bank/agency nurses
- Other Health Care Professionals (such as Occupational Therapists, Physiotherapists and Social Workers)
- Clinical Nurse Managers 1&2 (grades of ward managers)
- Clinical Nurse Specialists
- Advanced Nurse Practitioners

The rationale of the exclusion criteria was based on the scope of the research. Nurses working at a specialist, advanced practice or managerial level might have different interpretations and perspectives of care that they would provide or oversee. Equally, a student would require additional ethical approval from their university, and as unqualified nurses, their perspectives on care would also be different from those providing and responsible for care.

3.5. Data Collection

3.5.1. Introduction

Ethnomethodology is concerned with exploring how people create structures and social norms in order to make sense of the world they are faced with (ten Have, 2010). Healthcare in itself is a construct created to facilitate positivist approaches to the human condition, through which many social norms have been formed (Emmerich, 2013). Exploring how nurses sense-make the construct of care involves gathering many different forms of data and perspectives (ten Have, 2010). Nurses' understanding of a fundamental construct like care will be affected by any number of factors, and the data collection methods used must have the scope to capture as many of these influencers as possible. Equally, the research topic is discreet and can be easily pulled off track if the data collection methods are too broad and unfocused. Ethnomethodology (EM) has no pre-defined data collection methods; therefore, any data collection method that is congruent with EM epistemology and ontology is acceptable (ten Have, 2010).

In trying to explore how nurses sense-make a concept, it is important to get their perspective of the social construct and how it is influenced by the norms imposed by others. In order to gain insight into how care is constructed, it is important to triangulate the data collection in order to maximise exposure to the participants. This was sought through non-participant active shadowing, semi-structured interviews, and document reviews of the electronic patient record (EPR). The data collection process was not intended to run in a deliberate sequential process, and the EPR data collection could have occurred at any time. The sequence was determined by access to the sites through the ward managers and the EPR data managers. The final sequence was that the shadowing data collection was first, which overlapped with the initial interviews. The EPR review was the final piece of data collected. Fig 2 below sets out the overarching data collection direction; it does not include the iterative learning and analysis that took place across the data collection phases and between the different data collection approaches.

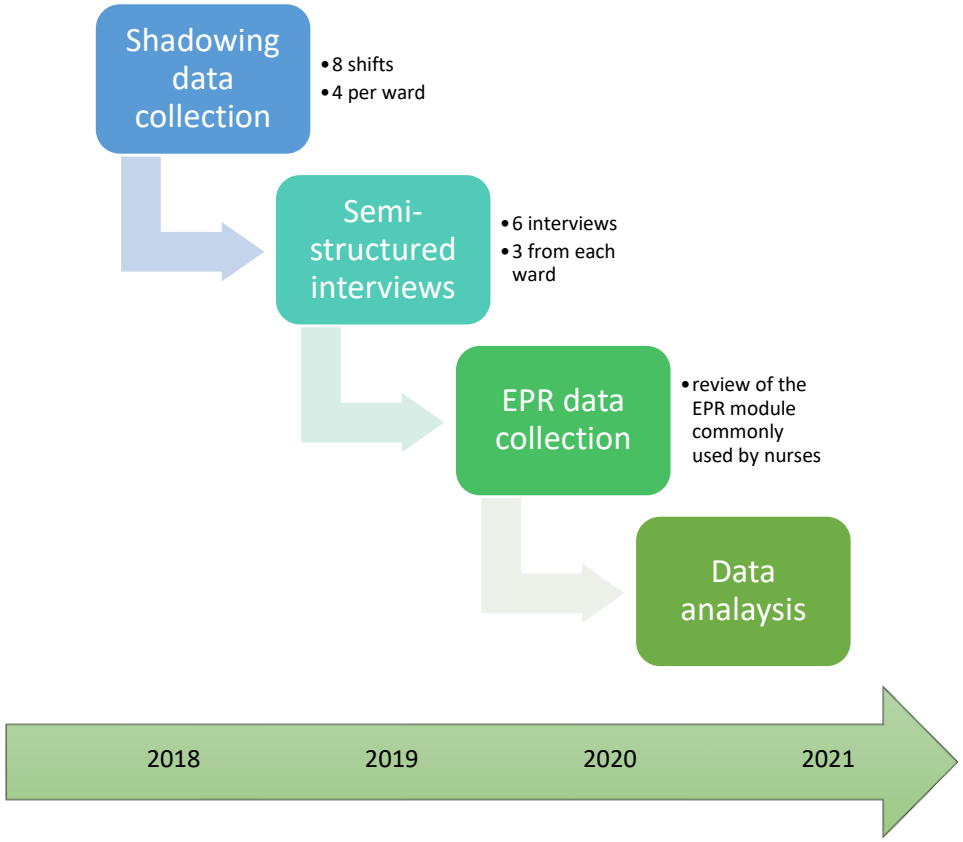

Figure 2 – Data Collection Pathway

Student nurses were present on the wards regularly throughout the shadowing process. They were deliberately excluded from the study due to their student status, but during the shadowing data collection, there was a considerable amount of interaction between the students and the staff nurses. These data were captured but only from the registered nurse's point of view; data surrounding the students were not collected; conversations between students or between a student and patient were not recorded.

Patients were also not included in the observation. Collecting data in the ward environment required vigilance to ensure patient data or any data that may identify a patient was not collected or recorded in any way. Additionally, vigilance was required during the shifts to minimise any interactions with patients. To reduce the risk of being mistaken as a clinician, the researcher deliberately dressed as "smart-casual" rather than in a uniform or scrubs and tried to position themselves along the main corridor, not near or behind the nurses' station. Should a patient request an interaction, they were politely informed of the researcher's status, and support was sought from a nurse to assist the patient.

3.5.2. Timeline

Shadowing

The initial timeframe for the data collection to run was from late 2018 into 2019. The pilot of the shadowing data was undertaken in December 2018, with the outcomes discussed with the supervision team and changes made so that the first shadowing data collection could be scheduled for January 2019.

The first delay to the timeframe was in February 2019, when there was national industrial action of the nursing unions which resulted in scheduled strike action. It was discussed with the supervisory team and the ward managers, and all felt it would be inappropriate to continue the shadowing during this time. The industrial action ended in April 2019, and the shadowing recommenced and continued during the summer at intervals of three to four weeks to suit the ward managers.

Interviews

The shadowing was completed by December 2019, and the interviews began in November 2019. The interviews were paused over the Christmas period as scheduling was proving difficult and recommenced in January 2020 at intervals of 3-4 weeks to suit the ward managers and the interview participants.

The second delay to the timeframe was the declaration of the COVID pandemic in March 2020. The interviews were paused while the hospital responded to the initial COVID surge. Through discussions with the ward managers and participants, they felt it would be appropriate to continue with the interview in April 2020. However, in light of the public health restrictions, the interview was conducted via Zoom, using the ward manager's office. This made scheduling very difficult as both the staff member had to be available and the ward manager had to vacate their office.

EPR Review

The EPR review began in September 2019, after several shadowing shifts to observe the interactions between staff and EPR. In April 2020, during the interview pause, offsite access was granted to a test version of EPR to facilitate the data collection.

3.5.3. Data Collection: Shadowing

Ethnographic field methods can require significantly more time than both interviews or document review in order to observe a relevant and appropriate interaction (ten Have, 2010). Ethnographic methods are commonly used to describe any form of field-based data collection method. This can be further determined by the level of interaction the researcher has with the participants. From non-participatory observation to quasi-involved shadowing, the scope of interactions must be determined by both the context and the aim of the data collection exercise. Due to the complex nature of the research aim, relying on interviews and documents alone would not do it justice or address the multiple layers of data required to provide understanding. Acknowledging that the data collection would be from a busy ward environment, non-participatory would not permit the researcher any interaction with the participants. This would severely limit the

potential data to be collected if the researcher could not speak, clarify or question the staff nurses during the data collection shift (Ferguson, 2016a). Therefore, it would be of benefit for the researcher to have some measured access to participants while they discuss and plan care. Adopting the shadowing data collection facilitates the researcher to closely follow participants during their work to explore their real-lived activities and conversations (Ferguson, 2016b; Quinlan, 2008). Shadowing allows the researcher to witness the behaviours, opinions, actions and explanations offered by the participants in the normal course of events (Gill, 2011; Quinlan, 2008). The interaction between the researcher creates an unusual duality for both the researcher and the participants (Ferguson, 2016b). The researcher becomes part of the participants' reality, immersed in their actions; this is reinforced when the researcher engages with the participants, asking questions or seeking clarifications (Gill, 2011). McDonald (2005) discusses the importance of maintaining a distance between the researcher and participants in order to reduce the "observer effect" (McDonald, 2005). However, more recent literature suggests that the 'observer effect' is inevitable, and the researcher should adopt the stance of proximity, in which the researcher can maintain reflectively but still be sympathetic to an understanding of the participant's actions and behaviours (Ferguson, 2016b; Gill, 2011; Quinlan, 2008). A key feature of shadowing is its 'nomadic' nature, especially the notion of mobility (Czarniawska, 2007; Meunier and Vasquez, 2008).

The researcher tries to truly shadow the participant, following the participant everywhere they go; mobility allows the researcher to see interactions and social relationships. Quinlan (2008) notes that shadowing is particularly suited to answering research questions where the unit of analysis is not the individual but the social relation; social positions and contexts are explored within a complex of inter-related relationships (Quinlan, 2008). Thus, shadowing not only reveals what the participant does but also how the participant interacts with other people and their environment (Ferguson, 2016b).

An example of the shadowing data collected is provided in Appendix 10. This shows how the shadowing data collection didn’t focus on one particular nurse for the full shift but observed all the nurses on duty as they moved and interacted in common ward areas. The nurses were not individually selected; the researcher based themselves in the common ward areas (i.e., nurses’ station or ward corridor) and observed nurses as they went about the normal routines and practices of delivering care. This approach met two outcomes; firstly, it maintained space between the researcher and the patients who were outside the scope of this research; secondly, it facilitated the researcher to observe nurses from a distance.

3.5.3.1. Pilot Testing Prior to Shadowing Data Collection

A pilot shadowing day was trialled before the formal shadowing data collection began. There were three aims in the pilot testing shift; they were:

- To test the framework that the literature suggested would be useful in keeping the field notes comprehensive during shadowing
- To help the researcher familiarise themselves with the new role
- To reassure that the field notes taken would be sufficient to allow thorough data analysis

The pilot shift did demonstrate that the framework A.E.I.O.U (Robinson *et al.*, 1997) did not facilitate taking comprehensive field notes; instead, it became a hindrance. The AEIOU framework is a structured way of capturing field notes at regular points in time; at the given point, the research captures the following:

- A – activity
- E – environment
- I – interactions
- O – objects
- U – users.

Initially, this structured approach was thought to assist in capturing the complex and changing context of the ward. However, on reflection after the pilot shift, it became apparent that the researcher was more focused on filling the AEIOU tools than actually capturing the nuanced behaviours, conversations and actions witnessed. The data captured had been so forced and constrained by the AEIOU tool that it wouldn't have been useable for any data analysis.

The physical presence of the researcher on the ward was always a concern as it could have an effect on the participants in their work. While every measure was taken to ensure the participants' work was never interfered with, it would be remiss not to accept some degree of influence of their presence. Gill (2011) argues that any interaction with participants creates an "intersubjectivity" where the researcher's presence can influence the participants' actions, and the resulting research "site" is unknowingly co-constructed between the two (Gill, 2011).

The researcher was careful not to deliberately influence the participants, especially when asking questions of clarification and avoided closed questions or any agreement/disagreement with the participants. There was a notable pattern to the day where the participants' engagement changed over time. Immediately after the morning handover, the participants were wary of the researcher with very little engagement, it was also the busiest time of the day, so it was reasonable for them not to interact with the researcher. After the breakfast breaks, on most days, they began asking the researcher questions clarifying the intention of the researcher and offering clarifications. As the evening came in, the participants became much more comfortable and invited the researcher into other ward conversations and more openly offered their opinion on the researcher's topic. The researcher deliberately left asking any questions until after the breakfast breaks or even until the evening, if possible, as there was a greater chance of a more engaged conversation as a result of answering.

It would not be appropriate for the researcher to be present at the point of delivering care to any patient, this research is not focused on the delivery of care, and the research does not want to compromise this through the effect of the nurse being

overserved. To this end, gaining access and approval for any form of an observational study can be difficult. Before commencing the shadowing, the researcher was very clear on his role and responsibilities and especially clear when it came to inevitable patient interactions. All patient interactions were minimised by not entering care areas (i.e. bays or rooms). As the shadowing took place in a clinical setting, there were patient interactions, but the research will not prompt an interaction or aim to minimise it. The researcher is a registered nurse, and his patient interactions will be governed by the professional code of conduct (Nursing and Midwifery Board of Ireland, 2014).

During the shadowing shifts, the researcher was present in the morning. So as not to delay or interrupt the handover, the researcher waited until the handover was complete and before the nurses left the day room to introduce themselves and explain the research aim. Any questions were answered, and the time. Participants then individually signed the consent form and provided the information sheet for their own reference and contact details of the researcher should they have further questions. Only if all nurses that were working on the ward that day consented to participate in the research would the shadowing on the ward commence. Should all nurses that were on the ward at the time not provide consent, the researcher would not proceed with the shadowing, subsequently would destroy any notes taken that morning and reschedule for an alternative date when the concerned member of staff was not working. Fortunately, this did not occur during any of the scheduled shadowing days.

On a typical day, there were four nurses on ward A and five on ward B. Each ward also had a Health Care Assistant to support the nurses' care. Ward managers (Clinical Nurse Manager 2 grade) work Monday to Friday, and their deputy (Clinical Nurse Manager 1 grade), works long days, but neither would routinely take a patient caseload. Over the course of the shadowing, no nurse did not consent to participate; in total, 27 nurses participated across the two wards.

As a data collection strategy, shadowing is particularly suitable for answering research questions where the unit of analysis is not the individual but the social relation (Quinlan, 2008). The shadowing data collection was made by taking field notes with pen and paper, taken in real-time throughout the shift. As the shadowing went on, the more comfortable the team members became with my presence on the ward. There was often a balance between maintaining a conversation or direct observation and stopping to take notes. As Schultze (2000) noted, there was important to take "head notes" of the keywords, which could be filled in later when the ward was quieter (Schultze, 2000).

For consistency, the researcher time-stamped each entry to reduce lengthy gaps. The field notes also captured any conversations or clarifications between the researcher and a participant or group of participants. A separate note was taken of the researcher's reflections throughout each shadowing shift. The field notes were transcribed at the end of each shift.

3.5.3.2. Field relations

Managing interactions with participants can be influenced by a power imbalance (section 3.5.6.1), but also the researcher had to be cognisant of the effect his presence may have on the ward during and after a shadowing shift. Although precautions were taken in seeking the Clinical Nurse Manager's (CNM) advice and clearance before any shadowing shift commenced, the staff on the ward were not informed of the researcher's presence until the morning of the shift. This was not deliberate, just an outcome of the planning and checks in place for the safety of the researcher and the appropriateness of the shadowing shift. During the shift, the researcher remained vigilant not to get in the way of the nurses as they attended to patients or went about their work. The researcher sought clarifications but would only engage in conversation if invited to do so by the nurses on duty. The researcher stayed in contact with the ward managers after each shadowing shift and asked to be alerted if there were remaining questions or queries from the staff.

3.5.4. Data collection: Semi-structured interviews

Interviews were chosen as the second data collection tool to deeper explore the participants' insight and understanding of the social construct of care and also to further explore observations made during the shadowing data collection exercise. Participants for an interview were recruited from the wards included in the shadowing part of the data collection. The recruitment of participants for an interview only commenced once shadowing had concluded. Invitation letters and Participant Information Sheets (PIS) (Appendices 4&5) were circulated to all staff in the two selected wards, and additional copies were provided to the ward managers. The recruitment of interview participants happened after the shadowing data collection was complete.

Sampling criteria for the interviews were limited to the inclusion and exclusion criteria as set out in Section 3.4.5 and applied to the two wards selected to be included in the shadowing data collection. The sample was not determined by factors such as age, experience or gender. All nurses from the wards included in the shadowing data collection were invited to participate in the interviews. Each nurse received a copy of the participant information sheet for an interview, asking them to contact the researcher if they would like to participate. Additionally, the ward managers were asked to make announcements at the daily handovers asking for participants to come forward. This approach proved to be the most fruitful, with only one participant contacting the researcher directly, all others through a ward manager.

Once a participant came forward to volunteer, a date for the interview was scheduled. The first five interviews were held in person in the hospital. The ward manager provided the use of their office for the interview. All participants were working at the time of the interview, so every measure was taken to minimise delays, all equipment was ready before, and the interview room was ready. A consequence of holding the interviews in the ward manager's office was the risk of interruptions for clinical/patient care reasons, and this did occur during two interviews.

In light of Covid-19 restrictions, it would not have been appropriate to conduct the remaining interview in person in the hospital. That interview was rescheduled and hosted over a video conference. Similarly to all the participants, the final interviewee was working at the time of the interview and used the ward manager's office.

Participants were informed that they could withdraw from the interview at any time without consequence. Interview participants signed consent before the interview began. Interviews held via video conference had consent forms posted to the ward, and the researcher collected them once complete. Data were stored securely and will be destroyed in line with local policy and national legislation (Data Protection Commissioner, 2014, 2017; St James's Hospital, 2016). All records with be pseudo-encrypted with coded identifiers, no names or identifiable references will be recorded.

The interviews lasted 38-45 minutes; all were audio-recorded for transcription later. Kvale and Brinkmann (2009) note the preferred use of "written style" when transcribing, as opposed to heavily annotated and indexed notes, as this method allows for a true reflection of the conversation, including pitch, tone and utterances (Kvale and Brinkmann, 2009). From the ethnomethodology perspective, this transcription method was vital, as the later analysis will focus more on the content and meaning of the participant's word than on the linguistics and conversation style.

The semi-structured approach enabled interview questions to be based on observations made during the shadowing exercise (Appendix 8) to enable the conversation to be meaningful (Savage, 2000). The questions developed were open-ended, with prompts for the researcher on important points to be covered. After the shadowing exercise, the researcher could identify areas that would require additional attention during the interview, for example, the level of interaction with EPR and how it influenced the care being delivered. The researcher structured the interview questions to put the participant at ease and also to address some of the other areas observed, for example, the handover process and the ward's model of care.

The questions were deliberately ordered to ease the participants in the conversation. The first question was to describe a typical handover, a process known to all nurses and something they would be very familiar with, with the intent of setting them at ease (Corbin and Morse, 2003). The second question was how they would define care. Although a challenging question, asking it so early did give the researcher an opportunity to revisit the question later and review the answers provided in the first instance. The third question followed, asking about the model of care on the ward. This was designed to see if the nurses could distinguish between a definition of care and a model of how care is planned or provided. The next question focused on the influence of EPR on the nursing practice, routine and conversations. This question was based on the observations made during the shadowing process of the extraordinary amount of time the nurses were spending inputting data into the EPR. The final questions addressed how nurses discuss care to gain insight into the language they used when discussing care and whether the translation witnessed in the shadowing was deliberate or unknown. No new questions were added as the interviews proceeded; although the focus did move to gain more insight into the second and fifth questions, more time was given to them.

The interview style was informed by Kvale's (2009) guidance on prompting and follow on questions (Kvale and Brinkmann, 2009). Once the participant had first answered a question, they were prompted with "could you tell me more about…" or "how does….work for you". Questions were deliberate, kept informal and hard academic language was avoided (Savage, 2000). The researcher actively listened throughout the interview and, after the first interview, did not take notes so as to maintain eye contact and engage with the participants.

The sound file from each interview was saved securely and transcribed by the researcher as soon as possible after the interview was complete.

3.5.5. Data collection: EPR Review

Natural documents refer to all kinds of documents, physical and digital, used by nurses to capture information regarding the care they provide (ten Have, 2010). This data collection method focused on the design of the documents as well as recording any alterations or annotations made by nurses to get the form to fit the nurse's intention of care. Unlike interviews, natural documents are not provoked by the research; they existed and were constructed before the research process began; therefore, they can be analysed as evidence without time framing. Natural documents are created for a specific reason to address current events and capture information for future retrieval.

This research study concentrated on areas of the EPR used at the point of delivering care and the provision of nursing care. The areas selected were determined during the EPR data collection as the researcher moved through the different aspects of the EPR available. In working through nursing assessments and documentation areas on the EPR, the researcher also included associated assessments if appropriate. The data areas covered in the EPR review included, but were not limited to:

Table 7 – Nursing EPR documentation

Nurse admission assessment form
Nurse care planning assessment form
Nurse falls assessment form
Nurse discharge planning form

The majority of the nursing documentation is through EPR (Figure 3). Only very specific drug regimens require a paper prescription. Other documents were available on the ward, for example, the ward census or whiteboards. These were captured in the shadowing data collection as they were physically available at the time of that data collection. The researcher did not include other documents such as policy or clinical guidance in the data collection.

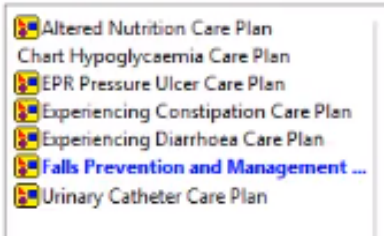

Figure 3 – Example of Nursing Assessments on EPR

The EPR review was limited to blank nursing assessments and documentation, as the study was looking at the structures that direct sensemaking rather than the way nurses complete the EPR. The researcher did not access the patient's nursing or medical records either on EPR or in hard copy.

It did not require the same level of participant engagement as shadowing or interview recruitment. However, due to the rescheduling of the interviews considering the pandemic, the EPR review was left to be the final part of the data collection process. Leaving the EPR review until the end allowed the researcher to shape his examination of the EPR after being informed by the shadowing and interviews.

The documents associated with the delivery of nurse care were scrutinised to identify sources of influence. There was no requirement for participant involvement in this part of data collection. Authorisation to access official hospital documents was granted through the hospital's Nursing Research Access Committee (NRAC). Access to the EPR was provided through a 'test' module, which is routinely used for training staffing on the EPR. It has all the functionality of the 'live' EPR, but with no patient or staff data accessible, therefore a safe environment. Additionally, the 'test' environment could be accessed off-site, which was beneficial as the researcher could not access the hospital during the pandemic.

EPR data collection involved two parts: literal text and context (ten Have, 2010). The literal text collected data on the actual words used to describe the provision of care. This data will range from assessment titles and subtitles to care planning aims and objectives. The second aspect is context; this includes examining where the EPR is used and how the documentation process is referred to by the participants. The context of the EPR was observed during the shadowing, and the perception of EPR was a deliberate question in the interviews.

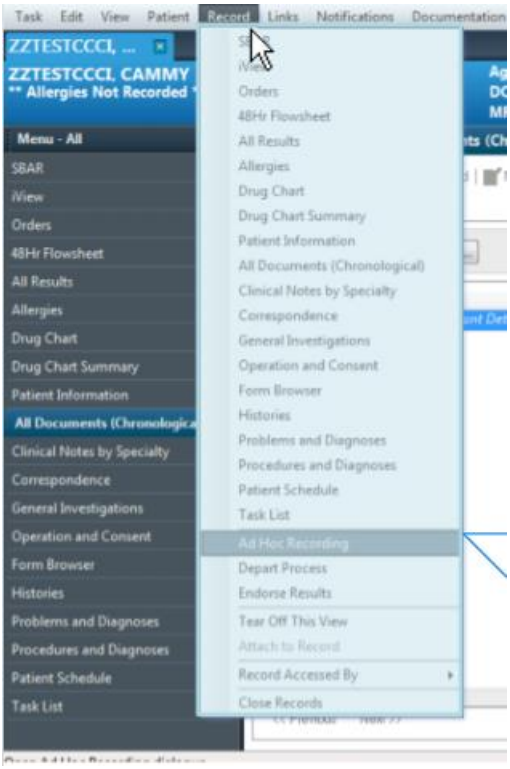

Figure 4 – Example of Ad Hoc Documentation

The EPR data collection took approximately two days of access time. As it was the last part of the data collection process, the review could be targeted at points of the EPR mentioned or observed already, and this minimised the time wasted.

Despite data collection occurring across the two ward areas, there appeared to be no differences in the nurses' approaches to how they interacted with the EPR.

3.5.6. Data Collection Considerations

An appropriate data collection method and tool is essential to any research study. Throughout the data collection processes, there were a number of considerations to ensure the research maintained its rigour

3.5.6.1. Balancing Power

The content of the interview could be affected by who the participant perceived the researcher to be or the nature of the power and status relationships between the two (Charmaz 2006). To contextualise the power dynamic between the participants and the researcher, the researcher's position within the organisation before and during the research was outlined. At the time of the pilot shadowing day, the researcher was employed with the organisation as a senior nurse manager in a directorate that was not related to the clinical areas associated with the research. Despite the researcher

not being known to the staff on the wards included in the data collection, there was a presumed power imbalance. To address this, the researcher:

- Addressed the staff at the handover, explaining his reason for being on the ward and that they were only a researcher,
- Wore smart-casual clothes, rather than formal clothes or a uniform, to distinguish himself from the ward staff,
- Wore a name badge that identified him as a researcher,
- Did not attend to duties associated with his normal work (i.e. answering work phone or emails) while shadowing.

During the shadowing process, any questions the participants had of the researcher were also answered openly and honestly, but no participant took an interest in the researcher's substantive job, they were more interested in the research aims.

Early into the shadowing process, the researcher was offered the position of secondment to a national post. This provided further distance between the researchers and participants. Due to the complex nature of the new post, it was not fully elaborated on during the shadowing data collection, just a high-level explanation. Again, no participant expressed interest in the new post during the shadowing.

During the interview process, there is a different power dynamic to be considered. While the researcher's substantive post, experience and seniority may have contributed to the participant feeling unequal, Corbin (2003) notes that participants hold a significant amount of power over the research, as not only is their contribution entirely voluntary, but also the content of their contribution can have significant ramification to the researcher's work (Corbin and Morse, 2003). It would be remiss to remove the participants' agency from the interview process, not only did they retain the option to cease the interview but it is the researcher's responsibility to present and explain the questions in such a way that the participant can make an honest contribution (Corbin and Morse, 2003; Savage, 2000). The participant was provided with the consent form and PIS, as they were made available on the ward. They were also provided fresh copies of the PIS and consent form in advance of the scheduled interview to make sure they had time to read both forms fully. Immediately before the interview, it was reiterated that they could cease at any time, stop or pause at any time or ask for any clarification they needed. No participant ceased an interview, and one did have to pause briefly due to an interruption on the ward. The majority sought clarification if they could use patient examples in their answers to explain the point they were trying to make. The researcher actively tried to make the interview conversational and allowed each participant time to expand on any point they wished. They were also provided with an opportunity at the end to offer any contribution they felt needed to be included.

3.5.7. Reflexivity

A central concept of ethnomethodology is reflexivity, which usually refers to the researcher's own actions and impacts on the research. However, in ethnomethodology, reflexivity has a different definition. Stemming from Garfinkel's

work, he notes the core concepts of *accountability* and *reflexivity* and that they have special meaning when applied to EM (Garfinkel, 1967). According to Garfinkel, *accountability* translates to actors have a clear or explicit sense of how they design their actions, e.g. why they queue or hold a handover in a specific location. In comparison, *reflexivity* relates to the self-explication of ordinary individual actions. This is an important concept in EM as the focus of the methodology is on the individual, not the social group. Dowling (2007) notes that often participants, as social actors, often experience reflexivity in being part of the research (Dowling, 2007). However, broader social research applies reflexivity to the research and, as such, must adopt ethnomethodological indifference so as to resist any personal judgements or the participants' actions or responses. Kinsella and Whiteford (2009) suggest that because reflexivity draws attention to the conditions in which claims of knowledge are made and accepted, it surpasses reflection. Critical reflexivity involves not only the questioning of ideologies but also the enactment of change. It moves beyond the individual toward the social conditions in which knowledge is acquired (Mahon and McPherson, 2014).

As mentioned before, the researcher's own background has been in acute surgical care as both a staff nurse and a nurse manager. This brings a level of comfort and understanding to the researcher during the data collection in a similar clinical environment. However, coming from a managerial background too, the researcher had to be conscious of not judging the ward from a managerial point of view. The pilot data collection was hugely helpful in making the researcher aware of these boundaries and how to address them. Throughout each shadowing data collection date, the researcher had to constantly remind themselves that they were present as a researcher and not a manager.

To achieve this, the researcher must acknowledge their own beliefs and bias, as in any phenomenological research (Cruz and Higginbottom, 2013; Quick and Hall, 2015). Throughout the data collection process, the researcher had to remain vigilant about what they brought to the sites or interviews (Charmaz, 2006). After each shadowing shift and interview, the researcher noted what biases, prejudices or beliefs they identified. These notes were captured separately from the data collection notes so as not to confuse the two.

Similarly, during the interview process, the researcher had to adjust his own frame of reference. Previously, the researcher would have been more familiar with interviews from a recruitment point of view, which requires a different skill set. The supervisory team undertook mock interviews with the researcher to address the different skills needed.

3.6. Data Analysis

3.6.1. Introduction

This section outlines the data analysis undertaken. It should be noted that these activities did not occur iteratively because as soon as data were collected, they were immediately transcribed. As transcription continued, further learning occurred so that the next session of data collection could be more focused or refined to explore deliberate areas. As mentioned above (

Figure 2 – Data Collection Pathway), the data collection itself was sequential, with each method being informed by the previous. Each shadowing exercise was transcribed, and in doing, so, an early analysis was undertaken, which then informed the next shadowing shift. The shadowing shifts informed the questions of the semi-structured interviews. These, in turn, were transcribed after each interview, with the early analysis applied. The formal data analysis occurs it is not fully linear. The focus was on coding at first, moving through theming and focusing more on understanding towards the end of the analysis. But it was not linear, given the iterative nature of data collection and analysis and the constant comparative approach, where the researcher constantly moved backwards and forward and zoomed in and out from the specific to the more general/abstract. The generation of the propositions occurred independently and in parallel to the coding process.

For clarification, the term 'coding' can be used differently in various research, and data analysis approaches, sometimes interchangeably (Kolb, 2012). For the purposes of this research and data analysis, the term 'coding' applies to Garfinkel's definition of indexical coding, that is, a line or phrase of data that expresses the context or actors' situation (Garfinkel, 1967).

As discussed above, EM is closely aligned to Grounded Theory in epistemology and ontology but is not completely suited to meet the aim of this research study, which is to generate understanding, not a new theory. The data analysis method of Grounded Theory can, however, be adapted to be used in EM. The constant comparison method was developed with the origin of grounded theory by Glaser and Strauss (1967). They saw it as a method to begin the data analysis with the first episode of data collection so that the learning from that would better inform the episode of data collection. This approach to data analysis allows for the iterative and reiterative review of the data collected. The constant comparative method is used by the researcher to develop concepts from the data by coding and analysing at the same time (Taylor and Bogdan, 1998). The constant comparative method involves breaking down the data into discrete 'incidents' (Glaser and Strauss, 1967) or 'units' (Lincoln and Guba, 1985) and coding them into categories. The Grounded Theory 'incidents' are the EM equivalent to 'indexical' codes. Constant comparison is used to facilitate the research's continuous reflection and learning from the data collected. In this research, the purpose of using constant comparison is not in theory generation but in providing a structured approach to analysing the data collected.

Throughout the data collection, there were three dimensions of constant comparison:

- Intra-episode – comparing the data collected within each individual episode, i.e. a single interview or shadowing day.

- Inter-episode – comparing the data between a data collection type, i.e. across interviews
- Inter-method – comparing the data between methods, i.e. between all interviews and shadowing days

3.6.2. Propositions

Throughout the research literature review and data collection process, the researcher formed a series of propositions based on the memos, the literature reviewed, and his own observations during the data collection processes.

These propositions form the basis of early analysis of the field research and further inform the data analysis process (Koch and Harrington, 1998). These propositions will be compared against the research's main and sub-findings in the Discussion chapter.

The propositions noted were:

- The reality of providing care forces multiple versions of nurses' reality. They acknowledge the importance of non-physical care but also realise that it is not included in a task of care to be delivered. The translation of care required into care delivered does appear to need a physical intervention.
- The balance of duality of task-based care vs non-physical care is sustained by the language and context of the ward
- EPR further drives the translation of care into tasks by forcing the recording of non-physical care into "free-text" boxes in EPR, thus removing their perceived value and ownership.
- Nursing is a linear process of physical tasks.
- Caseload is the same as workload
- Nursing is the application of physical/practical skills with little decision-making or theory required in the application.
- Self-replication of task-based care with students
- Context of care is key to understanding – it remains a social construct
- Task-based care is not depersonalised

The purpose of collecting propositions was to capture the researcher's commentary throughout the data collection process, and his contribution was to provide additional context to the translation of the data collected into the findings. The propositions collected are used when applying sensemaking to the themes to construct the main and sub-findings.

3.6.3. Coding

3.6.3.1. Initial Coding

Throughout his work, Garfinkel used many terms when referencing local or situational aspects of the data collected (Garfinkel, 1967). Indexical coding is expressively contextual, usually containing "you", "I" or reference to time or place. As Ten Have (2010) notes, this can make all expressions and actions collected indexical, but as an inherent feature of EM, indexicality must be considered when coding. Trying to balance the difference between abstract notions expressed through a context and the concrete instances, which are inevitably linked to a context, is noted as an endless task (ten Have, 2010). The natural tension exists in this dynamic, and this is where the learning and understanding and be found. To code in a descriptive manner in the first iteration is a practical step in cleaning out the data collected and identifying the indexical cases in the broadest sense (Hammersley, 2018; ten Have, 2010). Coding was applied to each type of data collected (shadowing field notes, interview transcripts and EPR notes)

All transcripts were uploaded to NVivo, and this programme was used to facilitate the coding process throughout. The process of coding involved each transcription being read fully so that the researcher was familiar with the text as a whole. Each transcript was then coded by indexical point, as opposed to a line-by-line approach(Saldana, 2012). Not every piece of the transcription was coded, just text that referenced context, action or situational expressions as mentioned above. A criticism of the indexical method of coding is that the researcher's existing bias may influence the coding more than a line-by-line approach. To mitigate this, an index of codes was kept, and each code was described and defined to ensure constituency. Examples of coded text and transcripts are provided in Appendix 9.

There were 68 codes identified, ranging from descriptive text to abstract concepts. As can be seen from the coding table, the code stayed close to the data collected, often using the same words or language as a descriptor, also known as "in vivo" coding (Charmaz, 2008). While the number of initial codes may seem low in comparison to other similar methodologies, the data analysis was focused on identifying points or events which gave insight and understanding as to how nurses constructed their reality of care; therefore, not even piece of text and dialogue was coded. In vivo coding helps contain and maintain the perspective of the actors throughout the process, as codes are reviewed and redefined. For example, the code "nurses as data entry clerks" was applied to text that referenced when the nurses' focus is on data entry to EPR, not analysis or interpretation. Usually, when it is EPR demanding the data, not necessarily related to patient care. While the phrase is descriptive of the action, it also highlights the underlying context of nurses' interactions with the EPR system and its demands on them.

3.6.3.2. Theming

As outlined above, the second phase of the data analysis is theming. This phase involves grouping together the codes from phase one into larger themes (ten Have, 2010). Themes were formed based on identifying similar concepts, descriptions or language used within the codes. This was done in several ways; the first was using NVivo to seek similar texts and language used in the codes and the text they represent. This allowed for some codes to be brought together, mostly ones that were very

obviously similar, i.e. "EPR effecting routines and practices" and "EPR assisting with care planning".

The second step was to print out all the codes and any themes generated thus far. Then, manually start to link comparable codes based on their concept or associated context. These steps also required using NVivo to reference back to the coded transcribed text. This process also involved the examination and re-examination of each code into broader and more complex groups. As this was done, there was a constant comparison between the codes to generate themes that reflected the variety and depth of the data collected. Each code was not exclusive to one theme if appropriate; a code could be assigned to two or more themes.

Six core themes were developed. These were reinforced by data from across all the data collection methods. They contributed to a deeper understanding of the research question by providing additional clarity as to the nature of the understanding being generated from the data. Some themes developed from the initial analysis of the early shadowing data were not supported by data and analysis from further data collection, and so the core themes of the context of care, the role of the nurse and the construct of care were further reinforced and evidenced by the data samples, these were collected as ‘core themes’. The remaining categories of physical aspects of care, language of care and effect of EPR increased in their significance as additional and supportive understandings as the effect of their data became fewer descriptions rather than conceptual or insightful; these were collected as ‘minor themes’. This differentiation leads to further clarity in the nature of how nurses define the care they are providing, and there are more layers to the process of sensemaking. The initial layer is the objective, task-orientated and descriptive layer.

3.6.3.3. Understanding

Moving from the themes to generating understanding is the most complex step in the data analysis pathway. Ten Have noted that this step is the combination of ideas with the evidence to construct an argument that, once tested against the data collected, can produce new insight or understanding (ten Have, 2010). The output of this phase was the generating of a frame of understanding, aligning the concepts observed with the data collected. Throughout the data collection process, the understanding generated was also discussed with the supervisory team.

Throughout the theming process, some themes were more prevalent than others, resulting in ‘major’ themes forming the most prevalent and ‘minor’ for the rest. The distinction between the two groups was only to assist in the analysis and understanding.

<u>Core Themes</u>

The core themes were generated when exploring the concept and abstract descriptions provided by nurses. In order to sensemake, their understanding of the complex concepts of role, context, and their own constructs had to be appreciated.

The context of care, when explored, revealed the influence of the ward culture, the management culture and the ward routine on how nurses made sense of the care they provided. This influence went beyond the superficial, and the participants demonstrated the challenges and frustrations they felt when their own construct of care was challenged by the context. The example of process frustrations felt towards the EPR underlines the difference nurses felt about what care should be versus how it was. Equally, the challenges in defining the role of the nurse notably influence how nurses sensemake the care they provide. The translation required thought the day to maintain their construct of care is notably. While 'language' itself became a minor theme, its use in support of the constructs of care is essential. Throughout any shift or interview, the nurse demonstrated such language dexterity to adapt from a medical model to care to patient-centred dialogue and from the formal handover process to informal catch-up. This only goes to underline that their concept of care is flexible, and in sensemaking, this must be considered.

Minor themes

As suggested, these relate to the first level of sensemaking of how nurses understand care. They relate to the objective, solid and descriptive element of the care they are providing. Task-oriented care is a key observation made by both the researcher and the nurses in their interviews, but not a new or nuanced understanding. Task-based care has been discussed for decades, usually in attempts to quantify nursing care for further measurement or improvement metrics (Blackman *et al.*, 2015; Jones *et al.*, 2015; VanFosson *et al.*, 2016). The difference observed here is the transformation from 'task-based care' to 'task-based on nursing to do care', the second being tasks of work required to be done for the nurse that may not be necessary to the patient. While the vast majority of the time, the nurses' work involves direct or indirect patient care, there are occasions when the nurses' work is dictated by organisational or local policy and manifests in the EPR (Drennan *et al.*, 2018). The difference between these two levels of care further adds to how nurses are sensemaking their care, rarely did they express insight into the difference. This distance between task-based care and tasks of care that nurses need to do is further distorted by the influence of EPR and the language used throughout a normal shift. Neither the EPR nor the language distinguishes between the two different aspects of care, both list the task to be complete and do not identify which will address the patient's care needs and which is for the nurses only. The process of distinction remains with the nurses, and this relies not only on their clinical experience but also on how they sensemake what care is.

3.6.4. Theoretical Sufficiency

Glaser (1967) notes that data must continue to be collected and analysed until "theoretical sufficiency" occurs; that is when no new data will add more to the understanding, or theory in GT, being generated (Glaser and Strauss, 1967). From the research process point of view, this is a key objective to be reached; however, it is

almost impossible to identify when that point has been reached, even more so when using EM. As each actor constructs their own version of a reality, then each contribution may add, even a small part, more to the greater understanding. Dey (1999) argues that data collection and analysis should stop when "theoretical sufficiency" has been achieved, which they defined as "*the stage at which categories seem to cope adequately with new data without requiring continual extensions and modifications*" (Dey, 1999) (Pg 164).

The position adopted in this study concurred with that of Dey (Dey, 2008) when sufficient data were collected and analysed to allow a meaningful analysis to occur and no new concepts were provided by the participants. This point was further achieved through the triangulation of data collection between shading, interviews and EPR review. This point was achieved after six interview participants were recruited. This was further confirmed when only one new code was generated from the final interview transcription, using previously generated codes instead.

Further data collection and analysis may add more data, but it was unlikely to influence the themes or understanding generated. The data collected and understanding generated remained credible and useful; therefore, it is believed theoretical sufficiency was achieved.

3.6.5. Memos

An essential step in data analysis is memo-writing, as it allows the researcher to stop and assess their ideas and have clarity on how the study is progressing (Charmaz and Belgrave, 2015). It allows the researcher to check their thought and maintain consistency when analysing the data collected, particularly over time.

Details of the memos that were written throughout the observation and interview process are in section 4.3.5 but are not considered part of the dataset; they are intended as supportive material only to help the development of understanding. Memos were written throughout the observation and interview process and provided real-time insight into my thinking during the data collection. This occurred more frequently during the observation data collection, as there were times when the ward was quiet or during my own breaks when the researcher had the opportunity to pause and reflect and write up memos. The memos are only ever partial, provisional and preliminary understandings of the process so far (Charmaz, 1995). Memos were kept as handwritten notes throughout the data collection process, often kept after a particular event or when an insight was realised.

3.6.6. Applying Sensemaking Theory

Once the data analysis was complete, the final step was to apply sensemaking to generate understanding. This is detailed further in the Findings chapter, but Sensemaking is introduced here as part of the process.

Sensemaking often involves moving from the simple to the complex and back again. The move to the complex occurs as new information is collected and new actions are taken. Then as patterns are identified, and new information is labelled and categorised, the complex becomes simple once again, albeit with a higher level of understanding (Helms Mills *et al.*, 2010).

Ancona (2012) outlines a series of steps to guide effective sensemaking, albeit the guide is directed at sensemaking in the leadership and management theory (Ancona, 2012). the intent of the steps provided remains useful. The steps provided include acknowledging the context and systems in place, mapping out the current situation, and considering how the situation/system changes.

In applying these steps to the data collected and the themes generated, the main finding and sub-findings were constructed. The process began by re-reading the transcribed observation shifts and interview transcripts to become familiar with the data again, then reviewing the codes and themes generated. It was important to be cognisant throughout the process that sensemaking is not about finding the “correct” answer; it is about creating an emerging picture that becomes more comprehensive through data collection, reviewing and immersion (Starbuck and Milliken, 2015).

In reviewing the data collected, the codes and themes and applying them to the first step in the sensemaking process was to consider the context. This required reading the data and paying further attention to the details of the nurses' context. Details of the activity and environment were primarily captured in the shadowing notes, but small details were also available in the interview and EPR data.

The second step in the process involved mentally mapping out how nurses plan, administer and communicate their care. To assist with this process, a mental map was developed to outline the various strands associated with how nurses construct care. The central topic of the mind map is ‘care delivered’, being the primary outcome; with sub-topics of care planning, communication, care delivery and the care environment. This mapping process helped clarify the complex nature of the social construct.

The third step was to outline how a system changes and adapted to provide insight into the foundations of any social constructs. During a change, it can become clear which construct is more malleable and which is more resistant, highlighting the core constructs. During the data collection, changes were observed in the shadowing but also discussed in the interviews. A notable change was the introduction of the EPR and the effect it had on ward routines, handover, and the language used.

Following the steps outlined above, the researcher was able to transition the themes into the main finding and sub-findings (Section 4.2), which are discussed in the next chapter.

3.6.7. Applying a Critical Realism perspective

It is an important step in the process to consider applying the critical realism perspective to the data and evidence collected. As mentioned, CR notes that reality is

not directly observable and data are only partial, and it acknowledges that all realities are subjective to the individual (Maxwell *et al.*, 2013).

From the data collected (shadowing, interviews and EPR data), there appear to be different lenses of perspective from the participants in both the shadowing and interviews. The purpose of the data collection was to understand the participants' construct of care and what influences how they understand care.

However, the most underappreciated data source was the EPR. When considering a CR perspective on the EPR data, it must be remembered that the EPR system was developed with nursing input. As with any software, it had to be generated and designed and can be re-designed if needed. Therefore, the perspective that EPR is considered objective reality must be challenged and considered by the researcher in data collection, but also when reviewing how the participants refer to EPR during shadowing and interview.

3.7. Conclusion

This chapter has outlined how the gap in the literature and evidence review informed the research design. Based on the gap in the literature, the researcher's aims and objectives are set out to provide the understanding required to meet that gap in current knowledge. This chapter has considered the ontology and epistemology, taking a critical realist approach to individual interpretation of reality and how that is constructed. The epistemology sets out how knowledge is generated, acquired and shared and based on this stance, a methodology was selected. Ethnomethodology meets not only, the researcher's ontology and epistemology but also meet the aims and objectives. Other methodologies were considered and explored.

The data collection process was outlined, including the inclusion and exclusion criteria. The triangulated approach of collecting data via shadowing, interviews and EPR review. This approach allowed for a comprehensive data collection of such a complex context and concept. The data collection then aligned to the data analysis, which stepped through the coding phases from initial coding and generation of themes to the final and complex development of understanding. The data analysis was supported by the researcher's memos and propositions which were developed throughout the research process.

The next chapter will discuss the understanding that was generated from the data analysis and will contextualise the findings.

4. Findings Chapter

4.1. Introduction

The previous chapter outlined a methodology through which the key research question can be answered: how do nurses in the acute surgical setting sensemake the care that they provide?

In this chapter, the combined findings of the three phases of the data collection are presented.

The chapter outlines the findings from the data collection and analysis as described in Chapter 3. The findings presented in this chapter are based on an analysis of the data through the lens of ethnomethodology and supported by quotes for further illustration. To answer the research question and address the aims, the findings will explore the social constructs of care and seek to understand how they are maintained in the context of an acute surgical ward.

Ethnomethodology was developed to illustrate how collectively, members create and maintain a sense of order in social life. Although ethnomethodology is based on the traditional social inquiry of ethnography, it remains very different (Dowling, 2007). Ethnomethodology focuses on what constitutes 'care' and/or how various sources of information (documents, colleagues, models) influence the collective construct of care delivered. The analysis was both inductive and deductive from the propositions identified from the literature review and the memos developed during the data collection. Combining an inductive and deductive analysis with multiple data collection resources allows for a thorough understanding of the findings.

4.2. Research Findings

This section provides an overview of the findings and then describes how the data were interpreted and understood to support the main and sub-findings.

Before presenting the findings, it is timely to remember that in this study, 'care' remains a social construct in the context of this research. As described in previous chapters, nurses' traditional view of care was defined at the point of intersubjective exchange between nurse and patient, i.e., the nurse administers it, and the patient accepts. Having care defined by this basic exchange reduces the complexity behind the education, expertise and professionalism of a transaction.

Relating back to the methodology, ethnomethodology is about using the 'data' and formulating findings of understanding based on the 'members doing social inquiries' (Garfinkel, 1967), or as Sacks noted 'ethnomethodology describes' (Sacks, 1963). This section describes the main findings and how they were reached and some of the sub-findings with supporting quotes from interviews, shadowing data and EPR review notes. These findings portray the new understandings generated from both the data

collected and the process of data collection. A new understanding is generated by combining the data, codes, and themes from the data analysis with the propositions and memos described during the data collection.

These findings are generated from the ordinary, basic and mundane actions noted throughout the data collection (Wakefield, 2000). Too often, research involving the ordinary has been neglected in preference for the controversial, the salacious, or the exciting (Allen, 2004). If nursing is to be distinct from other healthcare professions in the provision of care, it is in their reality of care that we need to understand and explore. Nursing as a profession in Ireland is governed by the Nurses and Midwives Act 2011 (Government of Ireland, 2011). This legislation underpins the development of the nursing profession, while adherence by nurses to standards and guidance issued by the Nursing and Midwifery Board of Ireland (NMBI) ensures safe and high-quality nursing care. It is the centrality of this that the ownership of care is unique to nursing and distinguishes it from other healthcare professionals. However, in order to fully take ownership and therefore responsibility for the construct of care, nursing must acknowledge its complexity and appreciate care for what it is in every context, not what researchers or theorists would like it to be.

The framework for the research underpins the researcher's approach to the project. It demonstrates the layered approach to the research, maintaining ethnomethodology as the overarching methodology through the investigation of care to achieve insight and understanding.

4.2.1. Generating the Research Findings

As described previously, the data collected were transcribed and coded as the first step in interpretation and understanding. The coding process generated 68 individual codes, the most common being “nurse’s input is informal and not recorded” to the least common few “psychological care is passive”, “including family in patient care” and “education and demonstration of physical care”. As expected, there was variation in the codes generated across the data collection methods. Codes relating to observed actions were more common in the shadowing, e.g. “handover is in a space removed from the patient”. This is due to the physicality of the shadowing exercise, which allowed the researcher to account for this unique aspect.

Whereas the interviews did utilise many of the same codes as the shadowing data, there were some generated that only applied to this form of data collection, e.g. “staffing and care planning”, and some codes were replicated across two data collection methods. The codes that were specific to the interviews were based on the participant’s narrative. For example, four participants associated staffing levels with the provision of care, and all noted the need for more staff on the ward.

Chronologically, the EPR review was the last data collection method undertaken. Based on constant comparison throughout the data analysis and data collection process, very few new codes were generated at this stage; in fact, no new codes were realised as part of the EPR review.

The codes were then reviewed as a collective so that themes could be discerned. These themes helped the researcher see the broader landscape of the findings.

These themes formed the base structure of understanding so that sensemaking could then be applied for further, deeper insight and facilitated the generation of the main and sub findings.

Once the themes were combined with the researcher's propositions, they were then viewed through the lens of sensemaking so that the main and sub-findings were constructed (section 3.6.6.). Applying sensemaking resulted in translating the themes from the data collection into this research's findings.

4.3. The Findings

The main finding of this research was that nurses construct and maintain multiple realities of care in the course of attending to their patients. This was the primary output of the research study. The sub-findings flowed from these as other areas that were uncovered through the process.

4.3.1. The Multiple Realities of Nurses in Providing Care

Overall, it is essential to understand how multiple realities of nursing practice affect how nurses perceive the care they give. Throughout the data collection processes, it became evident that the nurses experienced different versions of realities and could move seamlessly through several realities by immediately switching languages used and the type of information required or provided as appropriate. Multiple realities relate to situations related to working with colleagues, with other members of the MDT or with patients. This section will detail how the multiple realities of nursing care were constructed from the data collection and the sub-findings that were uncovered during the process.

In this section, the main finding of multiple realities of nursing will be explored against the data collected with details of how the finding was generated. Below the main finding, here sub-findings were generated.

This section will examine the findings under the main heading but also the sub-headings of:

- The multiplicity of roles in providing care
- The duality in perspectives of care
- The use of language to shape perceptions of care

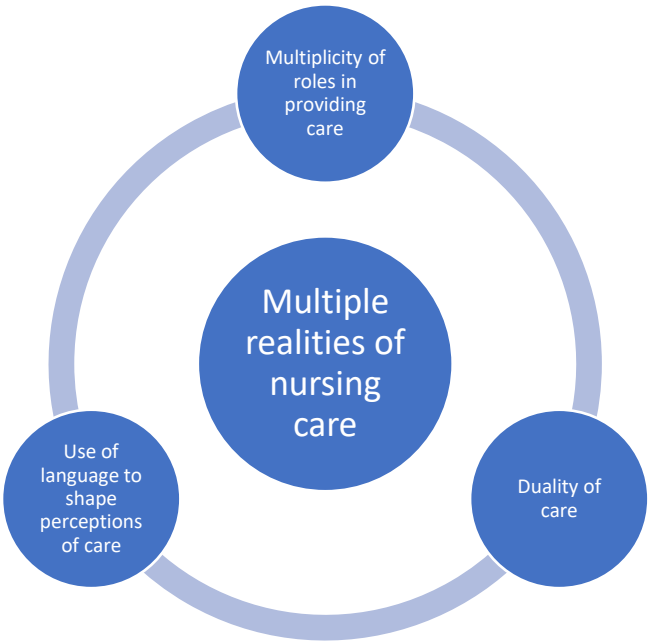

Figure 5 – Main and Sub-Findings

When describing the multiple realities of care, the term realities is used to describe the sociological concept of the reality constructed by a group, to avoid conflict with the methodology, the term realities will continue to be used over the more commonly used term 'constructs'.

Throughout the data collection and analysis, it became clear that the participating nurses unknowingly described, supported and transitioned through many different realities in the course of delivering their care. They were unaware of the subtle language changes they make instantly or how they redress the clinical information to suit the many different audiences, or even how their role shifts at any moment depending on the context. During interviews or shadowing, the nurses never displayed knowledge or determination in switching their language or behaviour as they moved from one reality to another.

> *Researcher:*
>
> *Okay, and is that [the model of care on the ward] what you use?*
>
> *Nurse:*
>
> *Well, that's what I would be using. In all of my past assignments and that, I presume that's just built into us to just... Every single nurse should know it. It's not necessarily, have you used your model today? I haven't really thought about models since college, but you should know it in your nursing care and daily... Pride in your nursing care daily, you should take into consideration everything.*
>
> *Researcher:*

And has it changed over time, or have you had to adapt your model yourself?

Nurse:

Well, it adapts to every patient, I suppose; everyone is an individual. Somebody might be independent, so you might not have to take care of their personal events and their dressing or whatever. Obviously, that's kind of ticked for you. You just trust the patient, that knows that their pressure areas are intact. You don't get to check them for them; they'd be embarrassed and stuff—you just kind of put that in their hands. And eating and drinking and things, you have to provide that sometimes to them.

Researcher:

And do you think everyone uses the same model, or is it all a bit different?

Nurse:

I don't know to be honest. We would really have these conversations, yeah. I presume viewing everyone else doing their nursing care and pride in their nursing care, and I suppose we all kind of... Yeah, it would be all the basic standards covered.

(Interview, Participant 6)

In using the terms reality and multiple realities, this research's finding refers to the individual version of a reality, a construct of the context, language, and personal knowledge (Dervin, 1998b). Throughout this research study, the nurse's reality will be explained by exploring the different contexts and language that was captured during the data collection to inform the main and sub findings.

During the shadowing data collection, the different contexts through which the nurses moved became clear, for example, working with EPR, interactions with colleagues, interactions with members of the MDT, interactions with patients, and interactions with students. At a descriptive level, the differences are obvious and apparent; however, when considering the influence these different and very divergent contexts may have on how a nurse defines the care, the variety is even more significant.

During the EPR review, there appeared to be no essential difference in how the nursing staff in the two wards engaged and interacted with the EPR systems; therefore, the findings are integrated between both wards and the shadowing and interview data to give a complete view.

The physical space can influence how care is delivered across multiple realities. As noted in the first days of the shadowing, both wards' handover is delivered in the day room, in a space removed from the patients. The need for further efficiencies drives

this new handover system by reducing handover to the bare minimum. In this transition, the need for patient interaction must have been seen as non-essential as it was removed, as was any opportunity for conversation or discussion on patient care. After the formal handover, there is an opportunity to hand a "catch-up" with the night staff before they go home to clarify anything from the recorded handover. The adaptation was made for the sake of time and efficiency; it moved the handover to be uni-directional and created a physical barrier between the patient information being delivered and the patient being discussed, as highlighted by Participant 5:

> *"We have a new system now. Earlier, we had something called bedside verbal handover where you go bedside and handover, but now what we have, is we have a tape-recorded handover. So, on every shift, the handover is recorded, and the staff adhere to that. It's, say, about 15 to 20 minutes. It depends. So, that would be the thing. If there are any queries after that, then they come to the staff and ask them. But it's mostly an audio recorded handover that we do."*
>
> *(Interview, Participant 5)*

In this interview, Participant 5 noted that previously there had been a process of bedside handover, but this had been recently replaced with the recorded process to reduce the handover time. Participants also reported this change was made to support the introduction of EPR across the hospital, as managing EPR at the bedside would be even more time-consuming.

4.3.1.1. Impact of different handovers

Removing this discussion to be secondary to the formal handover could create a hierarchy about how care is witnessed, with clinical, uni-directional and non-patient focused as the primary focus. Handover is seen as a task of care to be completed, but this task, and the method of communication, are given priority by the ward's infrastructure and culture. This hierarchy of how care is translated in the ward area is further described in the shorter "catch-up" handover throughout the day, where nurses verbally list items of care complete or to be completed. These different approaches to communication and, indeed, care are indicators of the different realities of care that nurses can seamlessly move through.

These 'catch-ups' occur throughout the day and are an opportunity for the direct nurse-to-nurse handover of patients within their assigned cohorts. They are brief and not formally structured, but there is a baseline level of information that is included in each handover. Given the unofficial and reactionary nature of the 'catch-ups" and how they are often done under time pressure, they provide an interesting early insight into what nurses consider essential in their patient's care. The review of the language and methodology of the handover also gives insight into what they determine care to be. Essential care can be considered to be the care that is consistently present in all handovers, both formal and informal.

No, you're absolutely right. It's interesting that we prioritize the physical stuff in to boxes of things to do, and psychological stuff is just as important, but we don't give that a box.

(Interview, Participant 4)

4.3.1.2. Realities of Care

Essential care usually pertains to physical tasks of care or care that require physical intervention and is critical to the patient physical care, as opposed to their mental, emotional and social care. While this is common across both formal and informal handovers and therefore sets the benchmark, what must also be considered is the content changes within the respective handovers. On both wards, the formal handovers focused on presenting the clinical picture of the patient, with less emphasis on the psychosocial. While the catch-ups translated the handover in tasks of care, the focus remained on the physical interventions, and there was more consideration given to the emotional or social care requirements. In creating and maintaining these multiple realities, nurses must also balance the interventionalist versus holistic approaches that some construct will demand. The flexibility demonstrated by nurses to effectively balance both approaches, based on the patients' needs, underpins the complexity required to maintain the multiple realities, as noted:

"The language used is clinical and detailed, but she also uses the patient's first name throughout. She describes how the patient 'is' i.e. "she's in good form, grand overnight."

(Shadowing Day 5)

Unlike the formal handover, the 'catch-ups' are not recorded; therefore, there is an opportunity for questions, discussion and engagement between the nurses. However, they are usually done standing in the corridor or storeroom and most often done just before one of the nurses goes on break. They are not acknowledged formally anywhere in the nurses' notes, patient records, or ward's structure. They are ad hoc, although the information being conveyed is critical to safe, high-quality care. The significance of the "catch-up" handovers is underpinned by the fact that they occur despite the formal recognition, they are a necessary tool of engagement between the nursing teams. The difference between the essential care (care that is consistently included in all handovers) and non-essential care does vary between both formats. The language of handover is discussed in Section 4.3.4; however, the content of the handovers is important as they distinguish what information is deemed essential to be included and therefore shape the narrative of the ward's care from the beginning of the shift.

"What's happened since the handover was recorded, but also there's more in the morning to handover because the teams have been around. In the evening, there's not a lot of updates unless something dramatic has happened." (Interview, Participant 1)

The researcher cannot quantify or label the realities that the nurses create; they are unique to the group of nurses working to provide care. The nurses' effortless movement between the various realities underpins how little notice is afforded to the realities. They are held and maintained in the social subconscious of the nurses. Moving through the realities is usually the result of a slight change in the language used, either the vocabulary changes from clinical to more informal, or the dialogue uses more colloquial terms. Indeed, each reality is maintained by its own language. While the language might be considered impersonal when referring to a patient as a bed number, the data collected shows that nurses maintain the multiple realities that they can move through quickly. In one such reality, there is a need to dehumanise the patient in order to transfer critical clinical information, whereas a second later, the very opposite can occur, as noted during the shadowing data collection:

> *"Bed 31 XX urine output wasn't great last night, can you encourage more drinks, if you leave it in front of him, he will drink it."*
>
> *(Shadowing Day 3)*

The most obvious indicator of realities switching was the jargon used. Each reality's language utilises jargon to define the limits of the individual reality. The jargon used is also a mechanism to alert other nurses as to which reality they are in conducting. Participant 4 noted the importance of language in protecting themselves, not necessarily capturing patient care:

> *"Yeah, really important. I just feel that if anything was to happen like if it went to court, it would be very hard to use tick boxes to say that it covers all the care I delivered. But if you have everything documented, it's good for our own backs."*
>
> *(Interview, Participant 4)*

4.3.1.3. Influence of EPR

Throughout the data collection, the influence of the EPR on both wards was immediately apparent. The researcher noted that the ward nurses interacted much more with the EPR station in the wards than expected. As detailed in other sections, the EPR was a significant influencer in the handovers. However, the nurses' interactions with the EPR throughout the shadowing days were so substantial that they informed several questions in the semi-structured interviews. The nurses gave the EPR status; they even personified it in how they spoke about it.

> *"Yeah well to be fair now we have stopped doing EPR until after we have done all the patient care in the morning, so EPR and checks are done after*

you've washed all your patients and vitals signs are done. It is not a priority. But at the back of your head it still there that EPR like those checks still have to be done."

(Interview, Participant 1)

The over-reliance of the nurses on the EPR to determine, shape and prioritise care was best realised in the generated task lists. The EPR, through in-built care plans, creates task lists for every patient, including generic tasks (medication and observations) and specialist care tasks. The nurses were not mandated to complete the task lists but did have to acknowledge it every time they interacted with the EPR; therefore, its influence was very subtle.

This approach to categorising care as a series of tasks to be completed, reinforced the organisation's view and value of care and added to the dissonance that the nurses experienced. Reducing nursing care to a series of tasks effectively reduced the nursing input to their patient's care as mechanical and linear, removing the critical thinking and complexity of nursing care.

The nurses also noted that the EPR was the source of information for the ward's/organisation's key performance indicators (KPIs). Nurses were conscious to complete the correct care plans as required, as it would negatively impact the ward's metrics if not done correctly. They recognised that this was another role the nurses had adopted, providing data for KPIs, and they were aware of how important the KPIs were. The nurses acknowledged that the KPIs did not always reflect the reality of the care they provided but also that the EPR was the primary data source. The example of the assessments (falls assessment and shift assessment) was discussed during the shadowing when a CNM was orientating a new staff member. The Nurse Manager drew the staff member's attention to the importance of making sure each box was ticked as complete; otherwise, the EPR would not record it as care being provided.

CNM is explaining EPR to the new staff on adaptation. She notes the importance of checking off the assessment each day ("otherwise it keeps coming up as a task undone"). The assessment is mostly questions with pre-defined answers (y/n). The CNM uses the line care assessment as an example:

Aseptic technique Yes/No

Connections changed Yes/No

Dedicated TPN line Yes/No

Sutures in place Yes/No

Swab sent Yes/No

CNM "all done, just save the assessment, and that's one less thing to do, done".

(Shadowing Day 7)

This research study has highlighted the underestimation of EPR as an influencing force on how nurses understand and deliver care. The full scale of EPR impact would require further study. Still, the EPR and participants included in this study have shown that EPR does not fully capture the complexity of nursing care and is used as a tool to further reduce nursing care to a process of linear tasks to be completed. The influence of an EPR is so significant because the system itself was often personified and given agency within the ward environments, with nurses using phrases such as "EPR said I must…" in order to justify their decisions.

4.3.2. Sub–finding 1: Multiplicity of Roles

This section will discuss the different roles identified during the data collection, including a data clerk, an information conduit and their role in providing emotional support, for example. The term *data entry clerk* is used to describe the observed role that nurses took on when inputting clinical and patient-related data into the EPR appeared to be their primary purpose and responsibility. It became apparent that there were different visions and expectations of what nurses, and by extension, nursing care, encompassed. When examining the EPR system, it could be perceived that nurses were primarily data collection clerks; the expectation was that they complete multiple assessments on each patient that would then guide the necessary care interventions. The use of EPR was understood by interview participants as a task of work to be completed, something to be factored into the planning of the shift. Participant 2 noted the level of involvement of EPR in their daily work:

> *"I mean what you're recording on EPR is what you've done that day. Each day, when I'm on EPR, you do all your normal daily checks, but I will always write a nursing note because then it's the story for the day, for each patient."*
>
> *(Interview, Participant 2)*

While the nurses did recognise that using EPR to document care was quicker than the previously used hand-written notes, they also did not feel it released additional time to care. Participant 3 highlighted the additional layering of using EPR in recording patient care:

> *"Yeah, your daily nurse check is on i-view, and it has things like have they beds rails, has the oxygen been checked, has the suction been checked, is the bed space clean. They're all in the daily checks. Whereas in the nursing note, I'd say 'nursed as per care plan, assistance with needs, whether they are incontinent or needed a hand with their elimination'. Then you mention*

any attachments, line or devices. Then how their fluid balance is, positive or negative. So, I'd have all that on a note."

(Interview, Participant 3)

During a shadowing shift, one nurse clarified that there are more assessments to complete while there are fewer notes to write now compared with before the introduction of the EPR. As a data entry clerk, this role is further reinforced in how the data entries are then used in the handover to colleagues. This role reassignment takes up a lot of the nurses' time, and EPR often becomes the focus of their work rather than the focus on patients.

It is normal practice for the nurse handing-over to read the required information from EPR, in fact the main page of the patient's EPR is laid out to provide quick oversight of their clinical situation. Therefore, the sequence and content of a patient's handover are predicated by the staff receiving the handover, and deviation from this learnt standard would be unusual behaviour. The role of the nurse as a data entry clerk is confirmed as they must enter a sufficient volume of data, into the right assessment boxes, during their shift in order for it to meet the expected sequence for handover later. There are many roles beyond data entry clerks which nurses have adapted; for example, during each shift, the nurses must confirm if the patient requires isolation precautions, regardless of their clinical conditions have changed (i.e. should a patient's swab result in the need for isolation precautions, the nurse is notified, but they will still need to check the "isolation precaution" box in the separate assessment), the nurse must complete this short assessment on every shift and the "isolation requirements" is featured on the patient's main page for handover, failure to do so is flagged as a "task outstanding". While this may seem like and reductionist approach to defining a role, it is only one of the many in the multiplicity. Importantly is a role that has been recently created as a result of the EPR introduction, and the role has been created from the policies and standards of data entry for the EPR, but also socially constructed, maintained and accepted by the nurses.

"When you're doing your admission, unless you do it through Care Compass, you might have done everything, but you didn't do it there; it's still coming up as seven red tasks that are not complete even though they are. We would know to do it, but let's say someone else did the admission, and they didn't know, you're going back then and clicking in and out and saying not done, but it actually is done. That takes a little bit of time."

(Interview, Participant 4)

During the shadowing data collection, the nurses frequently personified the EPR, giving it authority and position in the ward's hierarchy. The position of the EPR in the ward's hierarchy allows it to demand work of the nurses and to dictate which work they

should do. This not only gives it authority but power by assent as the nurses must comply for their care to be recognised, as observed on Shadowing Day 3:

> *"I still have all my daily check to do [on EPR], I hate them!"*
>
> *(Shadowing Day 3)*

Nurses bemoaned that EPR would list their tasks as outstanding or that an assessment was due. It should be noted that during the shadowing process, the nurses would routinely spend a significant amount of their time with some access to the EPR, either directly or indirectly. Directly, they had access through a wall and desk-mounted units. They also had mobile units that they brought to the patient when undertaking assessment or providing care, and units were mounted to the drug trolleys to capture medication administration. The difference between the critical thinking and skills required to care for complex patients and what can be captured on ERP was set out by Participant 5:

> *“Now, we deal with tracheostomy patients. When you suction... Now, this is your critical thinking. When I suction a patient and I find resistance when I suction, I know with my previous learning and with the knowledge that I have, that there's danger if the suction catheter is not going in deeper, and I need to call for help, so that is my critical thinking. But on EPR, it doesn't say anywhere, "Is there resistance met?".*
>
> *(Interview, Participant 5)*

Other roles were witnessed during the data collection; most notable is that of conduit between their own realities of care, translating care into tasks and between the various interactions with other nurses and healthcare professionals. The language of care and how it is used will be explored in Section 4.3.4, and the duality of care is described in Section 4.3.3; however, the role that nurses play as conduits is different. As seen in the previous role, as data entry clerks, the additional role of the nurse to act as conduits for various types of information is one that is not explicated and described but socially constructed and maintained. During the shadowing data collection, the researcher noted the ease in which nurses could shift from primary carer, information source, teacher and data entry clerk, while each was a role in itself, the overarching ease and fluidity became a noticeable feature of an expected role to act as a conduit. The distinction between the roles is subtle and only apparent to the research through the shadowing and interview process. The primary distinction is in the intention of the role and what the desired outcome is for the nurse in a particular role. While the nurses never ignored patient care, it might be temporarily superseded by a deliberate role. For example, when nurses are data entry clerks, their focus is on data input to the EPR, albeit patient information.

Interestingly, when asked either during the shadowing or the interviews how they define care, the responses were varied but mostly centred around the physical interventions associated with a medical model of care. While some did note the influence of patient-centred care in their definition, when it was explored further, their benchmarks were based on physical interventions. This is interesting because when defining care and, by extension, their roles as caregivers, they ground the construct in the physical elements and displayed no insight into the roles described above (Section 4.3.1).

> *"I remember that from college and like you're always okay when you look at your patient from head to toe, making sure everything is ok. Looking at the dressings, drains and pain. Making a change and checking if what you did was effective." (Interview, Participant 1)*

The roles described were witnessed on both wards, the data entry clerk appears to be a reaction to the introduction of the EPR; one can presume that the conduit role has been present for much longer. Both roles appear to be fully accepted and entrenched in the routines of the ward, and it could be argued that the role of conduit moves beyond the expected role of the nurse and provides much of the unseen work and care that is necessary for the ward to function. Alternatively, the role of a data clerk appears to reduce the role of the nurse to mundane tasks that do not directly, or indirectly, add to their professional practice.

The role of the information conduit differs from the nurse providing education directly to a patient as part of the care required. The role of information conduit was observed when nurses were acting as the main source of information between patients and colleagues and between colleagues. Throughout the shadowing and interviews, it was apparent that nurses unknowingly fulfilled the role and kept information fluid from the relevant stakeholders. This information-sharing care is active, in the nurses telling the relevant person some information, or passive when the information is sought from the nurse. The passive information sharing also underpinned the assumed knowledge and information the nurses must have before the AHCP asks them. The role of the information conduit is subtle but very essential to the general nursing of the ward. Frequently, the researcher observed a member of the MDT searching for nurses to either gain information from or deliver information to. While two roles were most evident in the data collection, the point that there is a broader multiplicity of roles must not be forgotten.

4.3.3. Sub-finding 2: The Duality of care

Before and during data collection, it was considered that the nurses might apply some element of task-based care, where care is modelled based on the physical task/work to be completed. Many researchers have captured the qualitative and quantitative effects of task-based care (Harvey *et al.*, 2018; Jones *et al.*, 2015). Task-based care

can often be seen as a reductionist approach to providing holistic care; however, throughout the shadowing and interviews, the nurses were always acutely aware of the non-physical care requirements of their patients but did not give them priority when planning the care to be delivered. Unfortunately, as has been previously researched, it is usually the non-physical care that ranks a lower priority in the work to be done (Recio-Saucedo *et al.*, 2018; VanFosson *et al.*, 2016).

The researcher did engage with the nurses to understand how they planned their care during the shift, with most translating the care that a patient required into single check-boxes to be completed. This approach made the 'catch-ups' during the day much easier and efficient too, as only the timely check-boxes were handed over. Equally, this approach was mirrored in the EPR, with most assessments and records reduced to boxes to be ticked when complete.

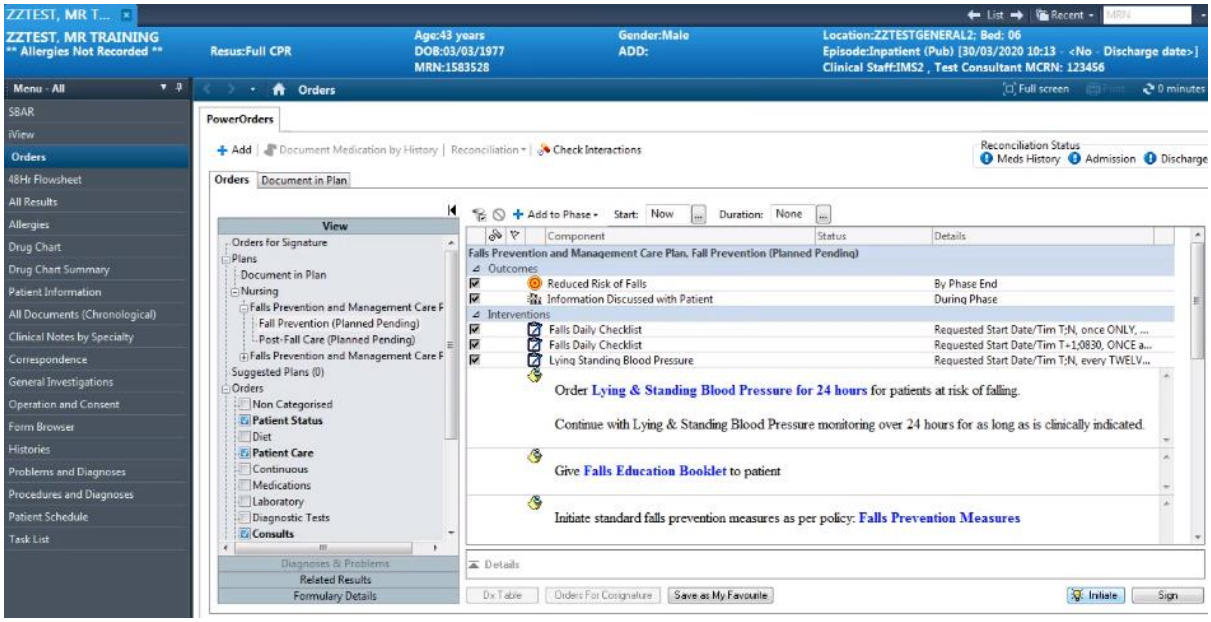

Figure 6 – Example of Falls Assessment from EPR review

Of note, though, was that the expected task-based care approach was not always focused on patient care needs. Throughout the shadowing, interviews and EPR review, there was also a focus on the tasks that the nurse needed to complete that were not necessarily directly related to patient care. When asked to speak to their to-do list during a shift, most nurses would have included a number of jobs to be done that would not affect their patient directly; for example, they included falls assessments, "update EPR," or "awaiting review". While it could be argued that these elements of care may affect a patient over time when compared to the other items that nurses add to their to-do list (observations, medications, dressings, etc.), there is a clear divide between what the patient needs and what the nurses need to do. As shown in Fig 6, the care plan to Reduce the Risk of Falls highlights a series of task-based interventions required for the nurses to complete as part of the assessment. Notably, none of the interventions requires communication with the patient beyond providing an information booklet.

"It's more of a to-do list than anything else. It's not like EPR; it's just for me." (Shadow day 8)

The nurses maintain this duality with a seamless transition, the duality between the tasks of care the patient needs versus the tasks of care the nurse needs to complete. It is only when questioned during the interviews that nurses realise the distinction between task-based care and tasks of care nurses need to do. The duality is sustained and maintained by the ward routines, especially in the handover process. During the morning handover, when detailing a patient's care that still needed to be done, there appears to be no distinction between the two perspectives, so it could be argued that both dualities aren't in opposition but, in fact in parallel. The only point of contention may arise from prioritising the workload; in the task-based care approach versus, when the tasks that the nurses need to complete are considered, the nurse becomes the central focus.

It is possible that their construct of care does not delineate between the two and all handovers observed give them equal weighting. Yet when asked, they all placed patient care first above all else and didn't realise that tasks nurses need to complete were given such weighting at all.

The sustained duality of care was more noticeable in ward B, where only the exceptions to expected care are included in the handover. It appeared, therefore, that every patient's emotional and social care needs were presumed to be met unless indicated otherwise. However, participants recognised that only care needs that require a physical intervention be included in the handover; therefore, emotional and social care needs will be presumed to be met.

“It's just really concise. Instead of saying for people who are on, let's say, NGs or rig feeds, you're not saying every morning, "They are on such and such a feed, starting at this time or that time." You're just saying, "They're on a feed." Then it can be either written down in your handover then, or it's always charted.” (Interview, Participant 4)

Handover in both wards has moved away from bedside handover to being held in a room away from patients. This provides a physical and mental distance from the patients being handed over. Combined with the recording, which removed the possibility of discussions, the handover was only physically in a room away from patients. Every nurse noted that the new recorded format of the handover was introduced with the EPR to align the process with the EPR format while also making it more efficient and quicker. Speaking with the nurses and noting the language they used regarding handover, it was clear that they felt that handover in itself was a task of care, a task for the nurse to complete as quickly as possible.

*The **second** tile in the "problem list". It outlines the reasons that brought the patient to the hospital. There are two boxes within this frame – "this visit" and "chronic".*

(EPR review)

4.3.4. Sub-finding 3: The use of language to shape perceptions of care

Throughout the shadowing, interviews and EPR review processes, it was noted that the language used by nurses changed depending on the context. During the morning and evening handover, the language is formal, deliberate and clinical. When the nurses are "catching up" during the day on the ward, the language moves to be more informal, casual and very task orientated. This section is discussed under three headings, handover, ERP and language used with students.

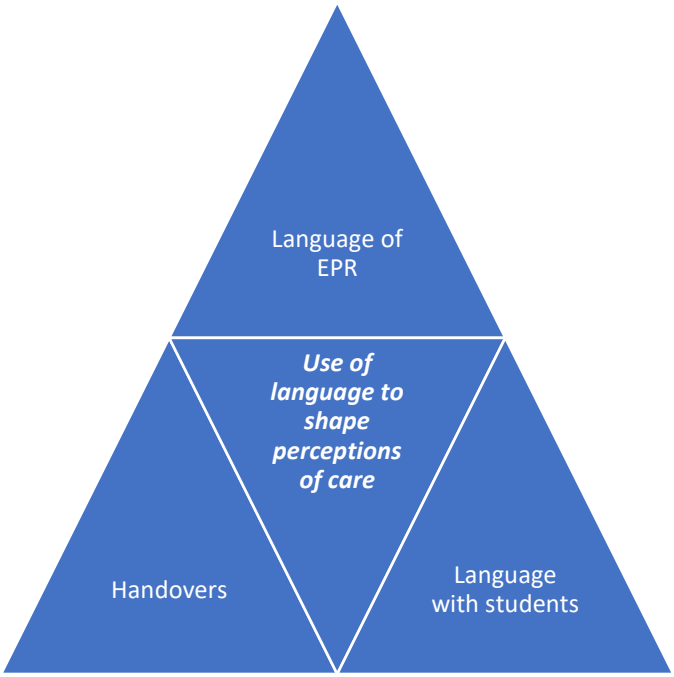

Figure 7 – Use of language to shape perceptions of care

For clarity, the term 'language' covers the words, intonations, conversations or means of communication captured during the data collection. Figure 7 demonstrates the relationship between the different uses of language by nurses; while they are all aligned, they do not overlap.

"Researcher: what kind of information would you hand over?

RN3: Their needs, whether they are independently mobilising or with hygiene. We'd handover their diet orders, if they are NPO or if they are on a special diet like high calorie or high protein diet. We'd handover if they've got wounds or if they're vascular patients and have specific observations."

(Interview, Participant 3)

Apart from the language used in the handovers, there are other examples of different words and phrases used in describing care. Most notably is the identification of patients, which ranges from bed number to formal name to their preferred name.

"RN 1&2 on the corridor, updating their grids and EPR while handing over before lunch. The handover is very brief, just to identify any changes:

Bed xx, nil new

Bed xx, all done

Bed xx, obs done, abx on

Bed xx, ready for theatre"

(Shadowing Day 5)

"RN1 "[patient first name], so nauseous last night, we tried everything. Had her sitting up and regular meds. She eventually got some sleep, but she feels awful this morning. Maybe don't take the drain out until this afternoon, there's nothing in it anyway"

(Shadowing Day 6)

"[patient's first name] she's grand all done, all ready to go, slept well.

[patient's first name] she's ok, repositioned a lot overnight, and she's in good form.

[patient's first name] she was so annoyed, her dressing kept leaking all night, the poor thing was driven crazy. I only changed it again an hour ago.

[patient's first name] (new admission) there's a lot going on with her family, very complicated and messy. Her son is a bit odd."

(Shadowing Day 8)

The variations in how patients are addressed, as evidenced in the quotes above, demonstrate the flexibility of nurses' language use and how it can be adapted to meet the changing context. Interestingly, it was observed that for patients who had been admitted for a longer time, there was a tendency to refer to them for their preferred

‘nickname’ in all situations. The observation below shows how the preferred nickname became the default identifier for the nurses and caused a source of confusion.

> *“Confusion about the name of a patient, the porter has her formal name, but the nurse is using her nickname, and the patient only responds to nickname so didn’t hear the porter.”*
>
> *(Shadowing Day 6)*

How this influenced the nurses’ view of care can be explained by the adaptability to the language. As described above, nurses can seamlessly move through multiple roles, and their capacity to translate the language required further assists in them supporting the multiple roles. Being able to change and re-orientate the language used based on the context and audience is an essential skill that the nurses demonstrated completely subconsciously. The example of how they can refer to patients based on the clinical context (formal to informal) but also acknowledging the patient’s preference and balancing their care needs (for long-term patients), is a very complex task that the nurses complete with ease.

4.3.4.1. Handovers

The morning handover in both wards followed a similar routine; both started at the same time and occurred in the dayrooms of the respective wards. The type of information conveyed was also similar, as the purpose of the handover was uniform. As discussed above, both wards used a recorded handover approach to reduce handover time, and this did also reduce the discussion or conversations around planned care.

> *“Handover is recorded on a digital recorder by the night staff and played back by the CNM to the oncoming day staff. There are three bays and eight side rooms the ward is split into two teams, one team takes two bays and one side room, the other takes the third bay and the remaining side rooms”*
>
> *(Shadowing Day 1)*

This formulaic approach reduced the time to handover each patient to minutes, especially as there was no process for questions or conversation. The final point, the "plan for the day", was often a series of tasks of care to be completed. This focus of the handover appears to be on the efficient transfer of information, to reduce handover time as much as possible. This transactional approach could be seen in the manner to which patients are referred, by bed number and full registered name, even patients who had been on the ward for a prolonged time were described as such. On average, the handover to 20 minutes.

The process in Ward B was similar in that the recorded handover approach was used; this ward had just introduced the printed ward census that is being used in Ward A. Previously, all details would be transcribed from the audio recording. A noticeable difference, though, is how patients are referred to. New patients are identified by the bed and full registered name, but patients that had been there for more than a few days, and especially the longer-term patients, were referred to on a first-name basis. In some cases, they are referred to by their chosen nickname as a point of clarification. The handover took, on average, 20-25 minutes.

The clinical language used underpins the context of handover that it is a task to be completed as quickly as possible. During the interviews, the nurses were asked to describe the handover process. All could list the sequenced script of information conveyed and felt it was a comprehensive assessment of the patient's care required. However, during the shadowing shifts, it was observed that after the formal handover the nurses immediately met the nurses on the departing shift for a "quick update", in which the 'softer' side of the patients' requirements was conveyed, i.e. adaptions to control pain or the patients' mood.

> *"poor thing didn't sleep well at all, she's in a poor mood, very fed up" and [another patient] "he's just a devil, he's so bold."*
>
> *(Shadowing day 2)*

After the morning handover, there were several informal 'catch-ups' throughout the day to provide quick handovers of tasks of care outstanding. These were part of the normal routine on both wards. Often, this occurred before and after staff breaks to hand over tasks of care to be complete or aware of while the primary nurse is on break. These handovers are brief and task-focused. The interesting change is mostly in the language used during these handovers. Similar to the morning handover, the language is used to convey patient information efficiently. However, unlike the morning handover, where the total clinical information is transmitted, the patient's care needs are seamlessly translated into tasks of care to be completed in the informal handovers.

4.3.4.2. Language of EPR

Another area similar to the handover process was the language of EPR. As detailed above, on both wards, the presence and influence of EPR was evident; the use of the keyboard and mouse could be heard through the audio recordings, and the sequence of the information being conveyed matched the front page of a patient's EPR, as observed:

> *"Can hear the night nurses using the EPR on the recordings, lots of mouse 'clicks' in the background as they move through assessments"*

(Shadowing Day 2)

The data collected referred to the language observed during the shadowing process, and EPR review, and not the language entered into a patient's records on the EPR. As mentioned, there is variation in how patients are referred to, but there was also a consistent approach to the kind of language used in handing over the patient information. The language was very formal and best described as clinical; even in Ward B, where patient names and nicknames were used, the remaining information in the handover related solely to the physical and medical care needs. Neither ward's handover routine includes a section dedicated to social or psychological care needs, but the overall language used remains unemotive and procedural, reinforcing the concept that the purpose of handover is to be efficient. It could be suggested that these handovers align closer to a medical model of care, not a complete nursing model of care. In the drive for efficiency, the influence of EPR would appear to have cost the "softer" elements of nursing care (Harvey *et al.*, 2018).

There is a clear translation of care requirements into tasks to be completed during both the formal morning handover and informal catch-ups. In the morning handover, this is done after the patient information has been received and is then further reiterated throughout the day. On discussion with the staff nurses, they are more comfortable with this approach, as quoted below:

> *The **second** tile in the "problem list". It outlines the reasons that brought the patient to the hospital. There are two boxes within this frame – "this visit" and "chronic". Clicking into either box opens a window that allows the nurse to free text in the patient's reason for admission i.e. lower leg pain for 3/7. The window also has a search function where the nurse can search for the appropriate diagnosis via SNOMED code i.e. left lower limb DVT. The reason for admission description can be updated but not removed. The diagnosis can be resolved and then it moves to the chronic box. The nurse can directly enter chronic conditions into this box too, using a SNOMED search*
>
> *(EPR Review)*

While task-based care has been described in various ways by the research available, it is usually a method to quantify care for more administrative reasons, i.e. billing or metrics (Elayan and Ahmad, 2017; VanFosson *et al.*, 2016). As a model of care delivery, it is worth acknowledging the impact and influence of task-based care across both wards. It is very much common practice and supported in the culture and context of the ward. The handover language is a clinical/medical approach that lends itself to the quick translation of care into tasks to be complete.

Additionally, the information included and the language used in the handover has also changed. Previously, as reported by the nurses, a holistic approach was used at the bedside. In this handover, the routine care needs are presumed, and only expectations are included, again for efficiency and speed. The presumption of routine care is more

evidenced in Ward B, from both the shadowing and interviews, where it was explained that during the handover the precedent was to only hand over non-routine elements of the patient's care requirements. It would be normal to disclose the patient's demographic details and reason for admission, recent procedures or interventions and non-routine care planned for the next day. Not only does this approach speed up the handover process, but it reduces the priority of nursing care outside of the medical model of care.

> *Nursing care plans*
>
> *At the time of the data collection, the hospital had only moved six care plans to the EPR: altered nutrition, EPR pressure ulcer management, experiencing constipation, experiencing diarrhoea, falls prevention and management (activated after a fall), urinary catheter care. Each plan has a suggested time from when it should be used, for examples the falls assessment is done on admission and every 24 hours whereas the constipation or diarrhoea care plans are only activated is a patient is experiencing symptoms. All plans must be added to the patient's i-view. Once added some have an automatic set of actions, e.g. the falls plans automatics send referrals to physiotherapy, occupational therapy and pharmacy for a review. Once initiated each care plan has a series of 'outcomes' to be met/not met each day until the care plan is discontinued. There are a number of generic outcomes in each care plan (communication with patient and family, education provided etc). additional specific care outcomes can be added, but this is a very complicated process and never witnessed during the shadowing data collection.*
>
> *(EPR Review)*

These details were not included in the main handover. It is possible that information of this type is not deemed necessary to be included, yet the immediate actions of the nurses to seek this information after would counter that assumption. It would suggest that there is another duality in the perception of care, between the clinical and official and the holistic and undocumented. Both perceptions are maintained by the staff, and both run in parallel, with nurses moving between both at any moment. When asked to describe the morning routine during the interview, the first answer was based on the formal, clinical and approved handover process. It was not until after further questions that the details of the second handover were confided.

4.3.4.3. The language used with student nurses

Students were not included in the data collection; however, during the shadowing process, the interaction of the nurses and students was observed. From the nurse's point of view, this was noted because of the translation of care tasks to the students. Information that the student provided back was not observed or recorded. As

discussed above, there are multiple dualities of care and the perceptions of care being maintained and sustained by the nurses. This was most evident when the nurses had to communicate the care requirements of a patient to a student.

When discussing care with students, the nurses further refined the care to the minimal physical interventions required. This was a reduction beyond the initial translation from holistic care into task-based care or tasks that the nurses need to complete. When asking students to participate or undertake the care, the nurse would convey the least amount of information required to the student, often on "do the obs, mobilise patient X, etc.". While the nurse, and researcher, are conscious of the student's competency and capability, the language used in the interactions further reinforces the primacy of the task-based approach to care. If the students' understanding of how the construct of care is influenced by the nurses they are working with, then it is reasonable to assume that language is a significant factor in how their concept is developed.

This also sheds light on the nurses' construct of care, noting the seamless transition between the parallel dualities, the effortless changing between roles and the natural translation of languages. However, it was noted that when conveying care externally, the nurses resort to using the most limited descriptions of physical interventions.

4.3.5. Memos

Memo writing occurred during the observation data collection as there were times when the ward was quiet or during breaks when formal data collection was paused and could reflect and write up notes. These memos were used to assist in sense-check the findings and the understanding.

The first step in memo writing was to fully expand each of the codes so that their differences and similarities could be explored.

Once that was done, then the memos were written out separately but copied below. Writing memos involves 'stepping back' from the data collected so that the ideas can flow more freely. The memos were written early in the data collection process, and some are no longer relevant, but others can be formed into propositions. The memos are only ever partial, provisional and preliminary understandings of the process so far (Charmaz, 1995).

Memo 1

Influence of EPR – affecting care routines and practices, prompting reactions, driving care into tasks to be completed.

During the shadowing, two issues were noticed by the researcher:

1. The time nurses spent using EPR was significant. Every action and interaction required time spent on EPR.

2. The way EPR was being referred to by nurses, usually discussed as being another member of staff, e.g. "EPR says I need to complete the falls assessment."

While on the ward, it was evident that the nurses were spending a lot of time with EPR. The wards are well-resourced with IT equipment, and there are several computer trolleys on the ward, as well as computers attached to the walls and drug trolleys. Despite the ease of access to EPR, most nurses took a computer trolley around with them as they worked into patient rooms and bays.

Memo 2

Language of care is used by nurses throughout their day.

During the shadowing shifts, the language used by the nurses changes depending on the context. During the morning and evening handover, the language is formal, deliberate and clinical. When the nurses are "catching up" during the day on the ward, the language moves to be more informal, casual and very task orientated.

When speaking with students, the nurses translate the patient care needs into simplified tasks. This may just be a way to delegate the task of care to be completed, but it also reinforces the construct of care is only a physical task for both the students and the nurses

How patients are referred to during the shadowing and interviews is also interesting. Usually, they are referred to by bed number or reason for admission, but that could have been influenced by the presence of the researcher.

Memo 3

The sustained dissonance of care – they recognise that non-physical care is essential but also that it is not important enough to be included in the handover. In Ward B, where only exceptions to expected care are included in the handover – therefore, every patient's emotional and social care needs are presumed to be met unless indicated otherwise. But they also recognise that only care needs that require a physical intervention are re-included in the handover; therefore, emotional and social care needs to be presumed to be met, and there is a significant gap between care needs met and require physical intervention.

Memo 4

Handover in a space that is separated from patients. Handover in both wards has moved away from bedside handover to being held in a room away from patients. This provides a physical barrier from the patient care areas where nurses cannot see or hear the patient what they are receiving handover about. It could be argued this eases

the translation of care into tasks. Every nurse noted that the new, recorded format of the handover makes it more efficient and quicker. This seems to be the purpose of the handover process, to be quick and get out to the ward as soon as possible.

Equally, the information included in the handover also changed. Previously a holistic approach was used at the bedside. Now the approach is that much of the routine care needs are presumed, and only expectations are included in the handover, again for efficiency and speed.

Memo 5

The duality between care the patient needs and care the nurses need to provide. All elements of care were included in the handover process, and there was no distinction between patient needs and nurses' needs. The nurses did not overtly recognise that some of the tasks of care they handed over or planned for in a day did not directly relate to patient care needs, i.e. falls assessments etc.

It is possible that their construct of care does not delineate between the two elements. At all handovers observed, equal weighting of importance was assigned to both sides. Yet when asked, they all placed patient care first above all else and didn't realise that tasks nurses need to complete were given such weighting at all.

Memo 6

Throughout the shadowing and interviews, the staff were asked about the ward's model of care to see how they defined it. Each ward has a philosophy of care displayed on the main corridor wall. The previous paperwork and assessment were based on the Roper, Logan and Tierney (RLT) model of care, and EPR follows a similar format to the general assessments (Tierney, 1998).

Most nurses were unsure how to answer the question about the model of care, to the point where it was not possible to see any link between the model of care and the care being provided on the ward. Some did note RLT, and others described the staffing levels, some focused on the patient profile on the ward.

Informally the ward managers were just as unclear as to the model of care of the ward and suggested it has no bearing. There was a notable difference in the care environments on both wards, as observed; this is more a result of the different ward managers and also the different patient profiles than different models of care.

4.4. Conclusion

This chapter sets out the research's findings, including the memos and the three sub-findings. In this chapter, a sensemaking lens was applied to the data collected through shadowing, interviews and the EPR analysis to generate the main findings of this research, that nurses construct and maintain multiple realities of the care they deliver.

This main finding was discussed, with examples from the data collected provided for clarity.

The three sub-findings were also discussed, and they highlighted the complexity of the multiple realities that nurses construct and maintain. The sub-findings outlined the multiplicity of roles which nurses work between, the duality of care that nurses manage and the influence of language in shaping their perceptions of care.

Discussing the findings is a key step in generating interpretation, understanding and making recommendations for further research that will be discussed in the next chapter.

5. Discussion Chapter

5.1. Introduction

As discussed, ‘care’ doesn’t exist without a society to develop and maintain the construct. When it comes to the application and provision of nursing care, that construct is further refined by the informed and vested interests of the nurses creating it. The narrative of nursing care often only acknowledges care in one setting; namely, care is a form of work (Allen and Mellor, 2002; Cook *et al.*, 2003; Fagerberg, 2004; Kerr, 2002; Lawler, 2006). This has previously been the presumed baseline for other work into social identity, workforce planning and exploration of issues such as burnout. Previous research assumes that the work is done, and more importantly, the context in which work is done is stable and continuous through a shift. Other research does acknowledge that the work does ebb and wane in line with (usually clinical) demands throughout the day, but none has captured the different realities that the moves move within each shift.

This chapter will discuss the implications of the findings, and the substantive contribution to new knowledge will be presented in Section 6.3. This chapter will also outline the interpretation of the main and sub-findings. Section 5.4 describes how the findings can influence the broader nursing theory. Section 5.5 sets out some of the imitations of the research.

5.2. Answering the Research Question

The research question set at the beginning of this project was:

How do nurses in the acute surgical setting sensemake the care that they provide?

In answer to the question, this research has found that nurses do not have one single understanding of care. Instead, they construct and maintain multiple realities of care to give structure to how they deliver care. Nurses move seamlessly and unknowingly through these realities, which is supported by their use of specific language. This research has also found that there are dual processes of care; the already acknowledged process of meeting a patient’s care needs and a parallel process of delivering care the nurse needs to provide. The final finding of this research is that the EPR surveyed did not appreciate or capture the full complexity of nursing care. It reflected the organisation’s vision of nursing care and reduced nursing care to a linear process of physical interventions.

Research Aims

Supporting the understanding gained in answering the research question were a number of aims:

- To understand what influences how nurses have shaped their understanding of care.
- To understand the effect of language on how nurses sustain their understanding of care.
- To understand how nurses maintain their definition of care in practice, acknowledging the contrast of theoretical definition against a working definition.
- To understand how the nurses' concept of care may impact how care is provided.

Influences

In understanding the influences on the multiple realities which nurses have created and maintained, they are discussed under three areas: the patient cohort, their colleagues and the workspace in which they work. No single area was independently influential; they all worked in tandem and overlapped (Figure 8).

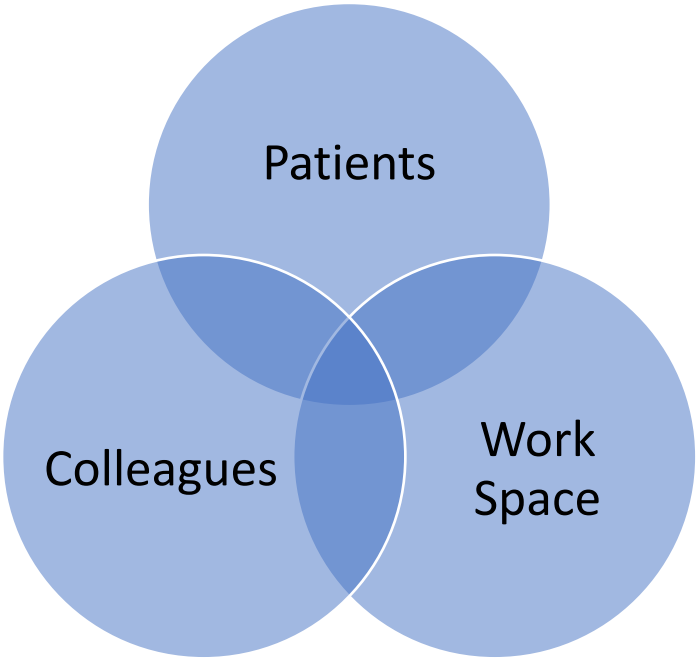

Figure 8 – Influences on Nurses' Realities of Care

Patients

Throughout the data collection, the influence of the patients on the nurses' realities was pronounced. Between the two wards included, there difference in the type of patients, and the different specialities, was referenced by the staff. Staff on one ward noted that there was a process behind caring for surgical patients; they are admitted for a deliberated reason, usually a surgery, and that the care required is focused on their return to their normal function. This approach influences how they plan, coordinate and deliver care to their patients. Equally, nurses on the other ward noted that their patients, usually with gynaecological conditions, required a different approach to care. They also noted that because of the nature of their patient's conditions, some would frequently return to the ward for further treatment. This would result in the nurses getting to know the patients well.

As an influencing factor, the incorporation of the patients into how the nurses perceive their patients is a key factor in how they sensemake the care they deliver. This underpins the relationship between nurses and their patients. As discussed previously, nurses' professional identity can be defined by their patients, but now we can see that patients are at the core of how nurses sensemake the care they deliver. The influence of patients is not just at the individual care-planning level but at the broader level, where nurses consider and acknowledge the population.

The dynamic relationship between sensemaking and identity reinforces the unique connection of nurses and patients. It is no surprise that patients influence how nurses sensemake their care, but the complexity of the care and level of influence has not been acknowledged previously.

Work Space

The influence of workplaces and organisations on practices is well documented in other research literature. When considering how the context of work influences the nurses in making sense of their care, it was clear that the organisation's expectations of the care being provided shaped the nurse's constructs. The organisation's perceptions of care are based on the physical interventions of care linked to measuring patient outcomes of nursing care. The organisation's focus on the physical and measurable outcomes of nursing care is further evidenced in the outcomes identified in the EPR. It must be noted that the EPR was fully rolled out in 2018; therefore, it is reasonable to assume it provides an accurate and timely reflection of how the organisation perceives nursing care, which in this case, is limited to the interventionalist view.

The interesting point is that, while the organisation's influence must be significant, nurses can still seamlessly maintain realities of care beyond the hospital's interventionalist expectations. The strength of nurses' capacity to sensemake care can supersede the influence of the organisation and its expectations.

Colleagues

The influence of other nurses on constructing and maintaining the multiple realities of care is two-fold. First, there is the already discussed influence that colleagues, as members of the social group, have in constructing and maintaining the realities of care.

The second influencing factor is colleagues outside the immediate ward staff nurses (e.g. ward managers, allied health professionals, and nurses from other wards). Their influence is in putting limits or permissions on the constructs created. A group of actors, in this case, nurses, can make the realities as they require to meet their sensemaking of care. However, the influence of colleagues from outside the group can put limits on external professionalism or organisation policies around the realities. Throughout the research, there were data collected on the nurses' interactions with other colleagues, and the variety of information conveyed, methods of communication and changes in languages suggest that there and multiple realities that the nurses maintain when engaging with colleagues. However, as they are not included in forming the constructs, their influence is limited to shaping the boundaries. Weick (2012) also noted an organisation's role in an individual's self-identifying that is social, ongoing, and based on cues from the environment (Weick, 2012).

5.3. Comparison with Literature

In comparing this research with published literature, some clear differences emerge. Primarily, this research addresses the dearth of research available examining how nurses sensemake the care they provide.

The themes identified in the literature review were:

Defining Nursing Care

The variation and approaches captured during this research reinforce the difficulty in defining nursing care previously experienced by other nursing theories and models. As noted in Chapter 1, in an attempt to reverse engineer a model of safe staffing based on the quantity of 'care left undone', these models and policies have taken significant presumptions that every nurse asked has the same understanding of care. In reality, 'care left undone' only questions the physical elements of care not administered or provided for during a recent shift (Leary *et al.*, 2014; VanFosson *et al.*, 2016). While this adds to the depth of the assessment when determining the staffing level requirement, it fundamental reinforces the concept of nursing care as an intervention only.

Theories and models of nursing care that try to define nursing usually focus on meeting patient needs as the primary function of nursing. In contrast, this research has shown that there is a duality of nursing care, what the patient needs and what the nurses need to do. From early theories of nursing, when Henderson (1982) and Peplau (1987) focused on concepts of nursing in meeting care needs, to Orem's version of nursing care (1987) is to bridge the gap of care needs, to the recent Roper, Logan and Tierney model (1994), which focuses on the activities of daily living; the general direction of nursing theories and models is to define nursing in as clean, clear and clinical a

method as possible, framed by the patient needs and the interventions that can be delivered; this immediately loses the nuances and complexity of nursing (Henderson, 1982; Roper, 1994; Wagnild et al., 1987). Newer models, such as the Fundamentals of Care framework (2019), report the primary aim as patient-centred care (Feo et al., 2019). Without acknowledging both parallel care processes in a theory or model of nursing, the complexity that nurses bring to the provision of care is lost.

Theories and Model of Nursing Care

As an early theory of nursing care, Peplau's was highly influential in transitioning of the nurse from physical interventions to a therapeutic relationship (Mc Crae, 2012; Peplau, 1989). In her theory, Peplau highlighted that the nurse, as opposed to their interventions, were the agents of change. Even in this early theory, the distinction between nursing and patient care needs was beginning to be developed. However, the next significant theory to emerge was by Virginia Henderson, which moved nursing care to be in response to functional assessment and needs. This trend to associate theories and models of care with patient needs, either functions or physical, continued throughout the subsequent years. Orem defines patients and people as social units which require nurses' care (Alligood, 2014; Wagnild *et al.*, 1987).

Nursing theories have not focused on addressing care as a social construct and incorporated this into a model that could inform practice. Care as a social construct is referenced in the literature, although the translation between the sociological understandings of the construct is often lost when applied to nursing or healthcare research. This research has reinforced that care is a social construct and added that the multiple realities of care are additional constructs to consider when further defining nursing care. It would be fair to say that nursing care is not a single construct but multiple realities which are developed and maintained by the population of nurses on a ward.

Noting the work of James (1992) in using labour as a core element in defining care, attempts to put boundaries on the construct of care by making the components tangible. The findings are also interpreted further when discussed under the social determinants of theory, practice, education and policy.

As Mc Crae (2012) notes, an understanding of nursing care that would inform a definition does not have to conflict with evidence-based practice (Mc Crae, 2012). This researcher concurs that the quest for a singular definition of nursing care is misguided if it seeks a static definition. Instead, cogent theory needs to acknowledge the complexity and fluidity of nurses' multiple realities of care while also making sense to the practitioner.

5.4. Interpretations of the findings

The review of the relevant literature that informed this research revealed a dearth of knowledge around how nurses sensemake the care they provide. There were notable papers regarding the context in which care is given and how nurses prioritise and administer care; however, there remained no published research studies about how nurses sensemake care and what influences their sensemaking.

The findings of this study address some of the gaps in the literature review. The main finding of the multiple realities that nurses construct and maintain when providing care is explored to further determine the effect nurses have in providing care and ultimately shape the care they administer. This research also provides new knowledge through its novel use of ethnomethodology. In keeping with the tenets of ethnomethodology, when reviewing the findings, some structural determinants of sensemaking arose. The four structural determinants are:

1. Theories and Models
2. Practice
3. Education
4. Policy

Theories and Models

A model is a representation of care, which enables the practitioner to organise their thinking on how to plan, deliver and assess their care (Cook *et al.*, 2003).

From the 1950s, there was an ongoing campaign to give nursing professional credibility by developing theories, models and frameworks to shape and guide practice. It was felt that having clarity internally within the professional would provide clarity for the wider public (Biley, 1992). The background and development of the models are described in Chapter 2. However, what can be identified over time was the move from the early model of Peplau, which focused on nurses as agents of change, to the more recent, and more widely used, models of Henderson and Roper, Logan and Tierney (RLT). In the evolution of these models, the most significant change has been to make the process more prescriptive and easier to translate into practice. In the RLT, the theories and models relied on the weight of empiricism, and from the outset, the nuisances of nursing were lost. Reducing nursing care to 12 activities of daily living immediately renders the more complex and tangential care less important, as it does not fit into the identified tasks.

The findings demonstrated that nurses had different ideas about what care is and different perceptions from the then ‘official’ or organisation’s version. Throughout the data collection and interviews, the nurses were generally unaware of the hospital’s identified nursing model, Roper, Logan and Tierney (RLT). When asked in the interviews, most described the model of care as “patient-centred”. There was also no reference to RLT found in the assessments on the EPR. While the hospital has a concept of the nursing model of care, it doesn’t appear to be realised in practice.

Newer models of nursing care are being generated to present a systematic, comprehensive and rational approach. The Magnet programmes across the US request that organisations have an identified model of nursing care; it does not mandate what the model is or what is actually used. So, while there are identifiably gaps between the models and practice, the fundamental understanding of nursing care remains unaddressed. Fundamentally, after Peplau, most other models have focused on what the nurse does for the patient rather than the focus of the model is on the nurses themselves and how they might practice (Alligood, 2007). **A key implication** of this research study is finding a model that can accommodate the complexity of the nurses' realities, not a linear approach to nursing theory. Based on the findings from this study, a model of nursing care would have to acknowledge that nurses have constructed a reality of the care they provide; moreover, they have constructed multiple realities through which they move seamlessly. These realities are built on the educational background, language used and the context in which care is provided. Other researchers have noted the challenge of the move to models of care without thorough consideration of the perspective of the nurses delivering the care (Alligood, 2014; Fernandez *et al.*, 2012; Zwakhalen *et al.*, 2018). Green (2018) pointed to the philosophical need for nursing theory and the gap that has been created (Green, 2018).

When applying the lens of sensemaking, the models used in the participating wards fell short of what was being discussed and delivered. **Another key implication** is that nurses in this study do not recognise these models in their realities of care; the models do not inform their thought process or decision-making and do not knowingly support their practice. There may have been some influence of nursing models during their education, but this was not evidenced in practice. The nurse, in effect, develops their own model of care, bespoke to themselves and their patients. As discussed, the duality of care changes proposes that care is not just focused on what the patient needs but also on what the nurses may need to do too. This duality is further reinforced by an organisation's preference for the interventionalist approach when capturing nursing care.

A model to acknowledge and capture this level of complexity might not be practical; however, a theoretical framework could be developed. With further research to develop a wider understanding of how nurses make sense of the care, they are providing, expanding into different care settings, grades and roles.

The interpretation of the finding in the practice of nursing is discussed in the next section. However, after discussing the theories and models, it is also important to consider the process of nursing care before discussing the practice. The process of nursing care, described by Orlando in 1967, outlines the reciprocal relationship between nurses and their patients and developed her nursing process (assessment, diagnosis, planning, implementation and evaluation) to provide deliberate outcomes of nursing care (Orlando, 1967). While the first three steps of the process are non-interventional, the final step (evaluation) translates into something that has to be done for the process to be complete. Orlando's process does acknowledge the complexity of care and does recognise the unique relationship between a nurse and their patient;

however, it does reduce the nursing relationship to be based on an intervention and evaluation.

Practice

This section will move away from the previous discussion on theories and models and move to how sensemaking care can impact the practice of care delivery.

There is no single reality of nursing practice, just as there is no single reality of nursing care. The multiple realities are created by the necessary social constructs of nursing care and of the wider healthcare system. Nurses' capacity to navigate and seamlessly move through the various realities is unique as they have the insight, intelligence, education, and language skills necessary. Previous models of nursing practice focus on nursing at the point of patient care and base the output of the model solely on patient outcomes (Roper, 1994; Tierney, 1998). This research has shown that there is much more invisible complexity through which nurses navigate in order to construct their understanding of care. The findings of this research challenge the previous perspectives of nursing practice; they show the multiple realities through which nurses easily move, e.g., as data entry clerks, data collectors, interventionists, communicators, teachers, and leaders, all while providing physical care.

When applying the lens of sensemaking to understand the nurses' realities, one must acknowledge the existing social constructs evidenced in the data collection, i.e. the ward and organisation's structures, the nurses' role, and the purpose of providing care. These inform the basic framework for all realities; as Weick notes, realities can be loosely coupled, but they must be loosely coupled onto something (Weick, 2012). Acknowledging the basic given constructs is important, as they provide boundaries for the realities constructed by the nurses and the wider organisation, therefore, can be described as the primary source of influence. In delivering care, nurses must work within the existing structures, both managerial and also professional/disciplinary. In doing so, these influence how they see care should, or can, be delivered within the existing structures. This is not a negative perspective, the nurses did not report feeling constrained or limited in practice, but it reinforces the concept of organisational identity or 'how things are done around here' (Black, 2003).

The organisational structures of nursing have been around since before the time of Florence Nightingale. The history of nursing shows the strong military and religious influences on the profession; both sectors have an appreciation of rigid hierarchy. In Ireland, the Commission of Nursing was tasked with reviewing the profession so as to modernise it for the 21st century (Department Of Health and Children, 1998). A core recommendation from the Commission was the disbanding of the "sister" role and the streamlining of career pathways with the creation of new managerial roles, clinical nurse manager (CNM) 1, 2 and 3. This approach has provided much clarity on the role and scope of the CNM but has also doubled down the hierarchical structures. When considering how nurses sensemake care, their place in the hierarchy is a key influencer.

A nurse's place in the structural hierarchy is an indicator of their role, which traditionally is dependent on patient outcomes as the priority. There is a noted duality in the nurse-patient construct throughout this research. In the first instance, there is the duality of care, that is, the care the patient requires versus the care the nurses need to provide. There are many studies on the discrepancy between what patients say is important and what nurses think should be done, including the impact of the nurse-patient relationship on patient outcomes (Molina-mula and Gallo-estrada, 2020); these often overlap, as discussed in 4.3.3. However, there is also the duality in the nurse-patient identity, in that the patient is usually very dependent on the nurse for their care needs. In a twist, it appears that nurses have become dependent on patients to provide their professional identity, in that the nurse is not responsible for just patient care; they are defined by patient outcomes. As discussed in the sub-finding, the duality of care, there is a balance between the care needs of the patient and the care that the nurse needs to provide. When nurses rely on patients to cement their professional identity, then the care a nurse provides that is not directly with the patient becomes invisible. When considering the organisation's perspective of care and the role of the nurse, invisible work remains invisible and unacknowledged; therefore, the role and full potential of the nurse is never fully realised.

In practice, this imbalance between the organisation's perspective and the nurses' reality leads to the point of contention. Acknowledging the multiple realities through which nurses move seamlessly but will remain unaccounted for makes the shift to an EPR an almost impossible task without further reinforcing the interventionalist understating of nursing care. The complexity of the multiple realities does not translate into simplified data collection in an EPR, resulting in parts of the nursing process being uncaptured or relegated to free-text notes that cannot be accounted for in metrics. Along with the hierarchical structures, this deliberate reduction in capturing the nursing process further diminishes their professional role, identity and overall value of the nursing contribution to patient care. As noted earlier, when interpreting the findings, consideration must be given to the concept of invisible work. Allen (2014) describes the unseen work of nurses in providing care, as described as 'organising work'. This is the work done away from the patient in the coordinating and organising of care. Allen (2014) describes organising work as separate from patient care but part of the nurses' overall workload. This researcher would contend that organising would be included in the broader understanding of patient care.

This structured and organisational unawareness of the complexity of nursing, the multiple realities of nursing care and the invisible work required is further reinforced by accepting the medical model of care and being the unilateral care option. Compared with the medical model, in which physical intervention is the primary methodology, nursing care can be seen as left wanting (Minion and Batten, 2018). This results in nursing care being pulled into accepting and adhering to the medical model approach. This was evidenced in this study's data collection with the primary focus on the task-based care approach on the physical intentions first; non-physical care was unknowingly deemed to be less essential and could be sacrificed if time did not allow it (Allen, 2014).

As the healthcare system evolves and reforms, especially to address the complexity of non-acute and long-term conditions, the need for nurses to have sophisticated, dynamic and critical skills is becoming more essential. The first step in this is to realise that nurses' reality of care is not uni-dimensional; it is complex, layered and dynamic to reflect the realities in which they are constructed. Nurses' capacity to construct multiple realities and move seamlessly through them ideally places them to lead and provide more complex care now and in the future.

Education

Nurses' education, especially the undergraduate curriculum, sets the foundation for care planning, coordination and delivery in practice. Any interpretation of the findings must be reflected in the education and context of the graduate-only profession, which now exists in the healthcare system in Ireland and the UK.

The move to a degree-based profession was arguably the biggest change in the nursing profession in Ireland. This moved nursing students into university education models, and clinical placements became the secondary method of delivering education after lectures, tutorials and labs. This move provided the basis of academic credentials for the profession from what had previously been an apprentice training model. Internationally, the move to degree-educated nurses was borne on the back of growing nursing theories and models, all designed to support nurses in their practice.

The education of nurses and midwives in Ireland is regulated by the NMBI, which is responsible for setting the standard of the curriculum across all higher education institutes. The purpose is to ensure that the student is equipped with the knowledge and skills necessary to practice as a competent and professional nurse upon successfully completing the programme. Clinical placements make up almost 50% of undergraduate education, which is the number of hours of placement set by the EU standard (Directive 2005/36/EC), meaning that the Irish education system is on par with undergraduate education across the EU. Students are supported by a clinical placement coordinator and a senior nurse responsible for their clinical placement education, and each student is assigned a local preceptor.

Throughout the data collection, the nurses' interactions with students were observed. As discussed, the translation of care into reduced clinical tasks was a finding of this research. The student's response was not recorded, as it was beyond the remit of this research.

In comparing the standard nursing curriculum with what was observed during the data collection, some differences became evident. Throughout all engagements with the students, the nurses' language was always to reduce care to the basic elements of the intervention. The researcher did not observe any conversation in which non-physical care was prompted to students. In contrast, the undergraduate curriculum is not limited to the physical aspects of nursing care. Programmes include a wide range of modules from sociology and psychology to health economics and philosophy.

> *Nursing is an interpersonal caring process that acknowledges the uniqueness of the person. The general nursing programme contains the essential elements that facilitate the development of professional knowledge, skills and attitudes necessary to meet the nursing needs of patients who are acutely or chronically ill. General nurses also have an important role in the promotion of health* (Nursing and Midwifery Board of Ireland, 2005)

The input from these modules was not reflected in the interactions with registered nurses. Most likely is that the registered nurses' interpretation of care prioritises the physical intervention. It could also be argued that the reduction of care to tasks is also easier for nurses to communicate, it closes the communication loop by specifying what to do and how to do it. The acknowledgement must be given to the reductionist approach being one of the realities of nursing care. That gap between what is thought and what is demonstrated and reported in practice is a further example of the unseen realities of nursing care. The undergraduate nursing curriculum, in theory, acknowledges the complexity facing students when practising and provides a broad spectrum of education to suitably equip students. Equally, in practice, registered nurses do use their education to assess, communicate, plan, and lead care. The point of contradiction is when nurses translate what they are doing to the students, and all complexities are not disclosed.

When reflecting on how the translation of care for students might influence the nurse's own construct of care, it must reinforce the task-based care approach structure, which is already emphasised by the existing medical model and the organisation's adoption of the RLT model care. This divergence from the practised multiple realities of nursing care could further drive a gap between academic and clinical education.

Other research suggests that the inclusion of the perspective of nursing into the care they deliver would advance nursing education across both the undergraduate and postgraduate pathways (Gibbs, 1988; Minion and Batten, 2018; Tobbell, 2018). Further inclusion of the complexity of nursing care, the language used and the duality of care being provided can only strengthen nurses' capacity to develop and maintain the multiple realities of care so as to capture its value.

Policy

When reflecting on how the findings of this research can have an implication on nursing policy, there are a number of ways that should be considered.

In the first instance, the findings allow for a more comprehensive understanding of the care being provided by nurses, recognising the complexity of their realities. When adopting this additional understanding to policy development, more credence can be given to the invisible and uncaptured elements of nursing practice, and caution can be applied to limiting a policy direction to just the physical interventions. An example of

this is the healthcare system development of the Safe Staffing Frameworks. While this research is not to critique the methodologies applied in these Frameworks, there are some points of observation based on the findings. The ratio nurse-staffing models are based on the rudimental approach assigned and the number of patients to each nurse. While this can have superficial benefits, it undermines the complexity of nursing care and the different levels of care required. When a simple ratio is applied, it presumes that the care required of each patient is equal and that nursing care is consistent and, therefore, easily divided. This research's findings show that nurses do not hold one universal reality of the care they are providing; therefore, the ratio approach is a blunt approach that further undervalues the contribution of nurses to patient care. Other models are more reflective of the complexity of nursing care and apply a more dynamic approach. The Irish Safe Nurse and Skill Mix Framework (Department of Health, 2018) is based on several assumptions. The first is that nursing care directly affects patient outcomes, which must be the primary sensor to correct staffing and skill mix levels. The assessment of staffing required is based on the Nursing Hours per Patient Day (NHpPD) model, which can generate estimated hours of care required from which the number of nurses required can be calculated. However, the Framework's governance structure is designed so that the ward managers can use the NHpPD in addition to their own professional judgement when determining the staffing complement. While this model does not completely capture the complexity of nurses' realities, it does give some credit to the nurse manager's awareness of the context in which care is being delivered. Using the findings from this research, a staffing framework would have to acknowledge the complexities of nursing care by capturing the invisible work and building the framework from the nurses' point of view.

Another key implication for consideration is the dilution of the role of nurses in some clinical settings. In not understanding or acknowledging the complexities of the realities of nursing care, it can be easy for a policy to be developed that focuses on the reduced vision of nursing care, that they only provide the physical interventions of care, and thereby miss the more complex non-physical elements of care. With a reductionist vision of nursing care, the responsibilities can be divided into other roles that would not have the same level of training and education. In doing so, the complexity of care required by patients is unavailable as other healthcare professionals do not have the nurses' insight and intelligence in navigating the multiple realities of care.

5.5. Review of the Propositions

As discussed in section 3.6.2, propositions were developed during the literature review and data collection that supported the researcher in their approach to understanding the complexity and context of nursing care. After analysing the data collected and generating the findings, it is timely to review the propositions to see which can be maintained.

The propositions are:

- The reality of providing care forces multiple versions of nurses' reality. They acknowledge the importance of non-physical care but also realise that it is not included in a task of care to be delivered. The translation of care required into care delivered does appear to need a physical intervention.
    - The main finding of this research is that nurses create and maintain multiple realities of care, demonstrating the complexities required in providing patient care.
- The balance of duality of task-based care vs non-physical care is sustained by the language and context of the ward.
    - This is a sub-finding of this research
- EPR further drives the translation of care into tasks by forcing the recording of non-physical care into "free-text" boxes in EPR, thus removing their perceived value and ownership.
    - This was supported by the data collected. The EPR included in the data collected was primarily focused on the physical interventions of care, with limited free-text boxes available to capture the non-physical and complex elements of a patient's care.
- Nursing is a linear process of physical tasks.
    - This has not been supported by the data collected and analysis undertaken. On a superficial level, the linear care process might be apparent; however, once the true complexity of nursing care is appreciated, the nursing process cannot be linear but multifaceted, depending on the patient's care and what the nurse needs to provide.
- Caseload is the same as workload
    - Some of the literature included in the review and other policy papers correlate caseloads with the workload. This is most precedent in workforce models that apportion ratios to nursing care. This approach automatically translates that all patient care requirements are equal, and therefore all patients are the same. It also immediately disallows for the complexity of non-physical care, as the ratios are based on the physical interventions required by a patient cohort.
- Nursing is the application of physical/practical skills with little decision-making or theory required in the application.
    - Complexity and critical thinking are required to create and maintain the multiple realities; however, they are unaware of this, and they're not involved in the decision-making of the realities developed.
- Self-replication of task-based care with students
    - This research demonstrated that the language used is an essential influence on how nurses sensemake the care they construct. When discussing care with students, it was noted that nurses deliberately reduced care into a series of tasks to be completed. This must inevitably influence how nurses perceive and sensemake care during their education.
- Context of care is key to understanding – it remains a social construct
    - Care remains a social construct, and therefore context is an important influencer. Context relates to the social actors and the organisational factors.

- Task-based care is not depersonalised.
    - Throughout the data collection, task-based care was often referred to, but there was no indication that task-based care was depersonalised. If anything, there was evidence that nurses adapted a task-based approach to incorporate elements of the individual's care needs into the task-based approach.

From reviewing propositions that were gathered early on in the research process, it is clear that some have been supported by the research findings and could be continued into further research. Propositions regarding nursing workload, process and provision of care have been broadly supported by the findings of this research in that they acknowledge the complexity of nursing care and move away from a linear or interventionalist view. Other propositions that relate to EPR, task-based care or critical thinking did inform some of the findings of this research but would not be supported by the research's findings. As an exercise, developing and reviewing the proposition throughout the research process added an additional level of thoroughness and completeness to the process.

5.6. Strengths and Limitations of the Research

The following section discusses some of the issues outlined in the Methodology chapter and describes various strengths and limitations of this study. The issues are not presented as separate lists of strengths and limitations because many include elements of both.

This thesis has added to the understanding of how nurses sensemake the care they provide in an acute setting. It has done this by adopting an ethnomethodological methodology to data collection and then applying the lens of sensemake to generate understanding (ten Have, 2010). This included three different types of data collection to provide a fuller and rounded exposure to the social group, and then careful and detailed examination and interpretation of the data to gain generate understanding. This approach, combined with a complex process of reflection, helped the researcher remain sensitive to the data.

The use of ethnomethodology enabled an open and exploratory approach that focused on how the participants constructed the realities, in this case, focusing on the realities of the care they were providing. Breaking data down into initial codes and comparing such codes across the different data sources (interviews, shadowing days or EPR analysis) did, at times during analysis, result in some loss of the complex situatedness and 'wholeness' of the narrative being understood. In compensation, a comparison of initial codes and themes across the different data collection methods added depth to understanding in ways that would have been missed but using only one data collection method. In addition, the inclusion of sensemaking added a further, yet different, approach to generating understanding from the data collected.

In writing up the findings of this study, discussing and comparing them with the literature, there was a risk of adopting a positivist attitude that there was a single, true definition of the reality or a single universal understanding of care. The aim of the research was to generate an understanding of how nurses, the main care providers, and sensemake care, required that the researcher maintained open to whatever the understanding was uncovered to be.

However, the aim of the Findings and Discussion chapters of this thesis is to add to the body of the understanding by discussing the main finding as well as the sub-findings, which further colours the understanding. The Discussion chapter develops how nurses sensemake their care and compares it with what is already known in the literature.

Regarding recruitment, a strength of the study was that two different surgical wards were included, and the level of engagement of all the staff was commendable. Using surgical wards was a deliberate choice because of the researcher's clinical background; this was also a strength of the study as it enabled the researcher to be more comfortable with the terminology being used and discussed. Having two wards to collect data from offered some variety and challenged the researcher's skills in data collection by changing the wards' routines and staff.

There was also some limitation to the study; by selecting two particular wards, there was a risk of poor variability; should they have had the same process and practices, there might not have been the rich source of data that was collected. Equally, only having two wards included in the data collection could be perceived as a limitation to the transferability of the understanding. However, the research aimed to understand the social construct generated by a group of actors; the findings are transferable and adaptable to other care settings once the aim is understood.

The difficulties of shadowing, interviewing, and EPR analysis were both strengths and limitations regarding data collection. The researcher undertook pilot testing of the shadowing and interview questions to hone the required skill set before embarking on full data collection; however, there was always the risk of missing the opportunity to capture rich data as a novice researcher. This was a conscious thought throughout all phases of the data collection. When the researcher became comfortable with the processes, this was a key indicator that data saturation had been reached.

In each data collection method, there are strengths and limitations. Shadowing allowed for the full immersion into the ward routine and to capture rich data in real-time; it also facilitated the capture of non-dialogue data to understand the context. However, shadowing was difficult in a bustling surgical ward, as only one researcher had to choose who to follow and who not to, and risk not capturing very rich data. Interviews were beneficial in exploring some of the early observations from the shadowing more in-depth. However, the questions could, at times, require some explanation and a presumption of understanding of the aim of the research. While the researcher was not employed in the hospital at the time of the study, reassurances had to be offered that the interviews were confidential.

This study was conducted by one researcher, and the researcher's professional background as a nurse leader could have influenced an understanding of how care can be constructed. This is a potential limitation to the trustworthiness of the findings. However, as described in the Methodology chapter, a reflection process was undertaken to turn this potential weakness into a strength. The researcher actively recognised their involvement in the research process and strove to view the data and analysis emergent understanding.

A final consideration is the findings' transferability and relevance beyond this research's immediate context for other settings. This study comprised a limited number of interviews, shadowing shifts and EPR review from a particular location, which was considered the most effective way to study the complex concept. The individual characteristics of the participants and the researcher strongly influenced the findings. The bespoke data collection gained a comprehensive understanding of the multiple realities of care being provided. There is always a trade-off between depth and breadth, and it is argued that, in this study, more was gained from studying a limited number of participants in a high degree of detail than would have been gained from a less thorough look at a larger number of participants and settings. Through the detailed description of the participants and detailed exposition of the data collected, it can determine whether the findings are applicable to another social group or setting.

5.7. Conclusion

This chapter has provided a discussion about the research question and the aims, detailing how the research study has generated an understanding of the multiple realities of nursing care. The findings were interpreted to different social determinants, including education, practice, theories and models, and policy. Each social determinant was discussed in turn, providing further understanding of the implications of this research.

The chapter also explored the influential factors to the nurses' sensemaking of care, from the patients in the care, the place where they work and the colleagues around them. Each factor was discussed in turn, providing further depth of knowledge to the complex concept

The research answer is compared to the original literature review and has addressed the gap identified in the literature. The challenges in defining nursing care are acknowledged, as this research has found nurses construct multiple realities of care; therefore, no single universal definition can be applied.

When interpreting the findings, a number of implications were also identified, including:

Implications of this research:

- A model of nursing care would have to acknowledge that nurses have constructed a reality of the care they provide; moreover, they have constructed multiple realities through which they move seamlessly.

- The potential for dilution of the role of nurses in some clinical settings due to the lack of appreciation for the complexity of nursing care
- That nurses do not recognise the current theories and models in their constructed realities of care; the models do not inform their thought process or decision-making and do not knowingly support their practice.

Finally, the strengths and limitations of the research and discussed, highlighting areas where the study was particularly robust and areas where risk mitigation was needed to protect the integrity of the study.

6. Conclusion

6.1. Introduction

This chapter brings together all aspects of the thesis, from the literature review, the methodology, findings and the discussion chapter. The chapter will conclude this thesis by reviewing the findings, their contribution to new knowledge and making recommendations on how the findings can be applied to policy and practice.

The literature review considered the available research on defining care and sensemaking, from which emerged the identified gap in knowledge regarding how nurses create and maintain the social construct of care. The literature review also described areas where sensemaking has been applied to healthcare research. The recognised dearth in research, combined with the appropriate application of sensemaking, led to the development of the research question and aims.

The research question is, how do nurses in the acute surgical setting sensemake the care that they provide?

This research project's aims included:

- To understand what influences how nurses have shaped their understanding of care.
- To understand the effect of language on how nurses sustain their understanding of care.
- To understand how nurses maintain their definition of care in practice, acknowledging the contrast of theoretical definition against a working definition.
- To understand how the nurses' concept of care may impact how care is provided.

Different methodologies were considered in how they could inform and structure the research, but ethnomethodology was determined to be the most appropriate as it recognised the impact of a population on creating and maintaining a social construct; in this case, the construct is nursing care.

6.2. Summary of Findings

The main findings show that nurses sensemake the care they provide by creating multiple realities to deal with the dissonance. The creation and maintenance of these realities are supported by the various languages used, as well as the dual processes of care.

Throughout the data collection and analysis, it became clear to the researcher that the participating nurses unknowingly described, supported and transitioned through many different realities in the course of delivering their care. They were unaware of the subtle

language changes they make instantly or how they redress the clinical information to suit the many different audiences, or even how their role shifts at any moment depending on the context. The nurses never displayed knowledge or determination in switching their language or behaviour as they moved from one reality to another. This complex view provides insight into the nurses' realities.

The sub-findings that emerged from the data were:

- The multiplicity of roles in providing care
- The duality in perspectives of care
- The use of language to shape perceptions of care

Each sub-finding is discussed in turn, using quotes and examples from the data collected to demonstrate how the findings were generated and how they emerged from the data.

6.3. Contribution to Knowledge

In answering the research question, the findings of this research show that nurses sensemake the care they provide by creating and maintaining multiple realities to mitigate the dissonance between care perceived and care delivered. There is a dissonance between the broader expectations of nursing care and the complex multiple realities of care that nurses provide. Not only is there no one singular accepted reality of care; instead, nurses create multiple realities of care, appreciating the complexity of the care their patients need and the care they need to deliver. This research has shown that nursing care is significantly more than the physical interventions usually captured by organisations to measure outcomes. This is a unique finding and is not evident in other literature or research available. The contribution of this understanding lies in both the unique insight gained into how nurses sensemake care and the implication this understanding has on practice and policy.

This research has demonstrated that this is no single universal understanding of how nurses sensemake the care they provide but that they can move through multiple realities seamlessly. As a social group, the nurses created and maintained the multiple realities of the care they delivered. The researcher has not found research of this nature in other healthcare professionals, so they cannot say if this is unique to nursing but argues that this contribution to knowledge is unique. Further research has been undertaken in exploring the management, perceptions and cognitive process of care, usually as a form of work. Still, none has been found exploring how nurses sensemake the care they provide.

Given nurses' position as primary providers of care, it is reasonable to assume that there is a higher level of complexity involved in the realities of nursing care. The movement between the realities, while seamless, requires their skills, aptitude and education to navigate the realities. Even acknowledging the complexity of nurses' realities opens up the understanding that nursing is more task-based care or a linear

process of interventions. This understanding reaffirms the skills and education required by nurses to not only create and maintain the multiple realities of care but also to seamlessly and efficiently navigate to provide high-quality and safe care to their patients.

The complexity of delivering care in an acute surgical environment is often underestimated, with a reductionist or interventionist approach to capture nursing care based on physical interventions. The findings of this research question the efficacy of some theories and models of nursing care, especially those that focus on an interventionalist approach to care delivery, not considering the multitude of complexities.

Further complexity is examined in the sub-findings, the multiplicity of roles in providing care, the duality in perspectives of care and the use of language to shape perceptions of care. These sub-findings demonstrate that the nurse-patient relationship is a much more unilateral arrangement as the duality of care extends to patient needs and the nurse needs too.

The use of language as an influencing factor in constructing an understanding of care is critical when looking at new models or practices of care. This is especially important when considering the adoption of an EPR, which will not acknowledge the full spectrum of nursing care. The findings demonstrate a clear gap between an organisation's perspective of nursing and the full scale and scope of nursing care. This is most evident in the application and development of the EPR. The development required the translation of nursing care into the EPR environment, which resulted in a limited, task-oriented approach. This misunderstanding of the scope and skills of the nurses was further evidenced by the EPR's creation of "to-do" lists, guiding nurses to interventions of care that are deemed necessary.

Combining the language used to describe care with the mis-capturing of nursing on the EPR and the complex duality of care that exists between a nurse and their patients underpin how complicated it must be, and should be, to understand and define nursing care.

6.4. Recommendations for Policy

The findings have been interpreted for their implication for policy, practice, theories and education (section 5.4). When considering policy recommendations and, by extension informing practice, the current and future direction of nursing and the broader healthcare system must be included. Ireland is three years into a ten-year programme of healthcare reform under Slaintécare. This will see a significant move of care from the acute setting into the community.

When considering and planning this new care delivery infrastructure, while nursing will be a key to the delivery, it must be remembered that nursing care is not simply limited to the impact of its physical interventions. As discussed earlier, the complexity of

nursing care cannot be overestimated. In their work in an acute surgical ward, the nurses demonstrated a considerable capacity to seamlessly move between multiple realities of care. It is also possible that this would also occur in a non-acute setting, but with the additional layers of reality that care in a patient home involves.

However, it is recognised that nurses are not the default workforce. This research has shown the complex duality of the relationship between nurses and their patients and the many roles which nurses undertake in delivering care; that is not a reason for other non-nursing elements of the patient's journey to be ignored. As noted previously, the difficulty in defining nursing can result in under-appreciation rather than acknowledging the complexity.

Internationally, there is a movement toward developing Safe Staffing policies or frameworks to provide a structured determination of the nursing resources needed for a care setting. While this is a positive move to address care settings that are chronically understaffed, it is important not to undervalue, and therefore underestimate, the complexity of nursing care when calculating the required staffing resource. Appreciating this nuanced complexity in a policy can be a challenge; however, some safe staffing policies already allow for the input of clinical nurse managers to increase or decrease the recommended staffing requirement based on their clinical and professional judgement (Department of Health, 2018). This acknowledgement of the nurse manager having the same agency as an evidence-based tool is significant. In future, this input could be further strengthened by including the ward staff nurses to triangulate the staffing requirement.

6.5. Recommendations for Practice and Education

This research shows a dissonance between the broader expectations of nursing care and the complex multiple realities of care that nurses create. There is no one singular accepted reality of care. Instead, nurses create multiple realities of care, appreciating the complexity of the care their patients need and the care they need to deliver. As a primary finding, this insight and understanding can significantly contribute to and inform practice and the approach to education.

This research has shown that nursing care is significantly more than the physical interventions usually captured by organisations to measure outcomes. This research has also demonstrated a significant gap between theories and models of nursing care taught and what influences nurses' understanding of care. From the perspective of practice, this research contributes to a better understanding of the gaps and subsequent frustrations of, an Electronic Patient Record focused on the physical interventions of care. It is recommended that utilising the unique findings of this research in developing a nurse-focused EPR would provide a system that captures much more than the physical interventions of care and the dual process of nursing care. In doing so, the organisation's value of nursing care can be portrayed and appreciated in a more meaningful way.

The unique findings from this research also provide insight into the theory-practice gap between the theories taught at the undergraduate and postgraduate level, compared to the nurses' approach to sensemake their care. While much research already exists that explores the theory-practice gap in nursing and other healthcare professionals, this research provides the nursing perspective of the care they are undertaking and, in doing so, shows that nurses recognise the theory but do not apply it in their sensemaking or practice. In the absence of a theory that appreciates and acknowledges the complexity and multiple realities of nursing care, the nurses have adapted their taught theories and adopted other, mostly medicalised models to inform and shape their practice. It is recommended that the findings of this research be incorporated into organisational and national practice development approaches so that a model of care can be developed to appreciate the complexity and multiple realities of care that nurses construct when sensemaking. It is also recommended that the findings and the implications are used in developing a hospital's EPR so that nursing care can be accurately captured. In doing so, this would support the valuation of nursing care, moving away from the interventionalist approach to appreciate the complexity of the care being delivered.

6.6. Recommendations for future research

This thesis's research question is to understand how nurses sensemake the care they provide. In answering the questions, this research uncovered the understanding that nurses create and maintain multiple realities of care. This is a previously unknown understanding and adds to the greater body of knowledge. In order to further develop on the understanding of nurses' multiple realities of care, there are other areas of potential research. Further research is discussed under the headings of students/other nurses, care settings and digital care. In consideration of areas for future research, the findings and implications discussed in the previous chapter informed the recommendations.

Experiences of Students and Other Nurses

Students were excluded from this research study. While there was a dearth of literature regarding nurses' sensemaking care, there is none available on students. As nurses had completed their education and were working in delivering care, it is reasonable to assume that their constructs of care would be very different from students who are still learning the theories, models and skills of care. Further research would uncover the various constructs of care that students create as they move through the undergraduate programmes. It would also discover the point of change when the students' realities start to reflect the nurses' multiple realities of their care.

In understanding the progression of sensemaking care, it might also to possible to identify any theory-practice gaps within the undergraduate curriculum.

Equally, this research's methodology could be adapted to other grades of nurses, including nurse specialists, advanced nurse practitioners and clinical nurse managers, to understand how they construct the realities of care they manage, provide or oversee.

Care Settings

This research focused on an acute surgical setting. The findings are underpinned by the skill and education of the registered nurses, therefore potentially transferable to other care settings; further research could be done to account for contextual changes.

Undertaking research in a different care setting would have a twofold benefit. Firstly, it would assure the findings of this research, but secondly, it would also allow for other complexities or factors to be included, such as the impact of the close relationship between a nurse and patient in a long-term residential care facility or caring for patients who are being ventilated patients

Further research into how context, colleagues, and practices inform and influence nurses' realities would provide invaluable insight and understanding into the development of curricula, guidance and national policies.

Digital Care

As digital care becomes more common across healthcare systems, its impact on nursing and the provision of nursing care needs to be further understood so it can be accurately portrayed. Building Digital healthcare records and patient management systems that fully capture the patients' journey requires significant input from nurses, especially those who understand the nursing complexities. The translation of the non-physical element of care into an EPR is a challenge. There is potential research required to inform the development of models of EPR to capture the non-physical aspects of care.

Patient Perspective

The final recommendation would be to adapt the methodology to understand care from the perspective of the patients receiving it. While patient experiences and outcomes are continuously monitored as assurance and performance measures, insight into how patients develop their understanding of the care and what influences it would have huge potential in shaping the policy perspective and delivery models.

6.7. Dissemination of Research Findings

6.7.1. Dissemination to participants

The researcher will give feedback on the findings of this research to the staff of the two wards that participated, including the interview participants and the ward managers, who were the gatekeepers to the sites. It is essential to give feedback to the participants on the process and the findings, especially to highlight the dissonance they reported during the interviews and provide them with insight into the complexity of how they sensemake the care they provide. Discussing the insights and understanding gained through the research is key to enabling nurses to put structure and value into the care they provide; the first group to witness this should be the participants.

The researcher will also present the findings to the hospital's research and nurse management committees as they both supported the research and provided ethical governance. The organisation must be aware of the complexities of nursing care and the nurses' experience with translating their care into the EPR. The findings of this research can be adapted and adopted by the organisation to better inform how EPR is used by nurses to capture the care they are providing. Appreciating the findings of this research will also enable the hospital to better inform their approach to safe staffing and resources and move away from the interventionalist approach to determine the nursing resources required in a care setting.

6.7.2. Conferences and publications

Throughout the duration of this research, the researcher has presented the methodology and early findings at several conferences and summer schools, including:

- RCSI Annual Research Conference – 2021
- RCSI Faculty of Nursing and Midwifery Conference – 2020 & 2019
- LSBU Post Graduate Summer School – 2019 & 2021
- University College Cork, Nursing and Midwifery Research Conference – 2019

Attending these conferences afforded the researcher the opportunity to present and discuss the research project and also network with researchers working in similar fields. Through these conferences and other online groups, the researcher has developed a broad network of nurse researchers and healthcare sociologists.

The research intends to make several publications from this work, using the novel approach of ethnomethodology in healthcare research and the unique findings generated. Given the broad reach of the findings, there is also significant potential for involvement in other areas of research, policy and practice development, e.g. safe staffing frameworks, curricula expansion and development of EPR to reflect nursing care more accurately.

6.8 Conclusion

This chapter has concluded this thesis by reviewing the findings, identifying new knowledge and making recommendations. It is hoped that the study's methodology and findings will be published in peer-reviewed nursing journals. These publications will lead to wide-ranging policy, education, and practice impacts.

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Appendix 1 – Ethical Approval Joint Research Ethics Committee

JREC Reference Number: 2020-12 List 46 – Other (51)

Mr Ray Healy

18th December 2020

Re: An ethnomethodology approach to understand nurses conceptualisation of care in the acute surgical environment

REC: 2020-12 List 46 – Other (51)
(Please quote reference on all correspondence)

Date of Valid Submission to REC: 10.10.2020
Date of Ethical Review: 11.12.2020

Dear Mr Healy

Thank you for your correspondence in which you sought to submit a **NOTIFICATION** for the above named study.

The Chairman has reviewed the documentation you submitted and noted the information.

The following documents were reviewed:

- APR via Email

Please note that ethical approval for this study is only active under the following conditions:

- ✓ *Applicants must submit an annual report for ongoing projects.*
- ✓ *Applicants must submit an end of study declaration/end of study report upon completion of the study.*
- ✓ *All adverse events must be reported to the JREC.*
- ✓ *All changes (minor and substantial) to documentation/study must be submitted to the JREC using the amendment request form and the changes must be tracked/highlighted clearly. Approval from the JREC is required before implementation of the changes.*

It is the responsibility of the researcher/research team to ensure all aspects of the study are executed in compliance with the General Data Protection regulation (GDPR), Health Research Regulations and the Data Protection Act 2018.

Yours sincerely,

Appendix 2 – Ethical Approval from LSBU

School of Health and Social Care

Dr. Adéle Stewart-Lord
Associate Professor
Chair HSC School Ethics Panel
School of Health and Social Care
London South Bank University | 103 Borough Road, London, SE1 0AA
t: +44 (0)20 7815 7931|
e: stewara2@lsbu.ac.uk

Raymond Healy

4 September 2018

Dear Ray

HSCSEP/18/11 Title: How do nurses conceptualise care in an acute surgical setting?

I am writing to confirm that the School Ethics Panel of the School of Health and Social Care, London South Bank University has considered the above study. A feedback sheet providing detailed comments from the Committee is attached to this letter and explains the decision of the Committee. Your application has been approved subject to some conditions.

The Ethics Committee approved study HSCSEP18/11 subject to the following:

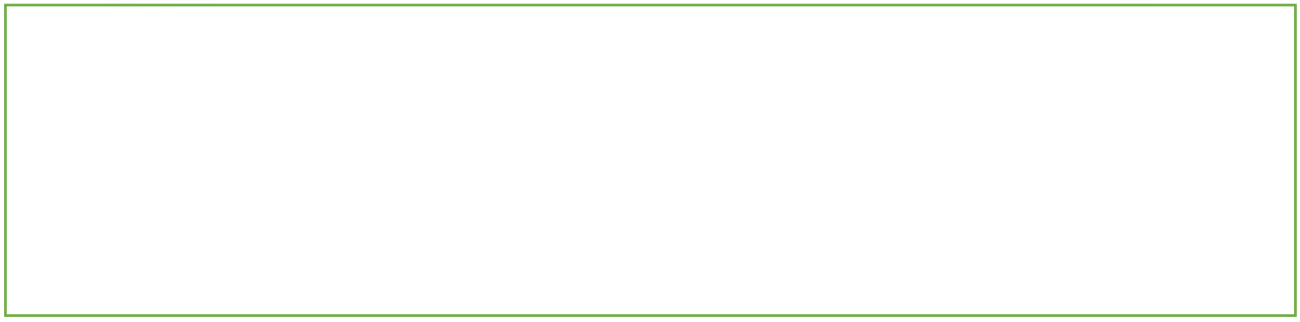
1. Revise the participant information sheet as below.
2. Revise consent form as below.
3. Include a copy of the letter of invitation / poster.
4. Provide written evidence of permission from Gatekeepers.
5. Provide written evidence from R&D / Governance Departments of placement providers that they consent to interviews taking place during placement and on their premises (see alternative suggestions in comments below)

You must respond to the numbered conditions listed above, more details are provided in the feedback sheet attached. Please send an e-mail or letter giving your responses to these conditions and providing a copy of any of the revised and additional documents requested. You should send this to the Chair of the School Ethics Panel at **hscsep@lsbu.ac.uk** for approval. These changes will be dealt with by Chairs action. **You may not begin the study until you have received a letter from the Chair of the School Ethics Panel confirming that the changes have been approved.**

Yours sincerely

Dr. Adéle Stewart-Lord
Associate Professor
Chair HSC School Ethics Panel
School of Health and Social Care
London South Bank University | 103 Borough Road, London, SE1 0AA
t: +44 (0)20 7815 7931 | e: stewara2@lsbu.ac.uk

Appendix 3 – Approval from Hospital Site



10 October 2018

Chairperson
HSC School Ethics Panel
School of Health and Social Care
London South Bank University

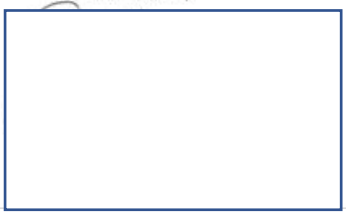
Your reference: HSCEP/18/11

Research title: How do nurses conceptualise care in an acute surgical setting

Dear Dr Steward-Lord,

I write in reference to the pending ethical approval for Mr Raymond Healy's Professional Doctorate research application. I am happy to assure the Ethics Committee that [redacted] as an academic teaching Hospital, consents to the researcher interviewing staff on site. Once Mr Healy has received ethical approval from LSBU he will be subject to approval from the [redacted] Research Access Committee before he can commence any data collection on site.

Yours sincerely



Appendix 4 – Participant Information Leaflet – Shadowing

London South Bank University
EST 1892

Participant Information Sheet

The title of the research is: How do nurses conceptualise care in an acute surgical setting?

You are being invited to take part in this research study. It is important that you understand why the research is being done and what is involved before you make a decision to participate.

Please read the following information carefully and ask questions or discuss it with others to help you make a decision. It is important that you take your time in deciding if this is something you want to do

What is the purpose of the study?

The aim of this research is to explore how nurses conceptualise care in an acute surgical environment. This research is part of a Professional Doctorate in Health and Social Care in London South Bank University. The idea of care is very difficult to define and usually only focuses on the tasks involved in care. This study is going to explore how nurses conceptualise care and what influences this process.

Why have I been chosen?

You have been asked to participate because you are a registered nurse working in the acute surgical care setting. Part of this research involves shadowing Registered General Nurses for a full shift. The researcher will undertake 4 shadowing shifts on each ward.

Nurse managers or nurse specialists are not invited to join this research study. The researcher will only be shadowing Registered Nurses, not students or HCAs or other healthcare professionals.

Do I have to take part?

No. You do not have to take part. It is completely voluntary, and you can withdraw at any time without consequences, including during the shadowing. You can withdraw from participating at any time before the data analysis has begun. When the data is being analysed it will impossible to retrieve individual data sets.

At any time, the Clinical Nurse Manager or their designee can cease the shadowing period and the researcher will immediately stop any data collection

What will be expected of me if I take part?

The researcher will shadow you in public areas only i.e. in the corridors, at the nurses' station, in the treatment rooms and utility rooms. The researcher will not be shadowing you at the point of delivering care, that is not the focus of this research. You will not be expected to change or alter your work in any way. This is a shadowing exercise so that you can interact with the researcher. The researcher may ask you for points of clarification during the shadowing. You might not be shadowing for the whole shift only for parts of it.

What are the benefits of taking part?

There are no direct benefits to you for taking part in this research.

What are the possible disadvantages and risks of taking part?

There are no identifiable risks to taking part in this research. A disadvantage may be the time required. The researcher may seek clarification on some of the observations made during the shadowing.

The researcher is a qualified nurse. For the purpose of the shadowing should a patient require any assistance or aid then the researcher will bring this to the attention of the nurse on duty.

What happens if something goes wrong?

This can be a sensitive topic and patient information may be revealed. It is possible that information that compromises patient care may be revealed. In this case, we have a clear plan of how to manage it, so it is escalated to the most appropriate person. Any disclosure which highlights the possible risk to a patient's safety will be escalated through the existing safety management framework. Patient safety is a

priority of this research. The Patient Safety Management Framework requires that the risk is mitigated immediately and that the patient's primary consultant is informed.

If you become upset or would like to speak with someone then you have three options:

1. You can speak with the researcher and we can de-brief on the shadowing. This will not be recorded or included in the research. The researcher can be contacted on 0857138557 or healyr4@lsbu.ac.uk
2. You can speak with your manager. They are aware that the research is taking place and have been given information on what is involved.
3. You can self-refer to the Employee Assistance Programme at St James's. This is a free and anonymous counselling service available to all staff. They can be contacted at 1800 222 833, they are available Monday to Saturday.

If you would like to speak with someone regarding how the shadowing was conducted then you can contact the researcher at any time on 0857138557 or the Researcher's supervisor - Prof Nicola Thomas Nicola.thomas@lsbu.ac.uk. Alternatively, you can contact the University's Research Ethics Committee and quote the title of the study.

The researcher will be available by email for any follow-up questions you may have after.

Will my taking part in this study be kept confidential?

Yes.

No identifiable information about you will be recorded. The researcher will be taking field notes during the shadowing. The notes will be transcribed (typed up) and the original destroyed. All the data will be stored securely on a dedicated hard drive and deleted once the research is complete

Each participant will be given a codifier (codename) in case their quotes are used later in the research.

However, it is possible that information that compromises patient care may be revealed. Should this happen, we have a clear plan of how to manage that and will make every effort to maintain your confidentially. A risk to patient safety is managed in accordance with the St James's Hospital Patient Safety Reporting and Escalation Framework

You can withdraw from participating at any time before the data analysis has begun. When the data is being analysed it will be impossible to retrieve individual data sets.

What will happen to the results of the research study?

The data gathered from the shadowing shifts will be analysed and then the report published. If you would like, you can be sent a copy of the outcomes of the research. It is planned that this research will be used in articles for academic journals and

research conferences. Only codifiers/codenames will be used in publications or presentations.

Once the research is complete all the data collected will be destroyed.

Who has reviewed the study?

The study has been reviewed by the School of Health and Social Care Ethics Panel, London South Bank University, and by The Nursing Research Access Committee of St James's Hospital

The researcher can provide you with a copy of the dissertation for your records when it is complete.

All research is conducted under indirect supervision.

Contact for Further Information:

Ray Healy

0857138557 or healyr4@lsbu.ac.uk

Thank you for considering taking part in this study

Appendix 5 – Participant Information Leaflet – Interviews

Appendix 4 Participant Information Sheet (interview)

Participant Information Sheet

The title of the research is: How do nurses conceptualise care in an acute surgical setting?

You are being invited to take part in this research study. It is important that you understand why the research is being done and what is involved before you make a decision to participate.

Please read the following information carefully and ask questions or discuss it with others to help you make a decision. It is important that you take your time in deciding if this is something you want to do

What is the purpose of the study?

The aim of this research is to explore how nurses conceptualise care in an acute surgical environment. This research is part of a Professional Doctorate in Health and Social Care in London South Bank University. The idea of care is very difficult to define and usually only focuses on the tasks involved in care. This study is going to explore how nurses conceptualise care and what influences this process.

Why have I been chosen?

You have been asked to participate because you are a registered nurse working in the acute surgical care setting. The researcher undertook the shadowing of nurses on the ward you work on and so following that I am looking to recruit 8-10 nurses for an interview. Nurse managers or nurse specialists are not invited to participate in this research as the focus is on nurses providing direct patient care. Nurse managers or nurse specialists are not invited to join this research study. The researcher will only

be interviewing Registered Nurses, not students or HCAs or other healthcare professionals

Do I have to take part?

No. You do not have to take part. It is completely voluntary and you can withdraw at any time without consequences. You can withdraw from participating at any time before the data analysis has begun. When the data is being analysed it will impossible to retrieve individual data sets.

What will be expected of me if I take part?

The research involves an interview of approximately 30-45 minutes. Interviews will be scheduled at a time that is convenient for you and can be done while you are on duty, if your manager agrees. The interview will be recorded so that it can be transcribed later on for analysis. The interview will take place on site in either the Research Hub office or the Quality and Safety department, whichever is more convenient.

The interview questions are designed to help keep you on topic without giving you the answers. The interview questions have been adapted from other research into the area and also from observations made during a shadowing part of data collection on the wards in St James's Hospital.

What are the benefits of taking part?

There are no direct benefits to you for taking part in this research.

What are the possible disadvantages and risks of taking part?

There are no identifiable risks to taking part in this research. A disadvantage may be the time required. The interview will last 30-45 minutes. There may be some a need to sign or check your consent beforehand so in total it may take 1 hour

What happens if something goes wrong?

This can be a sensitive topic and patient information may be revealed. It is possible that information that compromises patient care may be revealed. In this case, we have a clear plan of how to manage it, so it is escalated to the most appropriate person. Any disclosure which highlights the possible risk to a patient's safety will be escalated through the existing safety management framework. Patient safety is a priority of this research. The Patient Safety Management Framework requires that the risk is mitigated immediately and that the patient's primary consultant is informed.

If you become upset or would like to speak with someone then you have three options:

1. You can speak with the researcher and we can de-brief on the shadowing. This will not be recorded or included in the research. The researcher can be contacted on 0857138557 or healyr4@lsbu.ac.uk
2. You can speak with your manager. They are aware that the research is taking place and have been given information on what is involved.
3. You can self-refer to the Employee Assistance Programme at St James's. This is a free and anonymous counselling service available to all staff. They can be contacted at 1800 222 833, they are available Monday to Saturday.

If you would like to speak with someone regarding how the interview was conducted then you can contact the researcher at any time on 0857138557 or the Researcher's supervisor - Prof Nicola Thomas Nicola.thomas@lsbu.ac.uk. Alternatively, you can contact the University's Research Ethics Committee and quote the title of the study.

The researcher will be available by email for any follow-up questions you may have after.

You can cease the interview at any time. You can withdraw at a later up to the time that data analysis has begun. After that, it will be impossible to remove individual data sets.

Will my taking part in this study be kept confidential?

Yes.

No identifiable information about you will be transcribed. All the data will be stored securely on a dedicated hard drive and deleted once the research is complete

Each participant will be given a codifier (codename) in case their quotes are used later in the research.

However, it is possible that information that compromises patient care may be revealed. Should this happen, we have a clear plan of how to manage that and will make every effort to maintain your confidentially. A risk to patient safety is managed in accordance with the St James's Hospital Patient Safety Reporting and Escalation Framework

What will happen to the results of the research study?

The data gathered from the interviews will be analysed and then the report published. If you would like, you can be sent a copy of the outcomes of the research. It is planned that this research will be used in articles for academic journals and research conferences.

A copy of the transcript can be made available to you should you wish.

Who has reviewed the study?

The study has been reviewed by the School of Health and Social Care Ethics Panel, London South Bank University, and by The Nursing Research Access Committee of St James's Hospital

All research is conducted under supervision.

The researcher can provide you with a copy of the dissertation for your records when it is complete.

Contact for Further Information:

Ray Healy

0857138557 or healyr4@lsbu.ac.uk

Contact for concerns about the study:

Researcher supervisor- Prof Nicola Thomas Nicola.thomas@lsbu.ac.uk

Thank you for considering taking part in this study

Appendix 6 – Participant Consent Form – Shadowing

Appendix 5 Participant Consent Form (shadowing)

Research Project Consent Form

Full title of Project: How do nurses conceptualise care in an acute surgical setting?

Ethics approval registration Number: Pending

Name: Raymond Healy

Researcher Position: Professional Doctorate Researcher

Contact details of Researcher: 0857138557

Taking part (please tick the box that applies)	Yes	Initial
I confirm that I have read and understood the information sheet and the researcher has explained the above study. I have had the opportunity to ask questions.	☒	
I understand that my participation is voluntary and that I am free to withdraw at any time, without providing a reason, up to the point of the data being analysed	☐	
I agree to take part in the above study.	☐	

Use of my information (please tick the box that applies)	Yes	Initial
I understand my personal details such as phone number and address will not be revealed to people outside the project.	☐	
I understand that my data/words may be quoted in publications, reports, posters, web pages, and other research outputs.	☐	
I agree for the data I provide to be stored (after it has been anonymised) in a specialist data centre and I understand it may be used for future research.	☐	
I agree to participate with the shadowing part of the data collection	☐	
I agree to the observations being recorded.	☐	
I agree to the use of anonymised quotes in publications.	☐	

Name of Participant	Date	Signature
Name of Researcher	Date	Signature

Project contact details for further information:
Project Supervisor: Prof Nicola Thomas

Phone: 0044 207 815 8045

Email address: Nicola.thomas@lsbu.ac.uk

Appendix 7 – Participant Consent Form - Interview

Research Project Consent Form

Full title of Project: How do nurses conceptualise care in an acute surgical setting?

Ethics approval registration Number: Pending

Name: Raymond Healy

Researcher Position: Professional Doctorate Researcher

Contact details of Researcher: 0857138557

Taking part (please tick the box that applies)	Yes	Initial
I confirm that I have read and understood the information sheet and the researcher has explained the above study. I have had the opportunity to ask questions.	☐	
I understand that my participation is voluntary and that I am free to withdraw at any time, without providing a reason, up to the point of data analysis beginning.	☐	
I agree to take part in the above study.	☐	

Use of my information (please tick the box that applies)	Yes	No
I understand my personal details such as phone number and address will not be revealed to people outside the project.	☐	
I understand that my data/words may be quoted in publications, reports, posters, web pages, and other research outputs.	☐	
I agree for the data I provide to be stored (after it has been anonymised) in a specialist data centre and I understand it may be used for future research.	☐	
I agree to participate with the interview	☐	
I agree to the interview being audio recorded.	☐	
I agree to the use of anonymised quotes in publications.	☐	

Name of Participant _____ Date _____ Signature _____

Name of Researcher	Date	Signature

Project contact details for further information:
Project Supervisor: Prof Nikki Thomas

Phone: 0044 207 815 8045

Email address: Nicola.thomas@lsbu.ac.uk

Appendix 8 – Interview Questions

Q1. Can you describe the handover process?

Prompt – during the handover, is care discussed or just one-way communication?

Prompt – what kind of information gets handed over?

Prompt – why does this kind of information get included in the handover?

Q2. In your own words, how would you define nursing care?

Prompt - does care need to have a physical intervention?

Q3. My next question is about the nursing model of care on the ward.

Prompt – how would you describe the model of nursing care on the ward?

Prompt – what influenced this model?

Prompt – is the model based on nursing tasks to do or patient care needs?

Q4. Now thinking about the EPR - is there a difference between the care given and the care recorded on EPR?

Prompt – how do you define the care you provide?

Prompt – How do you think EPR has influenced the care you are providing?

Prompt – how do you manage the fact that care is different to what is recorded on EPR?

Prompt – how do you think you would manage the situation if the EPR couldn't be delivered due to lack of resources?'
Prompt – how do you think nurses' critical thinking about individual patients get captured
on EPR?'

Q5. How do nurses talk about the care they provide every day?

Prompt – what kind of language is used, formal/informal?

Prompt – how important is nursing critical thinking on the ward?

Prompt – do other professions seek nursing knowledge when planning patient care? If not, why do you think not?

Prompt – how do nurses decide what care to give to patients?

Appendix 9 – List of Codes

anticipatory care	Nurse fear and guilt
care delegated to AHCP	the nurse holds local knowledge
Care determined by EPR	the nurse informs medical care
Care discussed not recorded	nurse manager manages formal communication between nurses and medics
care effected by policy	nurse manager supports medics
care is a physical intervention	nurses as data entry clerks
care is based on patient demand	nurses critical thinking
care is discussed in unseen and informal ways	nurse's input is informal and not recorded
care is managing psychological need	nurses versus medical model of care
Care is process	nursing information is considered informal
Care recorded not discussed	paper resources for planning care
Communication effected by policy	patient-centred care, not on EPR
context of caring	patient-centred care
doctor interfacing with nursing care	the patient involved in their care
education and demonstration of physical care	The patient-perceived value of nursing information
EPR assisting with care planning	patient's journey (non-task orientated)
EPR effecting routines and practices	the perceived value of nurse's input
EPR or process frustration	Physical manifestations of care
anticipatory care	purpose of handover
care delegated to AHCP	reactionary care
Care determined by EPR	role of the nurse
Care discussed not recorded	Staffing and care planning

care effected by policy	Structured model of handover
influence on the perception of care	task-based care
informal communication	tasks are based on nursing to do
informal methods of handover	team versus individual nurses
interactions with students	the patient's story
inter-team care and work preferences	translating care into tasks
influence on the perception of care	value relationship with AHCPs
knowledge required to plan care	
Language of care	
medical model of care	
negotiation of care	
Nurse education informs understanding of care	

Appendix 10 – Sample of data collected

Sample of Shadowing field notes (transcribed):

Day 2 Shadowing (excerpt)

- Night staff recording notes that a patient is not compliant with his fluid restriction, the recording is paused as the day staff laugh and discuss that the patient is very bold and will never be compliant with his fluid restriction. The patient wishes to drink tea, but between his IVabx and TPN he has nearly reached his daily fluid limit. The nurse suggested that “someone” speaks with the clinical nutrition team
- Can hear the night nurses using the EPR on the recordings, lots of mouse ‘clicks’ in the background as they move through assessments
- Handover finishes and the staff move to the main corridor and nurses’ station. Night staff and ready to go home and there is very little conversation. Team 1 have already got a drugs trolley out.

0800

- Ward is busy; all the nurses are busy. Porters on the ward and several medical/surgical teams starting to round on patients. Nurses are deciding which one will do the drugs and who will “do the beds”.

0815

- Team 1 (RN 1 AND 2) are in the Ward/bay, RN 1 is doing to the morning drug round using the medication trolley and an EPR cart. RN 2 is working with the HCA to sit patients out of bed or sit up those that cannot get out of bed yet. There is a hurried approach to RN 2 as she must attend to all the patients before the breakfast starts. There is no communication between RN1 and 2 as he is doing the drug rounds and cannot be disturbed.
- At the same time, the surgical teams are moving from bed to bed, speaking with and examining patients as they go. There is little interaction with the nurses in the ward at this time.
- The surgical teams continue to the other bays on the ward and eventually handover to the CNM
- RN 2 is speaking with a patient who is very unhappy with his care since he has been an inpatient. She stands at his bedside and listens to his concerns, he feels his treatment has not been explained, and he is not getting the right medical care. The nurse is very sympathetic and tries to explain what medication the patient is on and what each medication does, but he dismisses

her and demands to see his consultant, the “top man”. The RN updates the CNM who is familiar with the patient’s complaint.

- The unhappy patient pulls the curtains around his bed, and the RN continues to the next patient to strip his bed
- At that moment, the surgical team responsible for the unhappy patient enter the ward for their morning round. The CNM informs them of the man’s complaint and what steps she has already taken but that he has been dismissive of the nurses. RN 2 joins in the conversation adding what he said to her this morning. The surgeons are aware of how difficult this man is and agree to meet him with the CNM present. The RN continues stripping the beds of other patients in the ward. The team spend several minutes with the gentleman and return to the corridor after. RN 2 joins the conversation again. The surgeons note how difficult he is and also note how hard it can be for the nurses as they have to be here all day with him. They agree to speak with him later when his wife is present.
- RN 3 is walking up and down the main corridor with bags of used and clean laundry, telling all present how busy she is – very funny
- RN 3 and 2 return to stripping beds and attending to patients while RN 1 and 4 continue their drug rounds.

0850

- RN 1 moves to the main corridor to continue drug rounds for the isolation rooms. Wearing the red tabard so that he is not disturbed. RN 2 continues sitting patients out, attending to personal hygiene and stripping beds.
- More medical and surgical teams are moving through the ward, some interacting with RN 2 but mostly reviewing their patients on EPR then handing over to the CNM after
    - Of note, it is the 2 junior nurses doing the drug rounds while the senior nurses are attending to the patients. This was the same last week
- RN 1 is finishing his drug round and tidying up his trolley before returning it to the drug room, still very little communication between teammates
- Ward remains very busy and loud, lots of people in the corridor. Catering staff are delivering breakfasts, porters or theatre and radiology and the medical/surgical teams.
- RN 2 is doing some “quick” dressings before breakfast of a patient due for discharge

0900

- Ward becomes quiet and calm. Nurses are preparing to go for breakfast, and the patients are still eating. RN 1and 2 are in the corridor having a ‘quick catch up’

- They handover “ok what’s left to do” which is tasks of care that remain undone and should be done in the morning.

- RN 3 and 4 having a similar handover. Items identified include “bed 15 not washed yet, bed 16 dressing is done just need d/c papers”

0930

- RNs start the breakfast breaks one from each team leave s and one nurse form each team stays the CNM also leaves at 0945
- RN 2 continues to make beds while RN 4 attends to some dressings that require changing, the task as identified and prioritised in the catch-up earlier
- Patient call bells are ringing, and the ward is busy, nurses are busy with patient care

Sample of interview notes (transcribed)

Interview 4 (excerpt)

Researcher:

What kind of effect has EPR had? You were there before EPR, and you've been there... EPR has been in two years now. What effect have you noticed?

Nurse 1 (female):

I think it's mostly positive. For example, things even like a cardex was gone missing at the bedside, you're not wasting time going around looking for it, it's all there. And likewise, for doctors, because they can access it wherever they are in the hospital, so if you're ringing with a problem, they can get the patient up there instantly. Look at their bloods, they can chart things. They don't have to be physically there on the ward.

Researcher:

That's great, yeah.

Nurse 1 (female):

And I think it's easier then, especially for notes for doctors, obviously you know yourself, trying to read medical notes and stuff like that. I think things are a lot clearer. Yeah definitely, I much prefer the EPR to the old paper way.

Researcher:

And have you noticed any negative parts to it? Are there any parts of it you don't like?

Nurse 1 (female):

Yeah. There has been teething problems along the way. One of them is when you're putting in some of the procedures, let's say some of the surgeries that we might have, don't always match up with the codes or there's a couple of them missing, so they're still working on that. But no, for the most part, it is positive. I know at the start we were all a bit dubious of it, but I was actually over in the Eye & Ear for a couple of weeks, giving them a hand with their ENT's and it's all paper over there. And I was like I actually don't know how we used to do it.

Researcher:

The coding part, is that when you put in the code for the procedure of what the patients come in for?

Nurse 1 (female):

Yeah. A lot of the teams, let's say the gyn, they would do typed post-op notes, and most of them done by the ENT team, they still write their post-op notes. Some of their procedures, now only maybe one or two, don't have a direct match, just so you can update your X-Bar, but that's only kind of minor. There probably was other things at the start, but I just can't think off the top of my head now. I think because we're so used to it, and we know our way around it.

Researcher:

Was there a lot of things you had to work around and make it work for you?

Nurse 1 (female):

Yeah. At the start, and the other thing that maybe is a little bit... When you're doing your admission, unless you do it through Care Compass, you might have done everything but you didn't do it there, it's still coming up as seven red tasks that are not complete even though they are. We would know to do it, but let's say someone else did the admission and they didn't know, you're going back then and clicking in and out and saying not done, but it actually is done. That takes a little bit of time, but for the most part, no I couldn't fault it.

Researcher:

And the way the Care Compass works, it kind of breaks everything that patient needs that day in to tasks. Do you think that has a knock on effect on how you talk to, when you're handing over stuff, do you use the same language, do you see the same tasks?

Nurse 1 (female):

Yeah. But I think I don't rely on Care Compass or EPR for help. I suppose, because we're used to the old way, obviously you'd know if someone is a falls risk, you're doing that every day on your checklist and certain things like that. I would clear it, but I don't rely on that to tell me what needs to be done.

Researcher:

Do you think other people do?

Nurse 1 (female):
I'm not sure to be honest. I don't know maybe if people who come in and this is the only way they've known.

Sample of EPR review (transcribed)

Layout section

The banner bar across the top of the page contains the base data -> patient name, allergy, resuscitation status, age and DOB, MRN, gender, current inpatient location and consultant (on this episode).

Under the banner bar are five tabs based on the SBAR – Situation and background, Assessment, Recommendation, Outpatient details, outpatient medications. The last two tabs have not been activated yet. The EPR opens on the 'situation and background' (SB) as the landing page.

The SB page is formatted into three columns of boxes. It is designed to give the nurse ready and easy access to an over of their patient's current situation and relevant clinical details.

The **first** tile relates to the patient's allergy status. Any HCP can update the patient's allergy status at any time. Clicking on this box opens a new window where the clinician can search for the allergen, by SNOMED code and then select the reaction type from a pre-populated list. Once updated this information is also generated on the banner bar. Allergy information can also relate to sensitivities.

The **second** tile in the "problem list". It outlines the reasons that brought the patient to the hospital. There are two boxes within this frame – "this visit" and "chronic". Clicking into either box opens a window that allows the nurse to free text in the patient's reason for admission i.e. lower leg pain for 3/7. The window also has a search function where the nurse can search for the appropriate diagnosis via SNOMED code i.e. left lower limb DVT. The reason for admission description can be updated but not removed. The diagnosis can be resolved and then it moves to the chronic box. The nurse can directly enter chronic conditions into this box too, using a SNOMED search.

The **third** tile captures the procedures for this visit/and history. Similarly, to the problem list, the nurse can click into the box and search for the appropriate procedure based on the SNOMED classification. Procedures can be listed as pending, active or complete. Once a procedure is complete is moves into the "history" box.

The **fourth** tile outlines the inpatient summary information: details of current consultant, team and inpatient location.

The **fifth** tile is titled ‘social history’. It provides an overview of social factors that may effect the patient’s care. The box can be expanded to provide additional options. Options to define social history are limited to: accessibility, alcohol, smoking, substance misuse, social environment, home environment, exercise, expressing sexuality, safeguarding, advanced planning. Each section and be further expanded upon with an initial risk assessment and then a free text box for further details. Areas that are assigned a high risk are flagged on the initial social history box. There is no connection with the past medical history area.

The **Middle Column** on the situation background page is differently coloured to the others, it is designed for clinical oversight.

The top tile is titled ‘vital signs’. It displayed the most recent clinical observations, which are entered separately. The vital signs include blood pressure, temperature, respiratory rate and calculated Early Warning Scores (EWS)

The next tile trends and graphs the EWS and vital signs as selected.

The next tile is an overview of the fluid balance. The data is entered in the assessment page (detailed later). The overview is a simple 72-hour balance of fluid input and outputs and the cumulative balance.

The next tile is titled “line, drains and tubes” and provides an oversight of the patients iv lines, surgical tube and any drains in place, and their appropriate removal date. All the data is entered in the assessment page separately.

The **Third Column** is the same colour and first.

The top tile is the current diet order, this data is entered in a separate assessment. It can display if the patient is on a special diet or fasting, and when the fasting was ordered or due to finish.

The next tile is titled flagged events. During a clinical assessment on the EPR a clinician can “flag” a result or data entry i.e. increase drain output. These events are entered as free text into the assessment and appear as a flagged event on the overview page for all clinical staff to see. These events have a small word count (one liners)

The next tile is titled over-due medication tasks. All medication is prescribed through the EPR and assigned or auto assigned an administration time. When administering the drug, the nurse must sign in and acknowledge the drugs being administered. The system then time stamps this and move that specific drug to the archive. When a drug has not been administered it is flagged in level places in the EPR, here on the SBAR screen. This tile outlines the name of the drug and the prescribed administration time. The nurse can click though this box to the medication section and administer the drug or alter the prescribed time and a note for the rationale or reason for the change.

The next tile outlines the patient's recent measurements. the patient's weight is entered in a separate assessment and the data pulled through to this screen. Other measures (i.e. abdominal girth) can also be displayed here. The result displays the 3 most recent results. But can be expanded for further details.

The last tile is titled documentation. All clinicians can compose a free text note that can be categorised and saved. The documents are displayed in chronological order with the most recent first. There are no notes available for the test patient.

The second tab in the SBAR is assessments. this provides an overview of other information that is entered separately in different assessments. the tiles here are: inpatient medication, immunization, allergy, laboratory and microbiology results, patient assessment (number of assessments complete/outstanding), radiology results, overdue tasks (list assessments, medication or orders incomplete), outstanding orders (order made that have not been completed i.e. bloods not taken or AHCP referrals).

The ICT ADON was able to provide the use manual for nurses which outlines that on admission to the hospital several 'orders' are automatically generated, these include:

Order	Clinician responsible
Resuscitation status	Admitting registrar
VTE assessment	Admitting junior doctor
Weight	Nurse
Vital signs	Nurse
Dementia/delirium screen	Admitting Junior Doctor
Discharge planning	Doctor/Nurse
ADL assessment	Nurse
Safe patient care assessment	Nurse
Social history	Doctor/Nurse
Admission details	Nurse
Care planning	Nurse

Each of the assessment outline above are separate and individual but can be done as a bundle to be more time efficient. Once completed, these assessments furnish the recommendations tab of the SBAR.

The 'recommendations' tab of the SBAR is blank as this was a clean test patient. However, the structure remains. The same tiled format as the two previous pages is used.

The firs tile related to "care planning" and identifies are care plans or assessment overdue or incomplete i.e. iv lines assessments should be done every 12 hours.

The next tile relates to MDT care orders not completed i.e specialist falls assessments.

The next tile is titled discharge planning – this pulls data entered into the discharge assessment and displays the estimated discharge date.