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Exploring patient experiences and power dynamics in an acute general surgical ward

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A mixed methods study exploring patient and staff perceptions of the inpatient experience at Waikato Hospital

A thesis submitted in partial fulfilment of the requirements for the degree Honours in Nursing, the University of Waikato, 2022

Abstract

Background: Alongside health outcomes, patient experiences are considered crucial in identifying the quality of a health care setting. General surgery comprise the largest range of pathologies and accounts for the highest number of patient discharges of any surgical specialty. As a way to address the power imbalance between healthcare staff and patients, patient-centred models of care are increasingly being adopted and implemented within hospitals including surgery. This study aims to investigate the current experiences of acutely admitted patients in a general surgical ward at Waikato Hospital, including opportunities for and challenges to improvement initiatives. Furthermore, the study examines relevant staff members perspectives of the inpatient experience and seeks to determine the efficacy of a proposed intervention focusing on empowering patients and their families.

Methods: The study was a mixed method design involving two phases. Phase I obtained qualitative data from semi-structured interviews with six patients and twelve staff members. Themes which emerged from the qualitative data in phase I were used to inform the development of phase II, as well as to inform a proposed patient self-assessment intervention. Phase II obtained quantitative data through Likert scale response surveys provided to acute patients on, or near to, their day of discharge from the surgical ward over a two month period.

Results: A total of six patients and 12 healthcare staff (senior registered nurses, n=3; surgical registered nurse managers, n=2; surgical fellows, n=2; surgical registrar, n=1; dietitian, n=1; social worker, n=1; occupational therapist, n=1; and physiotherapist n=1) were involved in phase I. A total of 53 surveys were returned from patients in Phase II (63.1% response rate). Qualitative data from phase I was analysed using a general inductive approach. This revealed three themes including power and control concerns for patients, the hierarchy of the health care team and the surrounding stressors of the organisation and environment. Analysis of the quantitative data collected descriptive statistics and calculated chi-squares. Of note were the statistically significant differences particularly between patients of Māori ethnicity comparatively to non-Māori, and according to gender and reason in hospital. There were no statistically significant differences for patients according to age group.

Conclusion: This study identified both the experiences of patients and staff in an acute general surgical context. The study found that the proposed patient self-assessment intervention was not immediately recommended. This was due to the current recommendations from patients who identified their strong preference was for face-to-face communication with staff. It was also due to staff members identification of a perceived inability to consistently provide person-centred care which corresponded with the patient self-assessment data. Acute general surgical care needs of patients were perceived by staff as taking precedent and current workplace stressors, including staffing and skill mix deficits and perceived lack of staff wellbeing supports, were strong inhibitors for staff to provide their preferred capacity of patient-centred care.

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Contribution

I, the researcher, undertook all components of this study under the direct guidance of my supervisors. This entailed selecting the appropriate research design, the data collection and analysis, and the publishing of the findings in this thesis.

Dedication

This thesis is dedicated to James (pseudonym) who was admitted acutely to the ward during the final month of this project. James was newly diagnosed, early in his admission, with extensive metastatic bowel cancer that has proved inoperable. James and his partner have a one-year-old child. To James, we hope that one day cancer will be diagnosed much sooner. We hope that one day we would have been able to heal you.

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Chapter I: Introduction

According to statistics from the Ministry of Health (2019), general surgery accounts for the largest volume of patient discharges across all surgical specialties in New Zealand, with acute discharges double that of electives. Evidence suggests that outcomes for acute general surgical patients are inferior to outcomes for elective general surgical patients (Mullen et al., 2017). Though health outcomes offer valuable insight into the level of effectiveness of a health care context, better patient experiences, patient and family-centred care and level of satisfaction are also recognised to be key indicators of the quality of a health care setting. Thus, investigations into the acute general surgical patient experience in a New Zealand context are recommended.

At its foundation, the role of the medical profession is to diagnose, to plan and to treat health pathology. The medical paradigm of the biomedical model which pervades Western medicine, and particularly surgical intervention, encompasses a worldview which suggests the body is a machine which can only be fixed with modern medicine and under the direct control of doctors. Though the biomedical model offers systematic and logical ways to improve health, other sociological theories identify flaws in the model such as lack of regard for the other intrinsic aspects unique to the individual including their values and perspectives. The relationship between the need for acute surgical intervention and ensuring an enhanced patient experience presents many challenges. A tension exists between meeting the holistic needs of the patient and their family in a time of acute stress with managing the unknown within a often changing complex environment. This discourse becomes harder to unravel, when there is an obvious power imbalance within the biomedical model, which positions the doctor as in ultimate control of outcomes.

The diversity of the acute general surgical patient demographic provides an opportune context for investigating inpatient experiences. As the New Zealand population progressively ages, so too do patients who present for acute general surgical needs, as well as the health workforce who provide the care. As technology improves and medical advancements occur, the breadth of ability for surgeons to offer less invasive

techniques increases. Surgical treatment options are becoming more readily available to people regardless of age and comorbidities (Deng et al., 2020). The challenges faced by acute general surgical contexts are directly impacted by the changing demographic of the New Zealand population.

In New Zealand, there are inequities noted in all health care contexts, and particularly for those who identify as Māori when compared to non-Māori. The World Health Organization (WHO) (2018) defines equity as the absence of avoidable differences among people groups, whether defined socially, economically, demographically or geographically. The New Zealand Ministry of Health (2018) has identified that inequity is both unjust and unfair, and that there is moral imperative for the health system to directly address discrepancies. It defines equity as the recognition that different people groups may require different approaches and resources in order to bring about equitable outcome (2018). The concept of equity for Māori is particularly significant in light of the principles of Te Tiriti o Waitangi, as noted by the Ministry of Health (2021c). The guarantee that Māori would receive and have active protection for equitable access and health outcomes, including autonomy of options and an equal partnership between Māori and the Crown, continues to be a work in progress. Though not limited to the subject, this research also seeks to investigate equity challenges in the acute general surgical population, analysing the tension between the biomedical model and holistic person and family centred care models which are of particular value to Māori.

This study will provide a valuable insight into the experiences of patients who present for acute general surgical needs at Waikato Hospital and will suggest improvements to the culture and practices of the environment. It also provides understanding of the challenges faced by members of the health care team who are involved in direct acute general surgical patient care in a ward environment, and the challenges of implementing changes in light of current resources. Furthermore, it will investigate the efficacy and limitations of suggested interventions which seek to improve patient experiences and explore alternatives.

This study endeavours to answer the following research questions:

1. What are the views of patients in relation to the acute inpatient general surgical stay?
2. What are the views of health professionals (nursing, medical and allied health staff) in relation to improving the acute inpatient general surgical stay?
3. To what extent would an acute patient and whānau self-assessment intervention be appropriate to implement for the improvement of patient and whānau experiences in an acute general surgical context?

Chapter II: Literature review

It's clear to me that different things work for different people and there is an obligation on the part of those of us with the power to do so, to instigate change.

Irihapeti Ramsden, 1998

2.1 Introduction

Across the health spectrum, the improvement of the health service user's experience is a vital process in ensuring effective and culturally appropriate care. Improvement to the patient experience empowers not only the individual but also the family / whānau as well as the wider population of health service users. To investigate improvement initiatives, research much be undertaken to understand the current state of patient experiences. This literature review attempts to analyse and bring understanding to the acute hospitalised patients' experience, in a local and international context.

This review of literature will be undertaken in two parts. The first will explore the demographics of New Zealanders who present for acute general surgical needs. It will then explore what influences the experiences of acute general surgical patients and the difficulties that are faced by patients and their families / whānau during the acute general surgical journey. The second part will explore patient empowerment and how the acute general surgical patient experience could be improved. This will include a discussion of historical influences on the role of the patient and the health care team. International approaches which have been implemented successfully in other health care contexts and how a revised approach could be implemented in a New Zealand context will be explored. To conclude, a proposed patient and whānau self-assessment intervention will be detailed and research questions addressed.

2.1.1 Definitions of terms

Prior to exploring the literature, it is important to define the terms used throughout this study. Firstly, 'acute' is used to describe a medical condition with a sudden onset. It can be used as an umbrella term to describe health care needs that can immediately threaten the life or wellbeing of an individual. 'General surgery' refers to the broad

specialty of medicine that includes the diagnosis and treatment of illnesses particularly related to the abdominal region. Treatment can be both surgical, procedural or non-surgical. For the purposes of narrowing search terms to general surgery in this research, the phrase acute abdominal pain was also used to define the general surgical acute admission. The Medical Council of New Zealand (2021) describes general surgery as the specialisation of medical disorders of the lower and upper gastrointestinal organs, endocrine organs, hepatobiliary, breast and related lymphatic structures. The specialty also encapsulates traumatic injury which usually requires multi-specialty involvement. Most commonly, general surgeons are the primary physicians involved in leading the complex care needs of the patient who presents after acute trauma (Balasubramaniam & Civil, 2022)

The term 'patient' is used to define the person who requires health care needs or the health service user. In the context of this thesis, the patient refers to the health service user who requires acute general surgical treatment. Whānau is a te reo Māori term used interchangeably with family to describe the family group. It can also be used to describe close ties with other people who may not share familial blood but who the person regards as a key support person. For Māori, whānau is complex term based on whakapapa and has broad spiritual, emotional and physical dimensions (Walker, 2011). The utilisation of this term in the proposed patient and whānau self-assessment intervention was chosen for the context of New Zealand.

2.1.2 Search strategy

A narrative literature review format was used in this thesis. Searches were undertaken on the University of Waikato online library databases, Pubmed, ProQuest, CINAHL, Web of Science and Scopus. These were searched both singularly and in combination using Boolean operators. English-language publications from January 2011 till September 2021 were searched using a combination of Medical Subject Headings (MESH) and keywords. Inclusion criteria included full text articles published in peer-reviewed journals. As computerised databases may have limitations and may exclude a number of eligible studies (Whittemore & Knafl, 2005), discovery layer searches of University of Waikato online library and Google scholar were also utilised to identify any missing literature. Relevant reports and statistical data were also included to

broaden the scope of the topic for a New Zealand context, as New Zealand literature related to the subject was more difficult to attain. Utilisation of other approaches to literature searching in a review ensures the search is comprehensive (Whittemore & Knafl, 2005). Titles and abstracts identified were briefly inspected for their applicability to the themes and topics discussed in this literature review. Article titles and abstracts which were identified as relevant to the topic were explored in greater detail and included or disregarded accordingly to relevance.

The keywords for part one of this literature review were: acute surgical care, patient experiences, emergency surgery, acute abdominal pain, acute hospitalisation, acute general surgery, equity in surgery, New Zealand surgical experiences. These initial broad searches identified an abundance of literature related to patient experiences of hospitalisation. However, there was a paucity of available literature specific to acute general surgical context in New Zealand. Considering this, search terms were broadened to include acute inpatient experiences, with preference made for articles specific to any surgical or medical speciality. Articles were also prioritised in the selection if they included an indigenous or equity focus. In part two of this literature review, the keywords were: medical sociology, parsons sick role, doctor-patient relationship, control and power imbalance in health care, informed consent, patient rights, patient self-assessment, patient empowerment, patient experience, patient preferences, patient self-efficacy, patient-centred care, family-centred care, shared-decision making, patient participation, patient perception, health screening, patient generated health data and patient reported health outcomes.

Part 1: Context is key, acute general surgery

The background context of an acute health presentation has a significant influence on the outcomes for the individual. Both modifiable and non-modifiable factors have an influence on the risk of acute health needs and Ministry of Health statistics have shown that acute presentations are most common in the general surgical speciality (2019). The background context of age, ethnicity, socioeconomic factors and any subsequent comorbidities in relation to the acute general surgical presentation and the patient journey from admission to discharge will be discussed in this section.

2.2 An ageing population

As the population of New Zealand ages, with estimates of those aged 65 years and over making up 26 percent of the population by 2050 (Statistics New Zealand, 2020), so too does the demand for access to health care and general surgical intervention (Deng et al., 2020; Linkhorn & Hsee, 2017). However, the Ministry of Health focus on improved access to elective surgery over the past two decades is a significant factor in the observed reduction in the incidence of acute surgical requirements for those aged 70 and over (Deng et al., 2020). A recent Auckland study found that mortality rates in acute surgical admissions were higher than elective surgical admissions and there continues to be an increased need for specialist care, including geriatric services, for elderly acute surgical patients (Linkhorn & Hsee, 2017). This is a trend also seen internationally with other Western nations investigating ways of reducing inequity. A study in the United Kingdom, the Proactive care of the older patient (POPS), introduced a discrete team of geriatricians who assessed the older person both prior to surgical decision and in the post-operative care phase (Harari et al., 2007) (Partridge et al., 2018). The study found to greatly improve health outcomes for this demographic and led to a large randomised controlled trial (n=176) which further associated preoperative comprehensive geriatric assessment with a shorter length of stay, less incidence of complications, and lesser likelihood of discharge into a higher level of dependency (Partridge et al., 2017). Another study found that older people tend to downplay their complaints or negative concerns, out of fear of being perceived as a burden (Doron et al., 2011). Key research advocates for more holistic approaches to older acute general surgical patients using a collaborative approach between multi-

disciplinary team members and multi specialties to optimise both patient health outcomes and experiences (Petersen et al., 2021; Vilches-Moraga & Fox, 2018).

A systematic review of the experiences of older people in acute hospital settings found that many feel marginalised and powerless in sharing their preference for the care they received (Bridges et al., 2020; Petersen et al., 2021). Negative experiences were linked to people with communication difficulties such as dementia, hearing loss and decreased physical ability as well as decreased level of support from family or lack of visitors (Bridges et al., 2020). Often negative care experiences were a direct result of absence in relational nursing care which maintains identity and ensures individual needs and preferences are upheld in care planning (Bridges et al., 2020). Other research on the experiences of older people and their close family members after emergency abdominal surgery identified key themes of powerlessness and fatigue throughout the hospitalisation and for many months after discharge (Petersen et al., 2021). There is also evidence to suggest there are inequities that exist between ageing individuals with acute surgical care needs and their medical counterparts in accessing appropriate palliative care in the face of emergent surgical intervention (Chernock et al., 2020; Lilley et al., 2018). Furthermore, research has shown there is inequity between older people who live in Aged Residential Care (ARC) and those who live in their own home with outcomes after emergent general surgery, which should be taken into account in decisions regarding goal-orientated treatment and early or concurrent access to palliative care (Chernock et al., 2020).

2.3 Equity and surgery: ethnic disparities, socioeconomic factors and comorbidities

Ethnic disparities in health outcomes are well documented within New Zealand and internationally with minority, indigenous and migrant populations being the most at risk of poor health outcomes (Dicker et al., 2019; Rumball-Smith et al., 2013). Inequities exist in many aspects of health care in New Zealand, as evidenced by the stark realities of life expectancy and morbidity for people groups, namely Māori, followed closely by Pacifica groups when compared with New Zealand European and Asian ethnicities (Dicker et al., 2019; Rumball-Smith et al., 2013). While this thesis

focuses on acute general surgical patient and whānau experiences in general, because of the overwhelming evidence of inequity that exists in acute surgical care it was imperative for this research to identify Māori experiences in comparison to experiences of non-Māori.

In an acute general surgical context, there is marked evidence of severe discrepancies in outcomes between Māori and non-Māori with regards to acute laparotomies (Perioperative Mortality Committee, 2019). A laparotomy is a common acute general surgical procedure associated with high mortality and morbidity, as it involves the emergent opening of the abdominal cavity for examination and repair of abdominal organs, (Boyd-Carson et al., 2020; Perioperative Mortality Committee, 2019). A report completed by the Perioperative mortality committee (2019) found Māori are far more likely to undergo emergency laparotomy than non- Māori, present at a younger age with more comorbidities and are more likely to have postoperative complications. A subsequent report by the Perioperative mortality committee (2021) on the outcomes after major trauma for Māori aged 15 to 18 years reported that this cohort is three times more likely to die in the 30-days following the trauma than their non-Māori counterparts. Though these reports focus specifically on acute laparotomies and major trauma, they offer evidence of the inequity in access to health care experienced by Māori who require acute general surgical health care.

A recent systematic review of Māori experiences in the public health system found that organisational structures, staff interactions and practical socioeconomic factors were all identified to be major barriers for Māori accessing health care services (Graham & Masters-Awatere, 2020). The findings supported an earlier review by Rahiri et al. (2018) who identified the need for further investigation of ethnic disparities for specific surgical specialities, though acknowledged the obvious inequities between Māori and New Zealand European across all surgical specialties.

Social and economic determinants of health remain a significant factor in all discussions of equity. In the context of this review, determinants of health refer to the non-medical factors that influence health outcomes and have a vital role in health inequity. The social determinants of health can be grouped into five main categories:

Economic stability; Education access and quality; Health care access and quality; Neighbourhood and built environment; and social and community context (World Health Organization, 2018). It has been widely documented that those living in poorer socioeconomic areas, with less access to stable income, housing, education and health care, are disadvantaged in health outcomes. Disparities in health outcomes for Māori and Pacific peoples in New Zealand are particularly prominent and often correlate with socioeconomic status (Stanley et al., 2018). Though there is limited literature in a New Zealand context on the association between those living in socioeconomic deprivation, comorbidities and health outcomes in acute general surgical intervention, international literature highlights the close connection between these and mortality, morbidity and an increased length of stay (Alves et al., 2021; Poulton et al., 2020; Wohlgemut et al., 2020). International literature also highlights the disparities in health outcomes for patients presenting for acute general surgical care with a concurrent serious mental illness (Bailey et al., 2018). Furthermore, there has been a lack of research on adjustments made in the acute surgical setting for providing appropriate care for people with disabilities (Iacono et al., 2014; Moloney et al., 2021).

2.4 Local context

The organisation formally referred to as Waikato District Health Board now exists as Te Whatu Ora - Waikato. It is a part of the midland region, Te Manawa Taki, and covers Tauranga, Rotorua, Gisborne, New Plymouth, Hamilton and their surrounding areas. Te Manawa Taki is responsible for a population of over 898,300 people. The demographic structure is similar to that of New Zealand as a whole, with some noteworthy differences, all of which played a significant role in the development of the research topic. The Ministry of Health (2021b) reports that the region has a much higher proportion of Māori and much lower proportion of Asian or Pacifica ethnicities than the New Zealand average and has a higher proportion of people living in higher deprivation areas. According to recent statistics for Waikato Hospital, the Ministry of Health (2019) reports general surgical patients account for the highest volumes of discharges of any surgical speciality; a trend that is reflective across all New Zealand hospitals. Ministry of Health (2019) data also reports acute general surgical admission and discharge numbers at Waikato Hospital are double that of elective, with over 15,000 acute discharges and 7,000 elective discharges between January 2016 and March

2019. This indicates that people who require general surgical intervention more commonly present acutely than electively, presupposing there is higher risk associated due to lack of time for ideal post-operative screening, assessment and risk mitigation such as adopting healthier lifestyle patterns.

An earlier health target for the New Zealand Ministry of Health (2011) was to improve access to elective surgeries. This, in combination with a target to reduce wait times in the Emergency Department (ED) has led to an investigation of ways to improve access to elective surgery by improving patient flow (Woods, 2012), therefore reducing need for emergency admission and acute surgery. The aim was for patients to receive surgery in a timely manner without developing need for acute intervention. At Waikato Hospital, a Waikato Elective Surgical and Procedural Pathway was implemented in line with the Ministry of Health target to improve efficiency of elective surgical services and improve patient access. To date there is yet to be available research on the effectiveness of this strategy; however, subjective data from users of the tool have indicated that it has had a role in improving elective admission planning. Currently there is no implemented tool for acute surgical patients, largely due to the impractical nature of this. There has however, recently been implemented the Waikato emergency laparotomy pathway which includes calculation of laparotomy risk prior to surgical decision, following guidelines from the Australia New Zealand Emergency Laparotomy Audit (Aitken et al., 2020). There is also currently a nationwide study on risk assessment for emergency laparotomy (Barazanchi et al., 2020), including data collected at Waikato Hospital, which aims to improve outcomes for patients receiving acute or emergent laparotomy and foster risk mitigation.

The Midland Trauma System have produced a recent study on patient and whānau experiences and outcomes following traumatic injury (Beaton et al., 2019). This study identified several improvement opportunities of service delivery for patients following serious injuries. Findings included the importance of reviewing service provider communication and service delivery processes and identified the experiences of former patients and key support people regarding information sharing and discharge planning. Findings also identified the need for patients and whānau to receive earlier support in relation to psychological trauma. The context of the MTS study lays the groundwork

for many components of this research as traumatic injury encompasses a significant demographic of the acute admissions under the wider general surgical speciality.

2.5 The acute general surgical patient journey

There are various themes common to the acute general surgical patient experience and indeed overlap between experiences of all patients who have acute health care needs. This section will describe these shared experiences of patients, drawing from both local and international literature. Following the patient journey from attendance at ED through to discharge from hospital allows a broader picture to emerge of the experiences of the patient and their family/whānau. Any exploration such as this must focus on the various features of the journey as well as the psychosocial needs of patients, their family, interactions with staff, the hospital environment and the discharge planning process.

2.5.1 Met and unmet needs

To reduce inequity in the inpatient acute surgical setting, an analysis of unmet needs common to the inpatient experience is required. There has been a large amount of literature over the years that has described the unmet needs of patients and their families across the various health care contexts (Bagnasco et al., 2020; Kalánková et al., 2021). Though there are limited studies specific to unmet needs for the acute general surgical patient, similar studies for unmet needs of acutely hospitalised adults can be transferable in the analysis of this topic. A review of literature for the unmet care needs in hospitalised adults identified three key categories related to unmet care needs: physical, psychosocial and spiritual (Kalánková et al., 2021). Unmet physical care needs included activities of daily living, physical condition and safety and monitoring. Unmet psychosocial care needs identified relational, supportive and communication needs while unmet spiritual needs, though less common, concerned religious and cultural care needs (Kalánková et al., 2021).

In the context of the acute abdominal surgical patient, physical unmet care needs may be identified with improper symptom management, most commonly pain and nausea (Patterson et al., 2021; Tegelberg et al., 2020). Recent literature on perioperative pain

treatments and unmet needs identifies that implementation of best practice for pain management is often suboptimal (Meissner & Zaslansky, 2019; Schug et al., 2016). Though there is a broad knowledge base of acute pain management, a gap still remains in the evidence and practice of pain management (Schug et al., 2016). Research indicates the need for all health professionals to engage with ways to meet acute pain management needs of patients through improved training on nuances of acute pain management, thus leading to improved outcomes (Chang et al., 2010; Schug et al., 2016).

The unmet psychosocial care needs of patients in the acute healthcare setting has also been extensively studied, though particularly in critical care and intensive care environments (Shorofi et al., 2016). Literature over the past 20 years has identified an association between psychosocial factors and surgical outcomes, finding there are direct correlations between positive social systems, baseline resilience factors and recovery (Rosenberger et al., 2006). Though not specific to acute general surgery, research into the monitoring of psychosocial variables among hospitalised cardiac surgery patients found a link between psychosocial factors and positive health outcomes (Callus et al., 2020). Providing for the psychological needs of general surgical patients has also be shown to improve patients experiences of anxiety and pain (Villa et al., 2020). This offers insight into the need to monitor and address both psychosocial and psychological factors for the acute general surgical patient for the likelihood of both improvement in patient experiences and outcomes.

2.5.2 Emergency department and point of admission

The journey of the acute general surgical patient, as defined in this study, includes the initial presentation. Therefore, a brief description of the emergency department (ED) and other relevant acute environments and their influences on patient experiences is indicated. A contributing factor for patient experiences in the emergency department is known globally to be wait times or a prolonged length of stay (PLOS) in the ED and overcrowding. A PLOS has been defined by some as a stay of more than six-hours, and evidence suggests that PLOS are associated with higher mortality (Rose et al., 2016). Studies have found mitigating factors for long wait times include excellent provider and staff communication (Sonis & White, 2020). Despite this, many

interventions to improve overcrowding and patient flow have been deemed ineffective (De Freitas et al., 2018). Success for reducing strain on emergency departments has been found in the provision of alternative acute pathways, particularly for general surgical patients (Eijsvoogel et al., 2014). For example, the introduction of acute surgical units have led to a reduction in overall length of stay without the compromise of mortality and readmission rates (Eijsvoogel et al., 2014). Ultimately, there is more research required to improve the challenges faced in emergency departments internationally. While it is important to note the experiences of patients in the emergency department and the overall effect on the patient journey, this research aims to explore the experiences of patients specifically in the acute general surgical ward setting.

2.5.3 The hospital environment

Another common influence on the experience of patients during hospitalisation in the acute surgical setting is the environment. The ward environment commonly consists of several multi-bedded rooms, usually single-sexed, with varying degrees of privacy and access to basic facilities. In their study on barriers and enablers of patient and family centred care, Lloyd et al. (2018) found that a common barrier for patients and their families to receive person-centred care was the lack of physical resources and the constraints of the hospital environment. A key noted that privacy was often not achieved as the use of thin curtains between the bed spaces did nothing to prevent other patients from hearing confidential discussions particularly in multi-bedded rooms (Lloyd et al., 2018).

A study from the United States on what determines surgical patient experience from the perspective of staff and patients found that both surgical patients and members of the health care team have similar views regarding the most important factors of patient experience (Mazurenko et al., 2015). These included interdisciplinary relationships, staffing and technical infrastructure. Through this study is in the context of for-profit health care and Medicare reimbursement, the identification of the similarities between patient and staff perceptions on the surgical patient experience is an important component and requires further investigation in a New Zealand not-for-profit healthcare context.

2.5.4 Staff interactions

Experiences of patients, regardless of the setting, diagnosis or demographic, are highly dictated by the degree of engagement they felt they received by the health professionals assigned to care for them (Jangland et al., 2016). A study on the experiences of patients with acute abdominal pain of the fundamental care they received during their admission found that the development of genuine caring relationships with health professionals and being kept informed of their care were key indicators of a positive experience (Feo et al., 2019). The access to timely and accurate information and ability for health professionals to build rapport is a fundamental care need for patients experiencing acute abdominal pain (Jangland et al., 2016). International studies on improving the clinician-patient relationship found that therapeutic listening, engaging with, validating patient emotions and unmet needs and ensuring patients are at the centre of their care were key ways to improve the clinician-patient relationship and improve experiences (Kornhaber et al., 2016).

The profound inequity of Indigenous people across the majority of health care contexts is well documented in health literature, particularly in surgery (Rahiri et al., 2018). Within New Zealand, there are well reported disparities between Māori and non-Maori (Rahiri et al., 2018). Several studies have found that Māori patients and their whānau experience ineffective communication and cultural alienation, which has led to distrust of hospital staff and environment and resulted in poorer health outcomes (Arlidge et al., 2009; Graham & Masters-Awatere, 2020; Mbuzi et al., 2017; Wilson & Barton, 2012). Further studies are needed which follow a Kaupapa Māori framework to identify ways to reduce inequities and improve experiences for Māori in the inpatient setting.

2.5.5 Complications, reoperations and critical care admissions

While many acute general surgical patients may spend much of their stay on the ward, many may fluctuate in their acute care needs and require more intensive monitoring often due to respiratory, cardiovascular or surgical complications. Secondary to the high-risk nature of acute interventions when compared to elective (planned) interventions is the increased risk of further unplanned surgical reoperation and

admission to critical care settings, namely, high dependency and intensive care units. A study on patients experiences of acute unplanned surgical reoperation found that patients had various psychological, social and existential reactions (Dillström et al., 2017), often with negative effects on the patients psychosocial well-being (Pinto et al., 2016). Meaningful factors for patients in managing these reactions were identified as access to family and clear communication from the health care team to the patient and family (Dillström et al., 2017). Furthermore, research on patients and family after an intensive care stay found common factors in the reduction of post-intensive care syndrome were the presence of family and staff attention, and proactive involvement by staff of family in the care (Hoog et al., 2020). Studies also identified a misalignment between the medical system and the values and preferences of patient and family, and the imperative for health environments to rectify this (Hirshberg et al., 2020; Hoog et al., 2020).

2.5.6 Discharge planning and point of discharge

Discharge planning is the process by which health care providers work alongside patients and their families to identify and prepare for anticipated health care needs once they have left hospital; the transition of one level of care to the next (An, 2015). There is a significant body of work on the various factors relating to patient discharge planning, including its optimisation and various causes of delay (Everall et al., 2019). An improvement in post-operative education was identified as a key need in a study on patient discharge planning after colorectal surgery (Jones et al., 2017). Furthermore, literature shows that clear discharge information and discharge strategies are paramount in preventing complications and unplanned hospital readmission (Kang et al., 2018).

Discharge planning can also be significantly hindered by socioeconomic inequities and as described previously, Māori experience inequity in relation to discharge planning processes. One study found that Māori patients are frequently discharged significantly earlier than non-Māori patients with similar health issues (Wilson & Barton, 2012). These early discharges were often rooted in bicultural nurse-patient relationships which were not patient and whānau centred and did not allow them to have a say in their care. This contributed to negative perspectives for whānau toward the hospital

and abrupt discharges prior to medical clearance. Further studies identify ethnic disparities in discharge with regards to readmission or failed discharge and mortality have found that Māori are 16 percent more likely to require further hospital admission or to die 30-days after discharge than NZ European counterparts (Rumball-Smith et al., 2013). Ultimately, there is work to be done across all aspects of the patient journey through acute general surgery to improve experiences for patients and their families.

Part 2: A shift in power

Quality improvement in health care has become widely accepted as more than just improvement in clinical care. The definition of quality health care now includes measures such as safety, equity and acceptability of care and is influenced predominantly by the recipients of the care, rather than by historical biomedical paradigms. The patient experience and voice are now widely integrated into health care planning, including in the testing of its effectiveness. A common theme present in health care literature is that of power imbalance; in other words, the hierarchy of power in the form of knowledge which exists between the health professional (particularly doctors) and the patient. This chapter will analyse the historical changes to power imbalance in the physician-patient relationship and more recent trends toward empowering the patient to become an equal partner in their care.

2.6 Early medical sociology: The patient-physician relationship

Researchers and theorists have been exploring patient empowerment for some time. Talcott Parsons, a mid-twentieth century sociologist working within a structural functionalist framework, described the social and cultural responses to disease through the sick role; a description of the behaviours associated with having an illness (Parsons, 1951). Parsons argued that responses to illness are governed by a set of social expectations and responsibilities. He asserted the following two rights and two obligations for the sick role. Firstly, it enables patients the right not to participate in normal activities while they are unwell and the right to not carry the burden of responsibility for being sick. Secondly, the sick role obliges patients to desire to get better and to seek care from medical professionals. This was the prominent view of health professionals for much of the mid 20th century (Sheaff, 2005). Parsons' theory also described the medical profession as a vital institution for social control over illness; indeed, he argued that the doctor's rule was supreme. For Parsons, the function of a doctor is to act as a moral guardian for society. The doctor utilises their knowledge and subsequent power to distinguish true illness (as defined in 'the sick role') and deviance, a concept whereby the two rights and two obligations of the sick role are not

adhered to by the patient. For Parsons, illness was as much about the threat to a social system and social order as it was about physical ailments experienced by a person.

A contemporary of Parsons, Eliot Freidson, described the professional dominance of medicine and critiqued the absence of the patient perspective in the doctor-patient relationship through commenting on the concept of medical paternalism (Freidson, 1960). Freidson argued that, due to its authority in defining illness, medicine exerts power over anything in relation to the function of the body including other occupations and civilians. In identifying this, Freidson critiques the power imbalance which exists in a paternalistic styled doctor-patient relationship (Conrad, 2007). The power imbalance and control mechanisms that Freidson referred to are especially evident in surgical health care, particularly in the complexity of acute surgery and its unfamiliarity to those who require it.

A later philosopher, Michel Foucault, addressed how knowledge found in the institution of medicine is used to shape and control social behaviour (Foucault, 2003). Foucault describes the concept of 'the medical gaze', whereby physicians may alter a patient's story in order to fit in with their biomedical paradigm (Misselbrook, 2013; Ristić et al., 2021). He charges that the medical profession creates an abusive power dynamic whereby doctors behave as authoritarians over patients. While many of Parsons, Freidson's and Foucault's views were perceived as extreme and have been somewhat refuted over time, their influence is still fundamental in shaping the view of the doctor-patient relationship and remnants of their ideas are still evident in health literature and health care today. Ultimately, patient empowerment seeks to reduce historical power disparities by fostering health literacy for patients and information sharing between all parties and to advance a patient and their family's role in planning, implementing and evaluating health care.

2.7 Patient rights, patient autonomy and informed consent

In critique of the paternalistic nature of the medical profession, patient rights and health professional codes of ethics became formal bills in Western medicine in the

1970s (Olejarczyk & Young, 2021). This included the concept of patient autonomy whereby those receiving health care retain the right to make informed decisions about the care they are to receive. Informed consent, the term for making an informed decision, sought to address the lack of accountability in medicine. However, early informed consent often focused more on the physicians obligation to disclose information than on patients understanding of the information (Childress & Childress, 2020), thus power imbalance within the doctor-patient relationship still remained. The terminology of informed consent is still used today and in New Zealand is explicitly linked with the Patient Code of Rights, one of which is for people to be fully informed about treatment options and their right to refuse treatment (Health and Disability Commission, 1996). Health professionals must take care however not to slip back into the historical obligation to disclose or rely on consent forms, but take practical steps to ensure the patient is truly informed to make an autonomous decision (Agozzino et al., 2019; Reynolds et al., 2020). As surgical or procedural intervention is often foreign to those who present acutely, special attention to the health literacy of the patient must be made and practical steps for information sharing taken to ensure informed consent and powers shift to balance the patient perspective (Agozzino et al., 2019).

2.8 Shared decision making, person-centred care, empowerment and cultural safety

Informed consent has now expanded to include shared decision-making, referring to the process where patients, family-members and members of the health care team form partnership to exchange knowledge and opinions. Treatment options are then selected together based on the clinical evidence and informed preferences of the patient and family (Childress & Childress, 2020). Though shared decision-making is seen as the gold standard and pinnacle for decision-making in patient-centred care (Barry & Edgman-Levitan, 2012), it also cannot be assumed that all patients will prefer this method of decision making. Studies on shared decision-making preferences report that patients still need to be consulted individually on this approach, as in reality many patients, particularly from non-Western cultures, may prefer a physician-led or family-led style of decision-making (Rademakers et al., 2012; Sankar et al., 2018). A paternalistic style of decision-making may also be more preferred by older people who

may lose their capacity to make decision and one study suggests this approach should not be taken lightly by health care professionals (Cole et al., 2017). Patient preference is fundamental to all conversations regarding decision making and must be assessed frequently in all health care contexts, particularly upon admission to hospital and periodically throughout an inpatient stay (Jerofke-Owen & Dahlman, 2019).

In an acute context, patient autonomy or self-determination can be difficult to attain due to the disease process itself. Promoting a patient-centred style of care therefore includes the intentional involvement of the family or key support people for the patient, often termed shared decision making (Ringdal et al., 2017). Shared decision making is a key component of person-centred care. The term is used to describe care that uses the patient's perspective, personal values and preferences as it's starting point, and failing this seeks to employ the views of the patient's key support people (Rademakers et al., 2012). Many studies have attempted to define person-centred care. A systematic review of the literature defined person-centred care as: an understanding of the patients' experience of the illness in their life situation, the health professionals interpersonal relationship with the patient and enhancing coordination of care to improve management of the patient-centred approach (Langberg et al., 2019). There are multiple studies that have demonstrated the positive influence that person-centred care has on health outcomes (Ekman et al., 2012; Eyles & Mhurchu, 2009; Meterko et al., 2010; Swenson et al., 2004; Ulin et al., 2016). Person-centred care is used widely in health care and has many associated concepts and meanings in different contexts. One study found that person-centred care, as defined by patients in the study, was the recognition that they were a unique identity, considered important and their wishes were recognised (Arakelian et al., 2017). Many studies highlight the importance of patient-centred care and that most patients report positive experiences of a health setting when patient-centred care was prioritised (Edvardsson et al., 2017; Rademakers et al., 2012).

Shared decision-making and person-centred care continue to imbed themselves within health care practice. Although a work in progress, with evidence to suggests they are not yet widely embraced across all medical contexts (Légaré et al., 2018), current healthcare has transitioned away from historical paternalism. A modernised view of

the role of patient, is that of the empowered patient, where patients are now more than ever before actively engaged in advocating for themselves and feel an increasing responsibility for their health (Timmermans, 2020). Patient empowerment is defined by World Health Organization as a process through which people gain greater control over decisions and actions affecting their health (World Health Organization, 1998). There are four key components which are determined to be fundamental to patient empowerment. These include an understanding by the patient of their role, the obtaining of sufficient knowledge to engage and make decisions, skills of patients such as health literacy and self-efficacy and a facilitating environment which ensures the patient is aware of their rights (Angelmar & Bermann, 2007).

In a New Zealand context, person-centred care, shared decision-making, and empowerment are fundamental in the theory of cultural safety, a key competency for both the nursing and medical professions. Culturally safe practice upholds the complex personhood of each individual health consumer and shifts the focus of care and power balance from the health professional to the health consumer (Ramsden, 2002). It is an imperative for all New Zealand nurses and doctors to reflect on their own attitudes and to take into account the needs, values, preferences and beliefs of patients and their family when planning care (Medical Council of New Zealand, 2020; Nursing Council of New Zealand, 2011). The fundamental idea underpinning cultural safety as a theory is that of reframing control or the ability to influence the behaviour of others. In the context of this research, historical control mechanisms such as the Parsonian doctor-patient relationship, aim to be replaced with a greater recognition of the unwell person and their family/whānau experiences, preferences and voice in the overall care planning. Thus, a shift of power is created; health care professionals and patients, alongside their family if desired, are equal members in planning care.

2.9 Research underpinning the study

There is a vast amount of research that has been undertaken concerning the experiences of patients and their families in a hospital setting including preferences for care (Ringdal et al., 2017; Siminoff, 2013; Spinks et al., 2015; Wilkinson et al., 2008), experiences specific to a general surgical context (Jangland et al., 2016; Mazurenko et al., 2015; Park et al., 2021; Petersen et al., 2021) and experiences specific to the context

of New Zealand (Arlidge et al., 2009; Graham & Masters-Awatere, 2020; Wilson & Barton, 2012). There is also nationwide quantitative research on the experiences of hospitalised adults which has been undertaken since 2014 through the Health Quality Safety Commission, through routine inpatient experience surveys (Health Quality and Safety Commission, 2021). However, a gap exists in literature on patient experiences specific to an acute general surgical setting in a New Zealand context.

There have been also been various studies on patient generated health data (Burns et al., 2019; Demiris et al., 2019; Jim et al., 2020; Lindroth et al., 2018; Murthy & Wood, 2015), and patient self-assessment (Boucher et al., 2019; Boucher et al., 2021; Hirshfield-Bartek et al., 1990; Miyamichi et al., 2012; Mora et al., 2008; Smith & Goldman, 2011; Stokes et al., 2016; Strömgren et al., 2001; Wasson et al., 1999), though none have been specific to an acute general surgical context. Further study into the efficacy of incorporating elements of patient generated health data and patient self-assessment into an acute general surgical context and the effect on patient experience is subsequently recommended.

2.9.1 Patient self-assessment: patient generated health data, patient reported outcome and experience measures

As the shift is made toward patient centred health care, shared decision-making and patient-empowerment, there has been a focus on interventions to encourage patient engagement with and responsibility in identifying holistic health needs. Ensuring the patient and their families voice, that is the specific information unique to that individual or family, is made visible to all members of the health care team is an important component of this. The 'patient and family voice' refers to the needs, expectations, preferences and values, from the perspective of that individual and family. Patient and family led reports of health have become commonplace across many contexts and are commonly referred to as patient generated health data (PGHD) (Jim et al., 2020). PGHD is information recorded by patients or their family to aid in addressing a health concern which is distinct from information generated through encounters with physicians (Burns et al., 2019). Many studies have examined the used of PGHD in the clinical setting and found promising results such as improved insight into clinical issues and improved patient participation and engagement in health care

(Bauer et al., 2018; Burns et al., 2019; Holch et al., 2017; Lindroth et al., 2018; Murthy & Wood, 2015), however more work is needed to integrate it into wider healthcare systems (Demiris et al., 2019). No studies on the impact of PGHD were identified in an acute general surgical context. Furthermore, studies on PGHD in a New Zealand context, including electronic PGHD, were also lacking.

Patient reported outcome measures (PROM), the capturing of a patient's perspective on their own health through questionnaires or surveys (Kingsley & Patel, 2017), and patient reported experience measures (PREM), the capturing of patient experiences of care received (Kingsley & Patel, 2017), are both relatively new concepts with medical subject heading (MESH) searches only identifying literature over the last five years. A PROM can be disease specific or generic; a disease specific PROM focuses on gathering subjective information about a patient's illness, while a generic PROM may gather subjective information on a broader health history (Kingsley & Patel, 2017). A further classification of patient self-reports has been made which separates the term into four categories, namely, preferences, outcomes, experiences and satisfaction (Klose et al., 2016). Patient reported preferences are being utilised in several contexts with positive outcomes being an increase in identification of patient preferences in clinical notes (Dirksen et al., 2013; Eldh et al., 2015; Jerofke-Owen et al., 2020). Findings show there is a significant gap in ways to increase the visibility of patient priorities in the clinical record and in medical decision making (Mangin et al., 2016), thus new innovations are necessary for specific clinical contexts.

Patient self-assessment is a relatively uncommon term in health literature however exists under the sphere of patient generated health data. Older studies on the effects of patient self-assessment in the community setting found that the addition of patient self-assessment alongside nursing and medical assessment led to a decrease in documentation time (Hirshfield-Bartek et al., 1990) and improved the quality of provider-patient interactions and overall patient satisfaction (Wasson et al., 1999). While one study found discrepancies between clinician assessment and patient assessment of functional capacity (Stokes et al., 2016), other studies describe patient self-assessment of health as a consistent and reliable predictor of health outcomes (Mora et al., 2008; Smith & Goldman, 2011).

While self-assessment could be impractical for the acutely unwell person, there are studies which have utilised patient-self assessment in an acute setting (namely the emergency department) with good effect. One study into the efficacy of utilising patient self-assessment in an emergency department setting found that patients generally believe self-assessment to be an acceptable way of data gathering, with an electronic version being utilised by patients of varying ages, including the older person, with success (Boucher et al., 2019). Another study found patient self-assessment was a valuable predictor of hospital admission in emergency practice (Miyamichi et al., 2012). Ultimately, patient self-assessment is a valuable supplement to medical records, enhancing the possibility that a patients care needs are fully recognised by the health care team (Strömgren et al., 2001). There is further need for research into engaging families with a shared patient and family self-assessment in early information gathering for patients who present acutely unwell.

2.9.2 Patient and family/whānau self-assessment intervention

Considering the needs of the acute general surgical patient and the movement historically toward patient empowerment, modern methods of ensuring patient and family engagement are indicated. Health professionals must engage in continuous ongoing reflection on their own mindset towards upholding patient and whānau preferences and values and must be supported in their work environments to do this. This study seeks to develop and assess the efficacy of a patient and whānau self-assessment intervention, utilising both patient self-assessment and patient generated health data methods, in improving the overall experiences of patients and whānau admitted acutely. The self-assessment intervention will be described in this section and will be based on common themes presented in this literature review. The intervention will then be further developed from findings of the patient / whānau and staff member interviews using general inductive method of inquiry.

Though there have been various attempts to utilise a patient and family self-assessment model in health care, none have retained a strong emphasis on the empowerment of the patient and their immediate family or support people for the purpose of improving their experience. Neither has there been an emphasis on specifically identifying beliefs and values of patients and their family from point of admission. The motive behind

this framework is to modernise the way in which health care professionals view a patient and their whānau's understanding of their needs; ensuring the voice of patients and whānau are emphasised throughout the health care journey. Instead of following historical patterns of paternalistic doctor-patient relationships, this intervention seeks to empower and highlight the voices of patients and their families, honouring the knowledge and experiences they hold as equal partners in their health journey.

This literature review has revealed several aspects of the patient and whānau self-assessment which will likely be included in the intervention pending the findings from the data collection phases. Firstly, the patient and whānau self-assessment intervention seeks to make an immediate connection between the identification that the patient is not only an individual but exists in community with others. It is commonly within the first twenty-four hours of admission that a key support person or family member is aware of and concerned for their loved one who requires acute general surgical care, will likely visit and desire updates from the staff about their family member. A study on perspectives of patients with acute abdominal pain found that wards receiving acute patients need to provide personalised care and information about how the ward operates and about treatment and care early in the admission in order to improve patients ability to make decisions during their hospital stay (Schultz et al., 2014). This process is further strengthened by the inclusion of the patient's family. The recognition of the influence of family members and caregivers in an initial clinical setting may have an improvement in effectiveness and efficiency of the health care (Siminoff, 2013).

On occasion, patients who present acutely may have no immediate family or community support and live in isolation at baseline. Recent census data shows that twenty five percent of New Zealanders aged over 65 identified with feeling lonely or socially isolated at times, with two percent of this population having identified as feeling lonely and isolated at all times (Statistics New Zealand, 2018). It is imperative for these individuals to be identified, and in an acute setting such as general surgery, early referrals to social work, patient advocation services or chaplaincy would be beneficial and is a right for all patients under the health and disability act (1996). Failing

this, nursing and health care staff must be positioned to advocate for these individuals (Ringdal et al., 2017).

Bedside handovers occur two to three times a day at the changing of nursing shifts where two primary nurses assigned to care for the patient engage in discussion around the events of the previous shift. There is a prime opportunity in this discussion to promote patient participation and engagement with care by involving the patient in the conversation, thus promoting a patient-centred approach (Rutherford et al., 2004). There have been various studies on patient preferences relating to the nursing bedside handover, all of which have found there is a positive perception toward involving patients in bedside handovers (Kullberg et al., 2018; Oxelmark et al., 2020; Spinks et al., 2015; Tobiano et al., 2018; Whitty et al., 2017). In regard to the patient level of involvement in the handover, evidence suggests that patients are not consistently involved (Chaboyer et al., 2010). Specific to an acute surgical context, a study on patients' perceptions of the meaning of good care found that bedside handovers improved patient perceptions of the acute surgical environment (Mako et al., 2016). This included an increase in perception of reliability and accessibility to care. Patient-centred beside handovers gave a greater impression of caring attitudes and fostered patient participation (Mako et al., 2016). Patient preference into the nature of bedside handovers should dictate the practical outworking's of the handover in order to improve patient experience and communication in the nurse-patient relationship.

Another practical area of improvement in review of the literature is changing the notion of the ward round to better suit the preference of the patient and their family. Research into the preferences of patients and their family in relation to medical rounds have found that simple changes to the nature and structure of the visits led to vast improvements in communication. One study found the employment of a structured interdisciplinary bedside round (SIBR) which included key members of the health care team improved the communication and involvement of patients and family in care planning (Basic et al., 2018). Other studies have explored the efficacy of changes to the physical environment, such as moving bedside rounds into a private meeting room, limiting the number of doctors that visit or organising chairs for doctors to be at eye level with patients and their family, enabled patients to feel more comfortable and an

active part of decision making (Redley et al., 2019). An Australian study into enhancing communication between patients, families and the health care team in the context of inpatients who are acutely unwell found that an AMBER care bundle was an acceptable tool to use for patients whose clinical condition was uncertain (Koffman et al., 2019). Ultimately, patient preference into the nature of the beside ward rounds and involvement in nursing handovers must be considered, to improve these common components of the patient journey and enhance meaning in the interactions.

2.10 Summary

This review of literature initially identified the current experiences of the acute general surgical patient and their families. This included the influences on and difficulties common to this cohort of health service users, the impact of both modifiable and non-modifiable risk factors. Patient empowerment and the shift of power from professional to patient was also explored with emphasis on modern ways of approaching shared decision making, person-centred care and patient empowerment.

A review of the literature has highlighted several potential interventions for improving both outcomes and experiences for patients across many health contexts, in varying forms of patient generated health data, though nonspecific to acute general surgery in New Zealand. Literature was also reviewed on the experiences of patients and their families which are the crucial component of quality improvement initiatives. The combination of the patient and family voice, alongside key insights from health care professionals specific to this area, seeks to inform the development of a patient and family led self-assessment intervention and the basis of this mixed methods study.

This literature review provided content for the development of all components of this mixed method research, interview questions for both patients and staff, survey questions for patients and the development of a proposed acute general surgical patient and family self-assessment intervention. It also identified the gap in knowledge regarding the experiences of acute general surgical patients in New Zealand and intervention strategies to improve experiences. It is evident from this review that a patient-centred intervention or process for improving the acute surgical patient experience may be of value.

2.11 Research aims and questions

This study seeks to explore the views of patients and family on their acute general surgical stay and the perspectives of general surgical staff in relation to the journey of patients from admission to discharge. This study will provide a pragmatic addition to the research base relating to patient experiences and will also provide evidence on whether a patient and whānau self-assessment intervention is effective in improving the acute surgical patient experience. More specifically, the study will aim to address the following questions:

1. What are the views of patients in relation to the acute inpatient general surgical stay?

2. What are the views of health professionals (nursing, medical and allied health staff) in relation to improving the acute inpatient general surgical stay?

3. To what extent would an acute patient and whānau self-assessment intervention be appropriate to implement for the improvement of patient and whānau experiences in an acute general surgical context?

Chapter III: Methodology

The only principle that does not inhibit progress is: anything goes.

Paul Feyerabend, 1975

3.1 Introduction

A methodology explores the reasoning behind the choice of a design method in light of the ideas assumed in the research questions (Creswell & Plano Clark, 2017). This chapter will discuss the research methodology used when engaging with the topic of the enquiry. Past literature offers differing definitions of research methodology. While Kaplan (2017) describes methodology as an analysis and description of the method used and it's underlying philosophical assumptions, Miles and Huberman (1994) describe it as the significance of a method and its basis for action. Despite difference in definitions of methodology, most share a common theme of the justification for the use of a research method.

This chapter will draw on literature informing the theoretical basis for the research methods described in Chapter IV. The chapter will be organised around an exploration of the different research approaches as well as relevant data collection and analysis techniques. It will include a discussion on the paradigmatic assumptions present in both qualitative and quantitative research, and reasoning behind the choice of a mixed-method approach from the perspective of this enquiry.

3.2 Paradigms

The diversity of methodological options in research arises from both philosophical ideas and the practical goals the research aims to achieve (Hammersley, 1996). The broad range of paradigms, a set of beliefs or practices shared by researchers, can shape the nature of an approach to any given research topic (Schneider et al., 2016). Historically, research tended to embrace a positivist paradigm; that there are absolute truths to be discovered which can be found through hard work (Schneider et al., 2016). The positivist approach is represented mostly in quantitative research and reflects rationalism and scientific discovery (Schneider et al., 2016). Though positivism is

fundamental to mixed methods research with its quantitative components, other paradigms also exist within it.

In more recent years, a post-positivist paradigm has become prominent in many research areas, including healthcare. Post-positivism assumes that researchers can seek for and discover truth through work, however their ways of measuring truth are flawed (Schneider et al., 2016). Post-positivist paradigms, namely critical and interpretive approaches found in qualitative research, explore truth as a construction of social, political, racial or ethnic values. These approaches are vital in research which seeks to identify practical goals for bringing about social change, hence why they are commonly used in research which involves healthcare. A critical approach invokes social change through the critique of an existing phenomenon and often encourages empowerment and equality for its participants as they are directly affected by the change (Schneider et al., 2016). An interpretive approach ascribes meaning within a social context which is constructed through the researcher and participants dialogue throughout the research process (Schneider et al., 2016). Some researchers assume that due to the differences between these three approaches, they cannot exist simultaneously (Bryman, 2016). However, in a mixed-method approach, as utilised in this research, key literature argues that they can be harmonious with one another and enable the exploration of different perspectives (Fetters & Molina-Azorin, 2017; Harvey & Land, 2017; Polit & Beck, 2021). Furthermore, different research methods are required to answer different clinical questions, thus all research approaches have equal value depending on the purpose for the research (Evans, 2003).

3.3 Qualitative research

Qualitative research has a strong foundation in both a constructivist and post-structural or interpretivist paradigm (Flick, 2006). Qualitative researchers assume a social construction of reality by focusing study on the perspectives of participants (Denzin & Lincoln, 2005). It attempts to interpret or make sense of the realities described by participants (Denzin & Lincoln, 2005). Prominent methods of collecting qualitative data include interviews, observations and focus groups from which raw empirical data are often recorded or transcribed. Though there are many complex ways of analysing this raw data, a simple yet effective approach is that of general

inductive enquiry (Thomas, 2006), which will be used to analyse the qualitative data gathered in this research. The key purpose of an inductive approach is to allow findings from the interviews or focus groups to emerge from recurring significant themes observed in the raw data (Schneider et al., 2016; Thomas, 2006). A process of general inductive inquiry comes from an interpretive paradigm. Observations and qualitative data collected through dialogue between the researcher and participant is processed and interpreted through generalisations and emergent themes (Schneider et al., 2016; Thomas, 2006). This leads to a condensed summary of raw data, establishes concise links between research questions and findings and can point to the theoretical underpinnings of the experiences shared by participants in the research (Thomas, 2006).

Interviews are a common method for collecting qualitative data and were used in this study. The structure of conducting an interview should be taken into account by the researcher as it can have an influence on the overall quality of the data gathered (Schneider et al., 2016). No matter the formality of the interview, whether questions are pre-planned by the interviewer (structured) or are posed during the interview through themes raised in the discussion (semi-structured), the interviewer should avoid leading questions as this can introduce bias and reduce the quality of the data gathered (Schneider et al., 2016). Furthermore, the researcher must take steps to reduce discomfort or lack of privacy felt by participants and to gain informed consent by the participants to gather unbiased qualitative data (Schneider et al., 2016). It is important that the interviewees feel they are able to truthfully answer questions and fully participate in the discussion through the provision of privacy and comfort as well allowing adequate time for the interview to take place (Schneider et al., 2016). Trustworthiness of data is achieved by attending to the needs of the interviewees and this was taken into consideration when conducting this study.

3.4 Quantitative research

While qualitative research often uses an inductive design of inquiry, quantitative research uses deductive inquiry (Schneider et al., 2016). Quantitative research uses numerical data to test a hypothesis, measure implications of a specific intervention or event, explain phenomena or predict outcomes (Schneider et al., 2016). It is the

traditional scientific research approach that is informed by a positivist paradigm as described previously. Quantitative data are most often collected through structured self-reports; use of questionnaires or interviews using open and closed ended questions, which is correlated to numerical data through scaling techniques (Polit & Beck, 2021). A common technique is referred to as Likert scaling where the degree to which a participant agrees with an opinion expressed in a questionnaire is recorded numerically (Polit & Beck, 2021). Though Likert scales can be difficult to construct, they offer the ability to measure a wide range of attributes and any opposing attitudes can be discriminated quantitatively (Polit & Beck, 2021).

Experimental design, the gold-standard in quantitative research, depends on the application of three major elements; control, randomisation and manipulation (Polit & Beck, 2021; Schneider et al., 2016). In research that involves nursing, many questions cannot be answered using an experimental design as true randomisation or control in the healthcare environment cannot be achieved (Henly, 2016). As a result, research that involves nursing often employs a quasi-experimental design where one of the three elements, usually randomisation, is missing (Polit & Beck, 2021). One type of quasi-experiment is referred to as a time series design where data are collected over an extended period of time during which an intervention is introduced (Polit & Beck, 2021). There are many interpretive challenges to a time series design including threats to internal validity; a specific event occurring between the preintervention and postintervention which could produce a biased result. Despite this, the extended period of time strengthens the researchers ability to attribute changes to the intervention and not to the events themselves (Polit & Beck, 2021). This research initially intended to utilise the elements of a quasi-experimental time-series design in the quantitative section of the mixed methods design, which will be described below.

3.5 Mixed methods research

Mixed method is a broad term used to describe research design involving both quantitative and qualitative methods. A mixed-method approach encapsulates both numerical and descriptive designs in the researcher's quest for a more comprehensive and appropriate data set for their chosen topic (Schneider & Fuller, 2018). Historically, the development of mixed methods was to promote integration between the paradigms

present in qualitative and quantitative (or critical / interpretivist and positivist) research and to promote a more integrative approach (Flick, 2018; Polit & Beck, 2021). Though there is one view that argues the two methods cannot be mixed due to their inherent differences (Bryman, 2016), the benefits of mixed-methods is that it can draw upon the strengths of both and facilitate a more holistic approach in investigating phenomena (Harvey & Land, 2017; Polit & Beck, 2021).

Morse (2010) postulates that a prioritisation framework enables a more thorough exploration of data arising from mixed methods. She distinguishes mixed methods into the weighting of either qualitative or quantitative data or whether they have equal priority. Furthermore, Morse (2010) discusses the importance of timing in mixed methods; whether qualitative or quantitative data precedes the other in a sequential design or whether they are collected simultaneously in a concurrent design.

Some researchers argue the prioritisation of a qualitative phase, which informs the collection and analysis of data in the quantitative phase, increases the strength of the research (Polit & Beck, 2021). However, the equal prioritisation of mixed methods in this approach is appropriate to the proposed questions raised in the research, despite the sequential nature of the design. An equally prioritised mixed methods approach ensured the research was able to: (i) Collect qualitative data that explored the experiences of patients and whānau and relevant staff members empirically through general inductive enquiry; and (ii) Gather numerical data to further explore the experiences of patients and assess the efficacy of implementing a proposed intervention for improving their overall experiences using quantitative data. Furthermore, gathering data using different methods and from different sources also increases the validity of the data and improves the trustworthiness of the research (Polit & Beck, 2021).

3.6 The researcher

The lead researcher in this project completed their undergraduate degree at Auckland University of Technology and Waikato Institute of Technology. After completing their Bachelor of Nursing in 2019, they commenced a new graduate position in a general surgical ward at Waikato Hospital. Now in their third year of practice, the

researcher plans to continue work at Waikato Hospital, developing general surgical specialty skills and focusing on implementing ways of improving the experiences of acute general surgical patients and their family/whānau.

Chapter IV: Methods

If at first you don't succeed, try two more times so that your failure is statistically significant.

Dr. Dallas Warren, 2013

4.1 Introduction

Methods are the systematic description of the strategies or processes employed for data collection and analysis in a research project (Polit & Beck, 2021). The method depends entirely on the research methodology which, as described previously, is the philosophical reasoning behind the research questions, providing the overall basis for a research project. The method must also be descriptive enough to enable the research design to be easily replicated (Polit & Beck, 2021). This research aimed to understand patient and family/whānau experiences of the acute inpatient general surgical stay. It will describe the mixed-method approach utilised in the research; incorporating both qualitative and quantitative data for the purpose of producing more informative findings.

This chapter will systematically describe the research processes involved in this mixed-method design. This will include a description of the research design of the interviews (phase I) and surveys (phase II) and analysis of the population including sampling and research setting. It will then explore the process of data collection for the interviews and surveys and describe the type of data analysis utilised. The reliability and validity of the data will then be briefly discussed, and ethical considerations noted.

4.2 Research design

This research combined both qualitative and quantitative methods through two sequential phases. The first phase aimed to obtain qualitative data through interviews with both patients and key members of their family/whānau and staff members of the general surgical multi-disciplinary team. The second phase initially aimed to explore the quantitative data obtained through surveys of two months of acute patients on their day of discharge, with a T-test comparison between two groups (control and intervention), illustrated in Figure 1. Due to research findings from phase I which will

be discussed in later chapters, the revised second phase instead included the distribution of surveys to patients over a two-month period on or near to their day of discharge, or in the discharge planning phase of their admission, as shown in Figure 2.

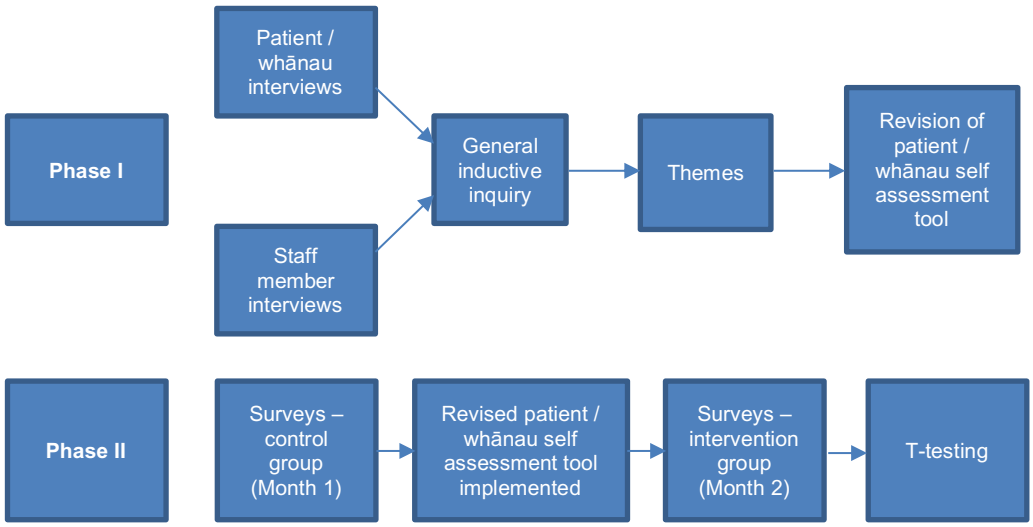

Figure 1: Initial research plan

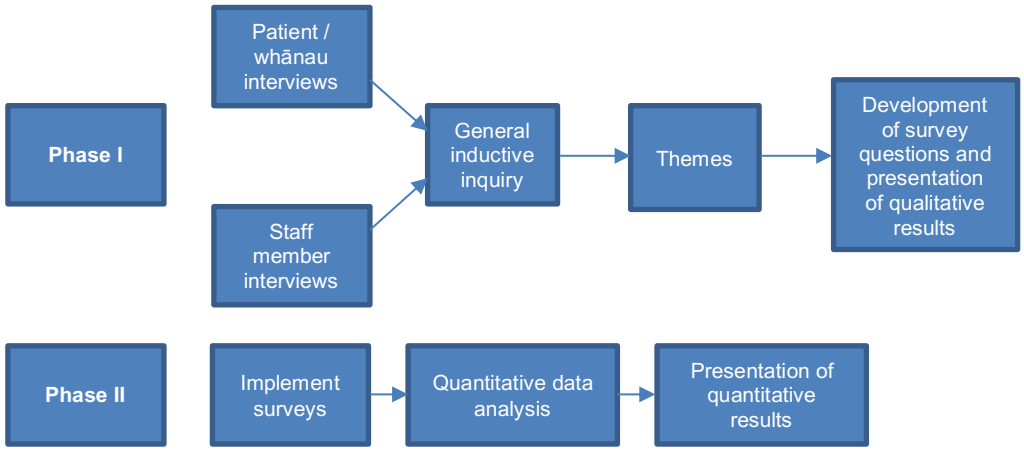

Figure 2: Revised research plan

4.2.1 Phase I – Patient and staff interviews

Phase I utilised general inductive inquiry, as described by Thomas (2006), to identify common themes from both the patient and staff member interviews. The purpose of this approach was to develop a concise summary of the annotated interviews and identify areas of difference in experiences of patients and perceived patient experience by staff members. Themes which emerged from qualitative data were used to assess the efficacy of the proposed patient and whānau self-assessment form from patients' perspectives, and from the perspectives of the members of the multi-disciplinary team. According to Thomas (2006), general inductive enquiry is a key method in establishing theoretical underpinning of experiences shared by participants and establishes clear links between questions and findings in research. Open ended questions were posed in a semi-structured interview style to enable depth of discussion without direct questioning, to reduce risk of bias (Schneider et al., 2016). The objective of the interview process was to identify the views of patients on their acute general surgical stay from admission to discharge. The themes which emerged from the interviews were then used to explore the efficacy of the proposed patient and whānau self-assessment intervention. The purpose of interviews with staff members was, firstly, to identify their views of the acute patient journey in order to compare these with results from patient and whānau interviews. The purpose of interviews was also to further explore the proposed intervention using the perspectives of the multidisciplinary team.

4.2.2 Phase II – Patient surveys

Phase II initially aimed to analyse the differences between survey scores in the acute general surgical population prior to and after the implementation of the patient and whānau self-assessment tool. The survey was initially to be distributed to patients on or near their day of discharge from the ward over a one-month period prior to implementation of the developed tool, and initial plans were then to repeat the survey again for another month after implementation of the tool. As described, according to results from phase I (the patient and staff member interviews), Phase II did not ultimately require implementation of a second survey post intervention. Instead, the survey was distributed over a two -month period with no intermediary intervention. The survey was developed based on themes emerging from the patient and whānau

interviews, literature and key contributors which contained five-point Likert scale statements around their experiences of and views regarding their inpatient stay (Appendix VIII). The use of Likert scale questions enabled the researcher to gather a large amount of raw data on the views and opinions of a wider group (Polit & Beck, 2021).

4.3 Population

4.3.1 Sampling framework

Phase I involved semi-structured interviews with four non-Māori and two Māori patients which occurred on or, or near to, their day of discharge. It also included semi-structured interviews with five registered nurses, three senior doctors and one of each from the dietetic, social work, physiotherapy and occupational therapy disciplines. Patient participants were selected using purposive sampling, identified as those participants who are most likely to benefit the study (Polit & Beck, 2021). Patients were selected non-randomly by the ward charge nurse manager (CNM) having been identified as originally an acute admission (commencing their hospital stay in the emergency department (ED) or acute surgical unit (ASU)), spending one week or greater receiving treatment on the ward, nearing their estimated day of discharge (EDD) and patients were encouraged to invite their key support person to also be present during the interview. Patient participants were excluded from the study if they had at any point during their stay had the lead researcher as their primary RN, in order to avoid bias. The key disciplines represented in the staff interview section were initially approached directly by the lead researcher. The staff participants were then selected according to their discipline's availability and preference of the individuals to be involved in the research. This was a form of purposive sampling, which according to literature is a way of understanding phenomena by intentionally selecting individuals (Creswell & Plano Clark, 2017). Staff participants were selected based on their likelihood to benefit the study and as a representative of the broader group of their discipline.

Phase II of the research intended to involve all acutely admitted patients and their whānau who wished to take part. Convenience sampling was utilised in this phase, that is participants were encouraged by the staff members to participate in the survey

as able, though their participation was voluntary. Convenience samples are non-random but are the most accessible sample as they are based on the participants willingness to participate(Polit & Beck, 2021). Demographic data was also collected including age range, ethnicity, gender and reason in hospital to gain a greater understanding of the sample population.

4.3.2 Setting

The study was conducted in Ward M12, Menzies Building Level 2 at Waikato Hospital. Phase I was undertaken in October and November 2021 and Phase II undertaken in March and April 2022.

4.4 Data collection

4.4.1 Phase I

Phase I of the research, which encapsulates the semi-structured interviews with both acutely admitted patients and health care professionals on the ward, used a phenomenological and observational methodology. Phenomenological methodology is used by focusing in the semi-structured interviews on describing, understanding and interpreting the patient participants lived experiences within the hospital environment. Observational methodology is used in the semi-structured interviews with physicians, where observational data of the care provided is shared. Morse et al., (2010), uses the language of a QUAL (phenomenological) + *qual* (observations) for similar designs. Data collected in Phase I used the general inductive inquiry to establish themes and identify differences between the two groups and in order to revise and assess the value of the proposed patient and whānau self-assessment tool.

Prior to participating in the interview, patient and staff participants were provided with information sheets. If the participant agreed to being involved in the study, written consent was obtained in writing prior to the interview. The interviews took place in a private meeting room on the ward and were semi-structured in that they followed a loose format on questions with general prompts. Interviews last up to 30 minutes duration and were conducted by the lead researcher. The audio was recorded and later

transcribed by the lead researcher. Refer to Appendix IV to VII for the patient and staff participant information sheet and consent forms.

4.4.2 Phase II

Initial plans for phase II included distribution of surveys to two groups pre and post a patient and whānau self-assessment intervention, which was a quasi-experimental time series design. As discussed briefly, Phase II did not implement the survey to a post intervention group instead utilising a single survey which was distributed over a two-month period and did not include the self-assessment intervention.

Phase II formed the quantitative component of the study where patients who participated numerically identified their perceptions of their time as an inpatient. The survey consisted of 30 statements with a 5-point Likert scale response. The survey was distributed to all acute patients on the general surgical ward over two months on the day of their discharge or in the discharge planning phase. An acute patient was defined as a person who had required admission to the general surgical ward emergently or without prior planning to receive treatment from any number of the general surgical specialties, including trauma, upper gastrointestinal, lower gastrointestinal, hepatobiliary or breast. Treatment was defined as any operative or non-operative procedure, including tests, medications, therapies and monitoring. Participants were asked to complete the survey anonymously on or near to their day of discharge and were invited to do this alongside their family or key support person. Participants were encouraged to spend up to 15 minutes completing the survey. For informed consent to be maintained throughout, patients were advised they were welcome to opt out at any point and that they did not have to answer any questions they felt uncomfortable answering.

The survey was undertaken by the lead researcher who was working as a Registered Nurse on the ward during this time. The surveys were distributed by the lead researcher to patients in the ward who had not had any previous interactions with the lead researcher, that is the lead researcher had never been allocated as the primary nurse for the participants. Participants were approached directly by the lead researcher who asked them if they would be interested in filling in a brief survey on their

experiences of being a patient on the ward. Prior to approaching the participants, the lead researcher spoke with the primary registered nurse allocated to the person to enquire about if they believed it was an appropriate time to approach them. If those approached were not interested or declined to participate, they were not asked again and were thanked for their time. If those approached responded positively when asked if they would like to participant, they were given the survey and instructed to complete the survey as soon as they were able to and before the same time the following day. The lead researcher then returned to collect the surveys the following day, and if not completed the participants were not asked again to participate to ensure participants did not feel coerced. The survey included a brief description of the inclusion of results from the surveys in a research project on patient experience as well as confidentiality. By their willing completion of the survey, participants were consenting to being involved in the research and were advised they were not required to write their name in order to maintain anonymity.

4.5 Data analysis

The mixed-methods design implemented in this research provided a range of both qualitative and quantitative data. Analysis of this data employed certain methods, depending on the qualitative or quantitative approach, to ascertain inferences. The quantitative portion of the research, the patient and staff member interviews, employed the use of general inductive inquiry to develop themes which emerged from raw empirical data. These themes were then used to sequentially develop the quantitative portion of the research; the patient experience surveys. The quantitative components used descriptive analysis and chi-squares to determine the findings, which will be further expanded upon.

4.5.1 Phase I

While there are many approaches for analysing qualitative data, such as phenomenology, grounded theory, narrative and discourse analysis, an approach that is becoming more widely used is that of general inductive inquiry (Thomas, 2006). The purpose of a general inductive approach is to condense broad empirical data into summarised themes, establish clear links between the objectives of the research and

the themes and provide a framework for experiences evident in the themes (Thomas, 2006).

The general inductive inquiry was used in this research to analyse the qualitative data that was gathered in the patient and staff interviews. The interviews were all recorded with consent obtained from the participants and were transcribed by the lead researcher for further analysis. From the raw data emerged key themes from each group of participants which were then described and utilised in development of the quantitative phase of surveys which followed.

4.5.2 Phase II

Data in phase II intended to use a quasi-experimental interrupted time-series design, described as one of the stronger alternatives to a randomised experiment (Duncan & Duncan, 2004). The pre-intervention assessment or baseline prediction, in a time series design provides researchers with the means of statistically projecting the level and slope of post-intervention assessment (Thyer, 2012). The extent to which the post-intervention observations deviate from the pre-intervention or control group observations may lead to the ability for researchers to infer an actual effect from the intervention (Thyer, 2012). However, due to results from the qualitative section which will be discussed further in the findings chapter, a descriptive research design was used for Phase II instead. Descriptive research seeks to identify systematic information about a phenomenon, whereby hypotheses are tested and either confirmed or rejected based on numerical results (O'Dwyer & Bernauer, 2016).

Participants indicated their views of their experience of their inpatient surgical stay through a survey with the use of 5-point Likert-scale questions. The results from the Likert scale surveys completed by patients were entered into a data sheet and analysed using descriptive statistics and chi-square values which enabled the researcher to summarise data. They were then graphed in order for the researcher to use visual analysis for observing inferences particularly between demographics. Both central tendencies, including mean and median were calculated to assess data averages. The standard deviation was also calculated to measure variability of data.

4.6 Reliability and validity

Reliability of quantitative measurement is the extent to which scores are free from error and is a major criteria in assessing the quality of the data (Polit & Beck, 2021). In essence, for quantitative data to be truly reliable, it must be replicable in other situations of the same context and have little variation in measuring stable attributes for an individual (Polit & Beck, 2021). Validity is the degree to which an instrument is measuring the construct it intends to measure (Polit & Beck, 2021). Reliability and validity of the qualitative data in this research was achieved by data saturation, that is the quantity of interviews conducted was due to similarity in ideas and themes shared by individual participants. If interviews had produced vastly different data, further interviews would have been conducted to ensure outliers were ruled out. Validity in the qualitative component of the work was also improved through the use of an independent researcher to separately code the qualitative data, and similar codes were generated. Reliability and validity in the quantitative data was enabled by the amount of time allocated and volume of surveys that were completed, as literature states that research containing a larger number of data points increases its credibility in justifying a causal inference about the effect of the intervention (Thyer, 2012).

4.6.1 Data triangulation

Many scholars claim that triangulation provides the rationalisation for the use of mixed-methods (Mertens & Hesse-Biber, 2012). Creswell (2015) argues that triangulation ensures convergence of results between any number of data sources, samples or methods to generate better understanding of phenomena. Ultimately, the concept of triangulation is complementary to mixed-methods as it negates any bias (Creswell, 2015). In this research, data was triangulated in its use of mixed methods for the purpose of enhancing credibility. Other literature emphasises a version of triangulation as taking into account the theoretical backgrounds of both the qualitative and quantitative research designs in order to strengthen the methods and results of both types (Flick 2006). In this research a mixed-methods approach encompassed triangulation as this was appropriate for the theoretical backgrounds assumed in the research questions. Furthermore, triangulation of data occurred with utilisation of multiple sources in the intended development and in reviewing the efficacy of the proposed self-assessment tool. Analysis of the views of both the service users

(patients) and service deliverers (multi-disciplinary team members) combined with literature helped to ensure reliability and validity of the study.

4.6.2 Kappa test

In order to reduce acquiescence bias, the tendency for study participants to select positive answers or any random answers leading to misguided inferences (Polit & Beck, 2021), a kappa test was performed. Reverse questions were implemented in the survey in order to mitigate risk of acquiescence and improve internal validity.

4.7 Ethical considerations

This study was conducted by researchers from the University of Waikato in partnership with Waikato Hospital and data was collected from a general surgical ward at Waikato Hospital. This study received ethical approval from the University of Waikato Human Research Ethics Committee on 14th June 2021 (Approval code HREC(Health)2021#34) which can be found in Appendix III. Approval was also given by the Waikato District Health Board Research Office and relevant clinical directors. All patient and staff participants in the semi-structured interviews were given adequate information about the research prior to the interviews in the form of an information sheet (Appendix IV and VI). Consent forms were signed by the patient and staff interview participants and safely retained by the researcher (Appendix V and VII). Discharge survey participants also received information regarding the survey and by providing their answers they were consenting to being involved in the study (Appendix VIII). Furthermore, all participants were informed of their right to confidentiality and right to withdraw from the study at any time and interview participants were informed of their right to review their answers from the interviews at any time within three months after the date of the interviews.

4.8 Methods summary

The mixed-method design utilised in this research was favourable for the purposes of incorporating qualitative and quantitative data. The equal prioritisation placed on both approaches, whereby the qualitative approach preceded and informed the quantitative, led to a strengthening of both. Data collection in Phase I consisted of semi-structured

interviews with patients (both Māori and non-Māori) and Waikato Hospital staff members of different disciplines in the general surgical speciality. Interviews from both groups were recorded and transcribed and then analysed using the general inductive approach to outline key themes. These themes were combined with literature and were intended to inform the revision of a proposed patient and whānau self-assessment tool for use in Phase II, though instead interpreted the efficacy of it. Phase II was initially formatted as a quasi-experimental time series design, however after analysing results from the qualitative phase, a descriptive research design was instead used. All patients over a two-month period were offered to be involved in completing a 30 question, five-point Likert scaled survey on their acute inpatient experience, on their day of discharge. Collectively, the qualitative and quantitative data provided information on the perceived experiences of patients and perception of staff on patient experiences, offering significant results which will be further described in the next chapters.

Chapter V: Results

Nothing has such power to broaden the mind as the ability to investigate, systematically and truly, all that comes under thy observation in life.

Marcus Aurelius, 121 AD - 180 AD

5.1 Introduction

The combination of qualitative and quantitative in mixed method research can illustrate an extended understanding of a phenomena being studied (Mertens & Hesse-Biber, 2012). The results of this study, both qualitative and quantitative data are collectively presented to address the research questions presented in Chapter II.

In order to effectively explore the research questions, a mixed methods approach was utilised which incorporated two phases as described in the methods chapter. The patient and staff interviews in phase I utilised a general inductive approach in the analysis, a process by which empirical data is sifted through and coded categorical to identify significant themes for a succinct presentation of results (Thomas, 2006). The three themes which emerged from the qualitative analysis will be outlined. The data obtained from the discharge surveys in phase II will also be described. The quantitative phase of the study explored the data utilising a descriptive design and statistical analysis occurred including the use of mean for averages, standard deviation for variability, chi-squares and p-values were calculated to test for statistically significant differences.

Part 1: Qualitative analysis

5.2 Introduction

General inductive enquiry is a key method in establishing theoretical underpinning of experiences shared by participants and establishes clear links between questions and findings in research (Thomas, 2006). After all interviews were conducted and transcribed and a general inductive approached was employed in the analysis of data. The interviews were audio-recorded and transcribed using online transcription software Otter.ai and transcriptions manually edited to ensure accuracy. The approach of semi-structured interviews was utilised for the purpose of providing guidance to participants and open-ended questions limited bias and further explored participants perspectives (Schneider et al., 2016).

5.3 The sample

A total of 18 semi-structured interviews were conducted including Māori patients (n=2); non-Māori patients (n=4); senior Registered Nurses (RN) (n=5); general surgical (GS) registrar (n=1); GS fellow (n=2); Physiotherapist (n=1); Occupational Therapist (n=1); Social Worker (n=1); and Dietician (n=1). Demographics and a summary of both the staff and patient interviewees can be found in Tables 1 and 2.

Table 1: Staff participant demographics

Participant	Gender	Ethnicity	Role	Experience
1	F	NZ European	Senior RN	40+ years
2	F	NZ European & Māori	Senior RN	30+ years
3	M	NZ European & Māori	Senior RN	10+ years
4	F	NZ European & Māori	Senior RN	20+ years
5	M	NZ European	GS Fellow	15+ years
6	F	NZ Chinese	GS Senior registrar	5+ years
7	F	NZ European	Dietician	10+ years
8	F	NZ European	Physiotherapist	5+ years
9	F	NZ European	Occupational therapist	5+ years
10	F	NZ European	Social worker	20+ years
11	F	NZ European	Senior RN	5+ years
12	M	NZ Chinese	GS Fellow	15+ years

Table 2: Patient participant demographics

Participant	Gender	Ethnicity	Age range	Weeks in hospital	Presenting complaint / diagnosis	Procedures / surgeries
13	F	NZ Euro	50-55	1-2 weeks	Abdo pain / Bowel cancer	Laparotomy / bowel resection
14	F	NZ Māori	40-45	9-10 weeks	Abdo pain / Necrotising pancreatitis	Multiple drain insertions, distal pancreatectomy
15	M	NZ Euro	75-80	2-3 weeks	Abdo pain / Cholecystitis	Cholecystectomy
16	M	NZ Māori	25-30	7-8 weeks	Motor vehicle accident / Multiple fractures, bowel perforation, concussion	Multiple including orthopaedic and general surgical - laparotomy
17	F	NZ Euro	65-70	3-4 weeks	Abdo pain and severe sepsis due to cholecystitis	Laparotomy, cholecystectomy and multiple drain insertions
18	F	NZ Euro	40-45	2-3 weeks	Fall from horse / Multiple fractures, pneumothorax	Multiple including orthopaedic and general surgery

5.4 Thematic analysis

Utilising Thomas (2006) general inductive approach, raw data was read in detail by the lead researcher. The data was then separately read by another independent researcher and similar codes were established between the two. Once the development of new codes was exhausted, they were then divided into 16 key categories, as seen in Figure 3. From the categories, three themes were then developed as seen in Figure 3, which will be discussed in detail in this chapter. These themes were then integrated into the phase II quantitative patient surveys and were considered in the decision of whether to implement the proposed patient and whānau self-assessment intervention.

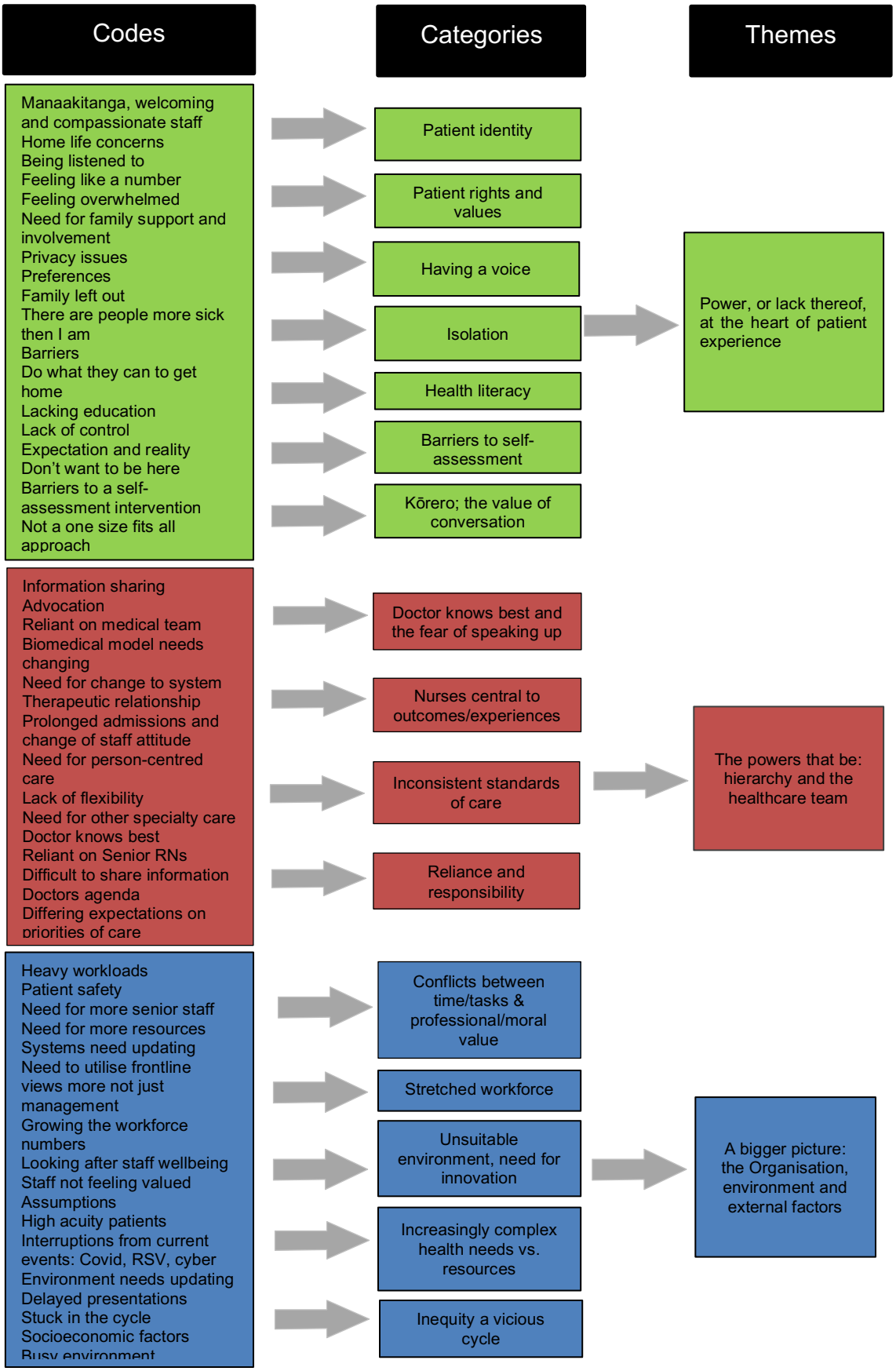

Figure 3: General inductive theme development from interviews

5.4.1 Power, or lack thereof, at the heart of the patient experience

The first key theme involves the notion that being a patient fundamentally changes the identity of the person who is in hospital and the receiver of health care. The nature of being a patient permeated the discussions with participants. Many took a baseline approach to their answers that presupposed the patient as being in a more vulnerable or less powerful position then the members of the health care team. One staff participant verbalised the idea that many health professionals see patients as their acute condition only and can fail to see them as a whole person, subsequently dehumanising the patient. The staff participant also identified the importance of seeing the person receiving health care from where they come from, an important aspect particularly for Māori worldview which celebrates community; their whānau, hapū and iwi, an identity that is paramount to a person's wellbeing.

> *To see them for a person and where they come from. Not for an abscess, not for a cellulitis or a necrotising pancreatitis. But actually, they're a person… be more mindful and see them as a unit, not just the person that's in with a condition.*
>
> Staff participant 3, senior RN

Alongside the paradigm of patient empowerment and the importance of bringing personhood back to the patient identity comes both the upholding of the rights and values of the individual. One patient participant described the way in which staff learned to uphold their values, which was very appreciated by them and increased their feelings of control over what was happening to them.

> *Every day at 7pm my whānau got together over facetime to do karakia… at the start a few came in and interrupted us but once they got the idea of that's how we wanted to do things mostly they started respecting that space... we got back some mana during that time.*
>
> Participant 16, patient

Though not all participants reported altogether positive experiences with some reporting occasional episodes where they experienced sub optimal care (described as behaviour from staff which lacked kindness, compassion, respect), and were subsequently disempowered. These negative experiences were intertwined with examples of staff actions that focused entirely on the task instead of the patient. One

Māori patient participant describes feeling pressured by a nurse to get out of bed when she was in pain, how she perceived the nurse saw her and how this made her feel. In this instance, the negative attitude of the nurse had a directly negative impact on the patient's experience.

> *I know I needed to get up, but I was really sore. I think she thought I was just being lazy. I think she knew I was in pain and then made me get up anyway. I thought I'd never be able to get through it; I had lost so much energy. Made me quite hoha.*
>
> Participant 14, patient

Another key finding from interviews surrounding the theme of powerlessness for patients was their perceived difficulty in having a voice or being able to speak up to voice their needs. One patient participant described their difficulty in asking for help and feeling like a burden, and often waiting for an extended period of time for needs to be met. The patient describes feeling it difficult to ask for help for a range of reasons including not wanting to be a burden, not liking to be dependent on others, and feeling that the nursing staff were too busy. This was a common notion evident throughout the interviews from both staff and patient participants.

> *I don't like asking for things but sometimes it was a bit hard to get what I needed… felt like I was really dependant but didn't want to be a burden. All the nurses seem really busy running around… it's hard to get help when you need it.*
>
> Participant 16, patient

A staff participant also described the power dynamic for patients in that they often conform to what health professionals say or plan for them despite their own perceptions or feelings, as the power lies with the health professional. She also described the difficulty for patients in sharing their perspective due to the perception of staff being too busy.

> *They're just going to nod and go yep and just get on with it because they want to do what the doctor says, cause that's who has got the power and is always right. They don't really want to or feel they can have a say. And everyone seems to have too much to do to pay them the extra attention.*
>
> Staff participant 3, senior RN

One staff participant described a cohort of patients who experience severe isolation as an acute surgical patient, and the importance for staff to identify and improve the supports for these individuals. She described the powerlessness of these individuals and their need for greater supports to be put in place than acute surgical patients with direct access to family support via the phone or in person.

> *It's important for us to identify those vulnerable individuals, the ones with no support or family around. When you ask "when did you last have a visitor or talk to someone on the phone?" and they say I haven't, it's those ones that need more support from us and they need to be identified earlier, and when it's only identified when it comes to discharge planning it becomes very tricky.*
>
> Staff participant 1, senior RN

Another staff participant also described the isolation of the older person in the acute surgical setting, and an experience of being overlooked in the busy environment.

> *They're the ones that get swept through the cracks… we often just send them by themselves to theatre or scans or procedures, even frail old ladies … they're being left there by themselves for quite a considerable amount of time. They're vulnerable and isolated.*
>
> Staff participant 4, senior RN

Another staff member also suggested one key reason this was such a pronounced issue specific for acute surgical patients, suggesting a need for change in this area. She describes the risk for isolated older people being lost in the system and their need for greater supports and the identification of the severe and often complex acute general surgical interventions that are planned for patients without their appropriate level of understanding.

> *It's not the medical wards where things run a bit more slowly… people with the chronic conditions might be having an acute exacerbation which they've had many times before, so they have an idea of what's happening. There's less understanding or familiarity [acute surgical admission], with scans and procedures and operations sometimes happening quickly without much warning. We need to be able to support vulnerable people more otherwise they get lost in the system.*
>
> Staff participant 11, senior RN

While much of the participant discussion emphasised the value and need for patient empowerment, not all participants took the perspective that empowering patients was an altogether positive thing. One senior doctor identified a more complex outcome of the empowered patient. The doctor described that patients with a high level of health literacy and who are more empowered to speak up for themselves, often demanded more and were more readily accommodated.

> *Generally, people that know a bit more about what they need… can ask for more and then we always feel we have to accommodate them. But there are some people who don't know as much and they just sort accept things as they are… you can tell that they don't really understand what's going on. Those are the people who often need our time more.*
>
> Staff participant 6, senior registrar

One example, a patient with high health literacy level took up a great amount of resource due to a number of highly technical questions they asked, with the medical team that day spending half of their time on rounds with that patient and their family. The doctor described this as being a common occurrence, and that it actually made patients with lesser health literacy potentially miss out on care as the team tried to accommodate the person who was asking more. This is one dichotomy of the empowered patient that demonstrates a challenge for healthcare; while we strive for patient empowerment, we may face inequitable outcomes in practice.

> *We spoke with a patient for close to an hour... This was half of our rounding time, and we had thirty other patients to see... Because she was knowledgeable about her health… it was a lengthy discussion. Though we encourage patients to ask questions… if everyone was like this patient, we wouldn't have the time or resources to get people to theatre.*
>
> Staff participant 12, fellow

Many of the interviewees when asked about the notion of a patient and whānau self-assessment intervention for the day of admission queried the logistics and identified many barriers to this for patients and whānau. Generally, participants agreed there was a good intention behind it, however barriers appeared to outweigh the potential positive gains. Barriers to the patient and whānau self-assessment were indicated as patients valuing conversation instead of a formal tool or process, being too acutely unwell to answer questions, lack of health or general literacy, misunderstanding the

need for information sharing, lack of ability for staff to follow through with preferences due to heavy workloads and lack of buy in from staff.

Many participants, both staff and patients, described a major barrier in the ability for patients to be able to engage with a self-assessment intervention on admission due to being acutely unwell, though accepted that family having a role to play would be beneficial.

> *In terms of collecting information it's pretty hard cause… I was pretty messed up when I arrived so maybe if whānau could be involved in that initial information stuff that would be good.*
>
> Participant 16, patient

> *They're often acutely unwell and don't want to do that. Like if I was really sick, you know, you're trying to get me to do an assessment tool, and they've come in with acute abdominal pain, I might just not answer it, or I might not answer it accurately.*
>
> Staff participant 7, dietician

> *…having the person in the condition where they can speak to you cognitively or have the mental capacity to be able to forward think. Then have their family or have some way of contacting because we know that not all people have the same phone number all the time.*
>
> Staff participant 3, senior RN

Other staff participants described barriers to the patient and whānau self-assessment. Lack of health and general literacy and misunderstanding the need for the information gathering was a key insight and practical barrier as well as inability to gain realistic information from patients.

> *I'm thinking about just being conscious of people that are illiterate. How do we do that so that they don't feel shame.*
>
> Staff participant 2, senior RN

> *I think one of the biggest barriers for some patients would be suspicion ie. 'Why do you want to know this, it's none of your business'.*
>
> Staff participant 1, senior RN

In relation to the patient and whānau self-assessment, one staff participant described unrealistic expectations of families and this being a potential barrier in the self-assessment. They alluded to a palliative care context, further describing the difficulties faced in having conversations about older individuals moving into aged care facilities or transitioning to the main goal of care being comfort. It was clear in this discussion that the health professional preferred the use of conversation rather than a self-assessment style of gathering information.

> *Just maybe not getting realistic information from people or not really understanding or engaging with it. And family being unrealistic. You get family who expect mum or dad just to live forever, and never have any problems. And that's something we do have to sort of overcome in our conversations with them.*
>
> Staff participant 5, fellow

It was also discussed by a few participants the issue of self-assessment or giving patients and whānau the ability to write down what they need to keep staff accountable for this, in that in reality patients and whānau may still be let down or disappointed by the outcome as they may not receive what they have asked for.

> *I'm going to ask you to write whatever you want in here. But I can only provide you with this… If that's the case, well isn't it better to give them a few options and say which one is best for you? Otherwise we're going to let them down.*
>
> Staff participant 3, senior RN

> *I guess barriers would be unpredictability and time… if I have to take a patient to theatre, I'm not going to have time to update another patient's family. So it would have to be flexible. I would feel bad to have kept the family waiting for a phone call when they're said they want a call at this time. It might not actually be possible.*
>
> Staff participant 12, fellow

A few of the allied health staff members also pointed out the lack of buy in from staff that would be likely if a patient and whānau self-assessment intervention was to be introduced.

> *Having a standardised approach like a tool or self-assessment or whatever that we can refer to, sounds like a good idea, so long as people are utilising it. But it takes a lot for things to actually get utilised.*
>
> Staff participant 8, physiotherapist

> *So if we get them to do self-assessment, who's going to read it? What's going to happen with it? How are you going to get the buy in? I mean, yes you can do a tool. Who's going to look at it and where's it going to go?*
>
> Staff participant 10, social worker

All interviewees agreed that establishing of immediate supports for patients was an imperative, however many believed this was more appropriate as a non-formal conversational format instead of a physical intervention or tool. All patient interviewee's they would prefer having time for conversation over a self-assessment or formal process.

> *I think just when staff are able to take time to sit and have a talk with you about what's on your mind. That's probably the times I've valued the most when nurses want to have a conversation with you about what's on your mind.*
>
> Participant 17, patient

> *When I could properly hold a conversation, someone could sit down and kōrero with me and my whānau about what we need. That's the best thing for us.*
>
> Participant 16, patient

Overall, it became evident in the patient and staff interviews that feelings of powerlessness, isolation and lack of control as an acute surgical patient is are common and were heightened by staff member's inability to provide person-centred care, with reasons for this being the time-poor environments, heavy workloads and current attitudes. While interventions to rectify this are indicated, it was also noted in the findings that the originally suggested patient and whānau self-assessment intervention was not appropriate for the acute general surgery ward in its current climate. This was due to several reasons including lack of capacity for staff to implement it or accommodate people's preferences consistently due to the burden of acute physical health care needs. The pursuit of developing and implementing an acute patient self-assessment intervention for this research context was therefore concluded. At present

it is the face-to-face conversation with staff about what their values, preferences and needs are that appears to be most esteemed by patients. Patient participants expressed their perception of improved experiences by identifying times and examples of when staff were able to provide this type of communication.

5.4.2 The powers that be; hierarchy and the health care team

The second theme was defined as the powers that be, referring to a perception that evades healthcare of the hierarchy of medicine and the biomedical model of care. This historical model, which places doctors at the centre of the health care team with the primary focus being diagnoses and treatment of physical illness, seldom lends room for enhancing patient experience. Generally, staff who were interviewed reported a negative view of this biomedical hierarchy. Many staff were frustrated and used examples of times where their job was complicated by the perceived limiting processes of the biomedical model. Other discussions with participants within this theme were responsibility and reliability of each role (the doctor, the nurse and the patient) and perceived inconsistent standards of care by staff and patients.

Freidson's concept of medical paternalism and the doctor's hierarchy over a person's health within the bounds of the biomedical model, as discussed in the prior literature review, was an underlying motif in the discussions with participants. One participant referenced the biomedical model directly and reported her belief that this needed changing, though reported the difficulties faced in revitalising it.

> *I think we have to particularly look at the medical model of care. I think we need to change the whole model and we're not going to change it overnight.*
>
> Staff participant 2, senior RN

The encouragement of patients to engage in their health care has been vigorously studied and conclusions drawn that an engaged patient is more likely to have positive outcomes (Timmermans, 2020). One patient participant reported they would do whatever the doctors recommended, without regard for their own personal wants or needs or ability to decide for themselves. This view places the patient as the passive recipient of health care, and though it may often be a baseline stance of patients, it

has not been found to improve patients engagement or outcomes (Timmermans, 2020).

> *When you're older, you just do what you have to do... You just sort of forget about your own dignity. I can imagine some people may be really uncomfortable with it, but they might not say.*
>
> Participant 17, patient

The existence of hierarchy particularly in the medical profession and maintenance of autonomy of senior medical officers was alluded to throughout many of both staff and patient interviews. Many participants described the culture of the general surgical ward round as a potentially isolating and disempowering experience for many, with particular concern raised for patients of an older age and more frail condition.

> *You know, they pull the curtain across, the big group of them crowd around. She's over there and quiet and she's quite poorly, she's probably overwhelmed or just not even really knowing what they're saying.*
>
> Participant 13, patient

Literature reports on the therapeutic relationship as central to positive clinician-patient experiences and includes the characteristics of therapeutic listening, responding to patient emotions and unmet needs and keeping the patient at the centre (Kornhaber et al., 2016). One staff member spoke about their thoughts on the culture of the general surgical doctor's round, describing its negative dynamics and emphasising the importance for health professionals to develop therapeutic relationships with patients. The staff member shares his perspective that the current style of ward round does not readily enable general surgical doctors to develop therapeutic relationships with their patients. He also explores the idea that doctors rely upon rapport built by nurses.

> *Infrequent, unprofessional, intimidating. And not very private and confidential. To put it bluntly… [you need to have] that relationship with people so you can actually have those important conversation with them… [instead] They're leveraging off our therapeutic relationships with patients.*
>
> Staff participant 3, senior RN

Staff participants from the multi-disciplinary or allied-health team also reported views that described the general surgical doctors' ward round as being intimidating, unfriendly, and unhelpful for patients in their understanding of what is happening.

> *My overall impression is they don't spend any time with the patient. They generally don't explain things simple enough for the patient to understand or they don't explain at all and they often don't allow time for the patients to ask questions. It can be quite intimidating.*
>
> Staff participant 9, occupational therapist

> *The doctors often go in and then they think that they've explained it… the patient's nodding and agreeing with them, but when I come in later and spend a longer time with the patient… they'll say I don't understand the plan or no one's telling me the results and they can be quite anxious and overwhelmed.*
>
> Staff participant 7, dietician

In agreement with other participants, all senior doctor interviewees described ward rounds and their function as entirely for the benefit of assessing, diagnosing and treating their patients and to implement and evaluate their plan. The language used was biomedical minded, though all interviewees insinuated they disliked that this was all they could achieve during this short time they had. The doctor participants all reported they often wished they could do more for their patients including updating family members and taking a more patient-centred approach.

> *Sometimes I feel like I do patient care really well. I sit down with the patient and really engage with them about what's happening for them. Then I have times where I've got 40 patients to see in only two hours and then I just have to tell them "Okay, today you're going to get a CT…" and then leave. You do feel like you weren't able to provide great care how you would like to provide it.*
>
> Staff participant 6, senior registrar

One senior RN participant also spoke about the doctor's perception of rounds as being only for them to plan care. She alluded to the misunderstanding, and subsequent disappointment caused by this, from the wider health care team or the patient themselves. She describes the differing expectations that exist on the purpose of the doctor's round though reported the difficulties this leaves for patients to properly converse with doctors and understand their plan of care.

> *If you talk to medical teams, they'll often say, these aren't meant for patients. These are for us to plan our care. We have these big expectations of them [the ward round], but that's what it's about. So, there isn't really anything that is planned for patients to really get their questions answered or be able to have a proper conversation with them.*
>
> Staff participant 2, senior RN

Another senior RN also describes this notion from the patient's perspective, explaining her belief of the differing expectations of what a ward round should be and what it is currently. She describes the general surgical ward round as being the pinnacle of the patient's day and reports frequent disappointment experienced by patients when they have unanswered questions.

> *It's like the pinnacle of their day, having the doctor come… they can find out what's happening. But then people are always disappointed cause it's not what they expected… they still don't understand.*
>
> Staff participant 11, senior RN

A number of staff members also reflected on the need to do things differently, to trial innovations and different strategies to improve the current system. One staff member contemplated the idea of changing the structure and culture particularly of the ward round to better suit the patient and their family.

> *We change it around so actually the patient's told: each day we're going to have a daily catch up together with the medical team, the nursing team and yourself and your whānau are invited, and we'll make the plan together.*
>
> Staff participant 4, senior RN

It was emphasised by many participants how influential nurses can be in a patient's overall experience as well as their centrality to patient outcomes. Many participants agreed a nurse with a positive attitude who was present at important times for patient throughout the day and actively involving them, improved their overall experience. Participants described how nursing presence at bedside rounds was particularly beneficial, however also alluded to the challenge for nurses to be present during rounds due to heavy workloads.

> *It was really helpful when the nurse can be there when the doctor's visit. Wasn't all the time because they can be quite busy but felt like they made sure my questions got answered. Often, you forget what you wanted to ask.*

Participant 18, patient

> *If you're actually able to be there with them during the round, then for the rest of their day, you've got the empathy in that relationship. I find it's really hard to encourage staff to prioritise that time to be there. So often you can't be there because the workloads are too heavy.*

Staff participant 1, senior RN

Both nursing and patient participants discussed positive implications of nursing handovers at the bedside when a person-centred approach was taken.

> *They feel like they've been looked after and that someone cares, in the sense that they may have met this person eight hours ago… but they're able to tell them what each inch of their skin looks like, where their dressings are and what they look like, what happening in the next few days.*

Staff participant 3, senior RN

> *The ones that did it well made me feel like I was really involved, asked me questions and asked me to share my opinion of the day and things… They didn't just talk to each other about me and say lots of medical jargon but actually it was more like we were all a part of the conversation.*

Participant 16, patient

In contrast, there were some who noted the inconsistencies of bedside handovers and pointed out the negative attitudes of registered nurses as a reason for this.

> *I don't think staff involve patients much. I have witnessed that it's very inconsistent. We have a duty to make sure we keep our patients safe, but I think we forget about our own safety as well. A lot of it comes down to attitude.*

Staff participant 1, senior RN

> *A lot of the time the two nurses stand there and just flick through the chart without the patient even knowing what's happening. The one handing over is over it after a long shift and they just want to get home. I think they don't have the energy to engage with the patient.*

Staff participant 4, senior RN

Concern over consistency of care being provided and nursing attitudes was raised by a few participants and could be a reflection of both the level of staffing and heavy workloads. One staff member raised concern over motivation and attitudes of staff toward completing basic patient-centred assessments, such as establishing who the patients key support person is. One study found that nursing attitudes were key in the delivery of patient care, and that negative attitudes resulted in poorer outcomes (Haskins et al., 2014). The study found that nurses that felt positive toward patient care were often for altruistic reasons, while those who felt negatively did so due to staff shortages, high patient loads, feeling unsafe and lack of managerial support. The study recommended all health systems regularly assess nursing attitudes and adequately delivered on staffing and support issues to ensure patient care was not compromised (Haskins et al., 2014).

> *There's a lot of bad attitudes out there and it shows. I think patients can be subjected to a lack of motivation to get the key information that's really needed and just takes a quick conversation. Establishing who is their key support person is and connecting with that person is not prioritised by staff. I think people are a bit too burned out to really take the time for that sort of thing.*
>
> Staff participant 11, senior RN

Another staff member articulated the high acuity of the ward and the inability for staff to engage in actions that promote patient-centred care. She hints at the exhaustion and burn out experienced by many staff and lack of capacity to consistently provide holistic care.

> *It's the time constraints. We're actually just running off our feet most of the time. It's such a busy area and so many outside staff often don't realise that. Sometimes our staff just aren't able or willing to actually go the extra mile for the patients as they know it's going to exhaust them. I think that's the hardest thing. They want to make sure people get all their needs met but they physically can't spare that extra time.*
>
> Staff participant 1, senior RN

Staff members spoke at length about the conflict of who's responsibility it is to keep the patient and their family informed or updated about the patient's status. It was insinuated by most that the ideal candidate to keep the patient and family informed

were the senior doctors particularly in regard to the life changing elements of care, namely surgical procedures. Smaller less life-changing updates were generally regarded as possible to be shared by other less senior members of the team, namely nursing staff, with regards to day to day interventions.

> *If it's something important or if we know it's going to affect their life, we will try to properly inform them. If it's something small, like an ultrasound or blood test, we don't always explain exactly why we're getting those things, but the nursing staff will usually provide them a reason or talk to them a bit more about it and answer their concerns.*

Staff participant 6, senior registrar

One Senior RN describes the reliance on the expertise of house officers and the responsibility they hold in patient safety and escalating patient deterioration. She describes a tension that exists between RNs and house officers and offers a number of suggestions as to why escalation may not occur promptly, such as being too self-sufficient or being afraid to escalate to their superiors. Limiting escalation of concerns to senior colleagues was a reason noted by junior doctor participants in a 2014 study due to self-reported fear of criticism or conflict with their superiors (Rotella et al., 2014). This suggests it is the hierarchical structure of medicine that leads to lack of support for junior doctors which needs to change.

> *It all relies on them to keep everything together… quite often they don't escalate well… or maybe they're just too scared to escalate to their seniors. It's up to them sometimes to decide whether the consultant or the Reg needs to be involved or not. There can be a lot of tension for RNs in relying on them… we often know exactly what the patient needs but the house officer doesn't act on our recommendations.*

Staff participant 11, senior RN

Another senior RN participant also described the difficulties faced by house officers in trying to keep up with the heavy demands of the role. She then highlighted her perspective on the need for change to be made with this. Professional hierarchy, occupational stress, emotional labour and taking distress home were key findings implicating the mental health and well-being of junior medical officers in a recent Australian study (Petrie et al., 2021).

> *I would like to see the medical team rather than having the consultant at the front and then the long troupe. Why aren't we looking at this better so that, rather than the poor*

> *house officer following that consultant around every patient, then coming back to finish every discharge, why don't we have it better set up? It's unsustainable for them.*
>
> Staff participant 2, senior RN

All findings within this theme highlight the challenges faced by health professionals working in an environment that has been shaped by centuries of traditional hierarchy-based health care roles. All staff participants reported negative perceptions about being unable to care for patients in a way that they would prefer to due to factors such as heavy workloads and time constraints, with negative attitudes secondary to workplace stressors of nursing staff having a direct correlation to negative experiences for patients. Many patient participants articulated the experience of being disengaged in relation to the doctors' ward round, but that nursing staff improved this when they were able to be present for them. Many had differing expectations on the function of ward rounds, ultimately indicating dissatisfaction about not having a more patient-centred approach. Furthermore many participants suggested further support was needed for members of the workforce to enable enhancement of patient experiences, such as interventions which improve the workload and minimise risk of burn out, particularly for registered nurses and junior doctors. Ultimately, the final theme developed from the qualitative data points to the bigger picture. It highlights changes which need to occur at the macro-level which support health professionals at the patient facing level to improve their capacity to care.

5.4.3 The bigger picture: The organisation and the environment

The third theme that was identified through general inductive enquiry was the need for innovation and change to organisational or macro-level structures. Involved in this were staffing requirements and direct pressures such as high acuity patients, heavy workloads and the environment not being fit for purpose. The theme also incorporated the effect of the coronavirus pandemic on the area itself, which has exacerbated all factors described. Staff participants spoke frequently about the strong desire and intention to keep patients and their whānau always informed about what is going on and encouraging them to engage, though frequently struggled with the practical outworking of this in light of their workload and subsequent fatigue. Frequent mentions were made of the time-poor environment of the acute surgical

ward and the high acuity patients, with the novel coronavirus mentioned as another instigator of this conflict. Many staff described the organisational impact of insufficient staffing as being a key correlator for not being able to achieve person-centred care, and the direct correlation this had to their personal feelings and mental capacity to provide the support needed.

> *I just wish we all had the time to care for patients like we really want to. And the sad thing is that the days that you do have more time, everyone just sort of like catches their breath. You don't have the capacity to do all those things that you really think would be really neat to do.*
>
> Staff participant 1, senior RN

Recent studies have found that urgent interventions for the retention of New Zealand nurses are required by nursing organisations, regulators and health system employers (Moloney et al., 2018), and also in the face of awaiting improvement to nursing wages with pay equity which as of September 2022 is still yet to be finalised (New Zealand Nurses Organisation, 2022).

Several senior nursing participants describe the lack of key senior nursing roles as detrimental to the general surgical ward environment and to patients themselves. All senior nursing participants described their perception of the need for more managerial support directly accessible on the ward in question and many voiced the need for an associate charge nurse manager (ACNM), which is a role currently not implemented in the general surgical ward involved in this project.

> *Having senior staff overseeing groups of families or the ability to give a portfolio of patients to an associate charge nurse, so that coordinators can actually coordinate, and the charge nurse can attend bed meetings, and more nurses can be on the floor to actually spend that valuable time and make sure the patients and their families are actually feeling supported.*
>
> Staff participant 1, senior RN

> *We need associate charge nurse managers and more senior RNs. We have very acutely unwell patients, often needing to be in critical care environment, often getting sick after hours when there's no one around.*
>
> Staff participant 3, senior RN

> *The new surgical ward has ACNMs and adequate staffing. The staff are positive about their work environment and actually want to turn up to work. We don't have them here and it shows. Our nurses are struggling.*

Staff participant 11, senior RN

One participant also spoke of an unhealthy culture of the ward receiving critical care level patients when there are no beds available in critical care, as well as a culture of the ward in question receiving higher rates of critical care patients than in other surgical wards. The participant noted the unfairness of this and alluded to this being a reason why many staff members were struggling.

> *Often there aren't beds upstairs in critical care, so they stay with us. It doesn't seem to be happening to all the other wards, we are like an ICU and HDU step-down ward. It's unfair and it's unsafe because our skill mix and staffing just isn't cutting it.*

Staff participant 3, senior RN

One staff participant also reflected on the difficulties they experience with regards to the direct environment of the ward in question and the physical appearance of the hospital and ward in general, arguing for the need for it to be a more welcoming and less clinical or sterile atmosphere.

> *I would love to see it more physically appealing… more welcoming for families, and here on the ward to be less like a sterile old hospital building. Just a much more culturally appropriate place, much more welcoming.*

Staff participant 2, senior RN

Another participant further developed the rationale for updating the physical environment of the ward by emphasising the lack of privacy frequently experienced by patients that their whānau, adding the hindrance the direct environment has on the wellbeing of its health service users.

> *The environments, noisy, busy, it's very high stimulation. So having some time, particularly if you're in a shared room too, to actually get some privacy and some time to grieve the fact you're here. None of that is conducive to wellbeing really.*

Staff participant 4, senior RN

The increasing prevalence of patients presenting with complex comorbidities and need for high levels of acute surgical interventions was also discussed, with reference to current inequities with access to health care.

> *When someone comes in for one thing it is never confined to that one thing. They're coming in, but suddenly, something else is not working so then they have to have input from another service. And it's all because they didn't get help sooner or it was too difficult to find help. It's for a variety of reasons, it can be for beliefs and values for lack of feeling comfortable within the system, then they don't get further treatment until they're at a much later stage.*
>
> Staff participant 2, senior RN

Participants also discussed the nature of the novel coronavirus and the varying consequences it has had on being able to provide treatment and care for people, particularly those with known inequitable outcomes.

> *We weren't able to put any complex elective patients through that might require HDU ICU. So patients that are really sick are actually waiting longer over that time [during COVID lockdowns and the information system outage] often they are the ones who have co morbidities, often Māori and Pacifica people. And they then are presenting even more acutely ill than before, it's just a vicious circle.*
>
> Staff participant 5, fellow

One senior staff member insinuated that the coronavirus was however being used as a scapegoat for an underlying issue of the systems failure to appropriately foster the partnership and participation of patients and their families.

> *Even outside of COVID, we don't actually encourage partnership and participation. We talk about, but we don't really do it… There isn't actually that involvement because when the visiting hours are is not when the team is around.*
>
> Staff participant 4, senior RN

Under this theme were the perceptions of the need for change in the immediate ward environment, including the allocation of greater senior nursing staff such as associate charge nurse managers and the current concerns of the general surgical ward in question having a disproportionate level of acutely unwell patients. Many participants

described the acute needs of patients as being unmanageable due to the level of staff experience including lack of skill mix and staff fatigue.

5.5 Summary of thematic analysis

Innovative ways of improving the current state of the inpatient environment are recommended to enhance the experiences of our people, both for patients and staff members alike. Ultimately findings from interviews have emphasised the immense difficulties present for patients and staff at all levels, both directly and indirectly. Power dynamics and control mechanisms are ingrained in the experiences of all patients in health care and the acute general surgical patient experience is no different. The patients' lack of control over their own health, the hierarchy of traditional biomedical structures and the influence of poorly distributed workloads and unsafe staff ratios to high acuity patients, all have an immense influence over patient experience and outcomes. Fundamentally, improving supports for staff would enable those currently working in this environment the ability to appropriately fulfil the needs and improve experiences of the people they have been called to care for. A number of potential interventions such as changing the current practices regarding ward rounds and bedside handovers and updating the environment to have a more patient and family centred approach were identified as being beneficial in improving the patient experience. Foundationally, staff participants spoke of the need of additions to the workforce to alleviate the pressures and enhance capacity for staff to provide care tailored to the individuals and their families.

Part 2: Quantitative analysis

5.6 Introduction

Utilising the themes arising from the patient and staff interviews, a survey was developed and distributed to patients on or near to their day of discharge from the ward over a two-month period. The survey involved Likert scale responses to 30 statements, using a numerical rating from one to five, one being strongly disagree, two being disagree, three being neutral, four being agree, five being strongly agree. Participants were asked to circle the extent to which they agreed or disagreed with the statements. The statements used in the Likert responses, though randomised in the survey itself, were previously developed from the themes identified in the patient and staff interviews. As described in the qualitative analysis, the three major themes that emerged from the interviews were the patient experience of power and control, the hierarchy of health care and the bigger picture of the organisation and the environment. The statements, that were developed as a result of qualitative themes, will be discussed according to those which were statistically significant for each demographic identified.

5.7 The survey population

A total of 84 acute general surgical patients were approached to ask for their participation in the surveys, with 68 patients responding positively in the initial interaction and 16 having declined to participate in the initial interaction. A total of 53 surveys were completed over a period of two months, the other 15 patients having opted out by not completing the survey within the 24 hours or having been discharged prior to the collection of their surveys; yielding a final 63.1 percent response rate. Demographic data were collected in the survey including gender, ethnicity, age and reason for being in hospital. This enabled the researcher to both understand the varying demographics represented in the service at the time of data collection and to ascertain any trends present across the groups regarding patient experience. Of the 53 people who participated in the survey, 29 were male and 24 were female. For ethnicity, 11 participants identified as Māori, 22 participants as NZ European, ten participants

specified they were of another ethnicity while ten participants did not specify any ethnicity.

With regards to age, six participants reported they were in their twenties, four in their thirties, 12 in their forties, six in their fifties, three in their sixties, ten in their seventies, six in their eighties and three in their nineties. The data for age groups were initially analysed according to decade but there was no statistical significance in responses between participants according to decade. Analysis was also made comparing the sample groups of over 65+ years and under 65 but the results also showed no significant statistical difference. With variability in the sample sizes per decade as well as sample sizes often being too small, results from this cohort will not be presented in the final analysis.

Participants were also asked to indicate why they were in hospital. The collection of data for reason in hospital specified was included to attempt to analyse whether a patient's diagnosis including level of severity, or lack of diagnosis, affected their experience. Initial analysis of the groups according to exact reason in hospital specified drew no significant results therefore the decision was made to combine groups according to severity of reason in hospital, for example generally conservative and likely non-operative treatments were combined to form a single sample group. The most common response included a range of likely to require non-operative, conservative or minimally invasive treatments for varying disorders of the gastrointestinal tract such as infection, wound care, cellulitis, diverticulitis and gallstones, which were grouped in a category of non-operative (14). Following this the next most common reason specific was in regard to symptoms such as abdominal pain or nausea and vomiting with an unconfirmed diagnosis (10) as well as motor vehicle accident (10). Following this, the next most common response from participants regarding their reason for hospital admission was related to malignancy (7), participants using words such as a tumour, mass, lump or cancer which were found in various organs, the most common of which was indicated to be bowel or colon. The next most common reasons in hospital specified were pancreatitis (5), bowel obstruction (4) and fall (1), which were excluded from the final analysis due to the

small sample sizes and likely varying degrees of severity evident in the diagnoses. A summary of descriptive statistics for the data are represented in Table 3.

Table 3: Descriptive statistics of survey participants

Respondents	53
Gender Count (%)	
Male	29 (55%)
Female	24 (45%)
Not specified	0
Ethnicity count (%)	
Not specified	10 (19%)
NZ European	22 (42%)
Māori	11 (20%)
Other (UK, Asian, Pacific Island, MELA)	10 (19%)
Age count by decade (%)	
16-19	3 (5.7%)
20-29	6 (11.3%)
30-39	4 (7.5%)
40-49	12 (22.6%)
50-59	6 (11.3%)
60-69	3 (5.7%)
70-79	10 (18.9)
80-89	6 (11.3%)
90-94	3 (5.7%)
Reason in hospital (%)	
Diagnosis requiring non-operative, conservative or non-invasive treatment: Infection, non-healing wound, cellulitis, diverticulitis, gallstones	14 (26.4%)
Unspecified diagnosis: Abdo pain or other gastrointestinal symptoms	10 (18.9)
Motor vehicle accident	10 (18.9)
Malignancy	7 (13.2%)
Pancreatitis	5 (9.4%)
Bowel Obstruction	4 (7.5%)
Not specified	2 (3.8%)
Fall	1 (1.9%)

5.8 Patient perception of control

As discussed in the review of literature, a fundamental concept which still invades the health care environment is power imbalance and the historical approach of the paternalistic doctor-patient relationship. The thematic analysis from the patient and staff interviews also identified the concept of power, control and hierarchy amongst

the health care team as two of its key themes. Though not as blatant as the Parsonian view, further investigations were required on the extent to which participants perceived the concept of control and power dynamics in their experiences. Seven statements selected from the survey under this theme will be analysed according to the variables of gender (male and female), ethnicity (Māori and non-Māori) and reason in hospital, which will be presented systematically.

5.8.1 Patient perception of control and power according to gender

The graph below represents the mean Likert scale responses to statements regarding the perceptions of power and control according to gender specified (Figure 4).

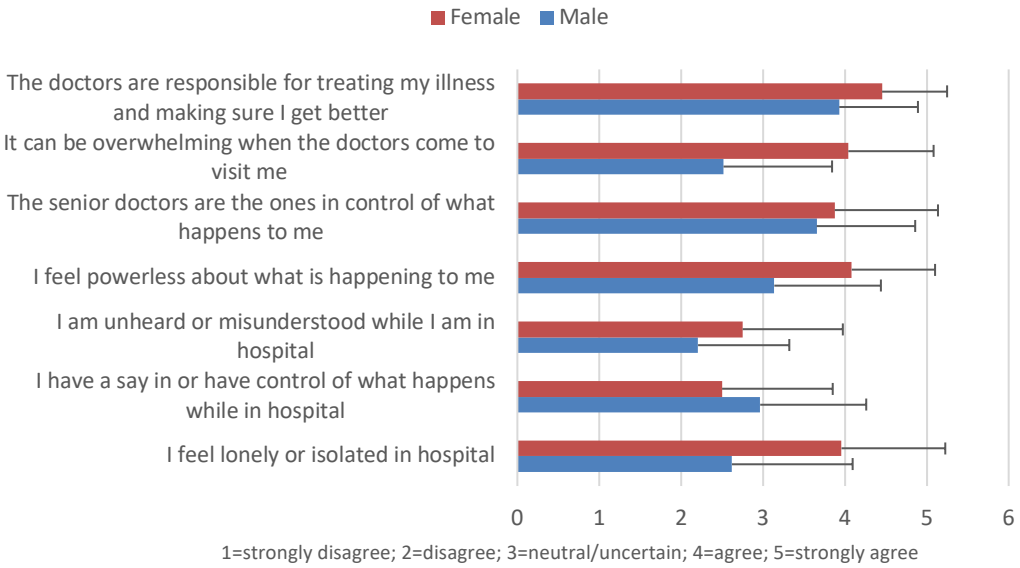

Figure 4: Mean Likert scale responses to perceptions of control statements in relation to gender (Error bar = 1SD)

The graph in Figure 4 illustrates a difference between female and male participant answers particularly to the statements on feeling overwhelmed during doctors' rounds, feeling powerless about what was happening and feeling lonely or isolated in hospital. Upon secondary analysis of the data, including p-values and chi-squares, these three questions reject the null hypothesis showing statistically significant differences in male and female answers, with p-values calculated as <0.05 as shown in Table 4. This could indicate the generalisation that females tend to have a greater emotional response to negative stimuli than males, as shown in a recent study which found women had a higher emotional expressivity particularly for negative emotions, while men tended to

have a more intense emotional experience overall but tended not to disclose it (Deng et al., 2016).

Table 4: Statistical results for perceptions of control in relation to gender

Statement	Chi-square	P-value
The doctors are responsible for treating my illness and making sure I get better	2.185	0.197
It can be overwhelming when the doctors come to visit me	17.490	0.001*
The senior doctors are the ones in control of what happens to me	3.483	0.515
I feel powerless about what is happening to me	8.100	0.007*
Unheard or misunderstood in hospital	5.508	0.120
I have control of what happens to me while in hospital	2.302	0.204
I feel lonely or isolated in hospital	12.463	0.002*

Note: * = significant at the 5% level

For the remaining statements tested, there was found to be no statistical significance between the two genders, as identified in Table 4. For example, according to the mean Likert scale responses depicted in Figure 4, there appears an assumed authority of senior doctors and expectations of their level of responsibility for health outcomes of patients under their care, with both male and female participants generally agreed that senior doctors were in control of what was happening. Alongside this both male and female participants tended to agree that doctors held the responsibility for treating their illness and making sure their health returned. Subsequently, female participants generally indicated they felt a lack of control over what had happened to them in hospital when compared with males who responded more neutrally. Finally, males tended to answer that they generally disagreed with feeling unheard or misunderstood while in hospital, whereas females tended to answer more neutrally on this.

5.8.2 Patient perception of control and power according to ethnicity (Māori & non-Māori)

The next graph indicates the mean Likert scale responses to statements regarding power and control according to ethnicity, with responses being analysed according Māori and non-Māori participants (Figure 5).

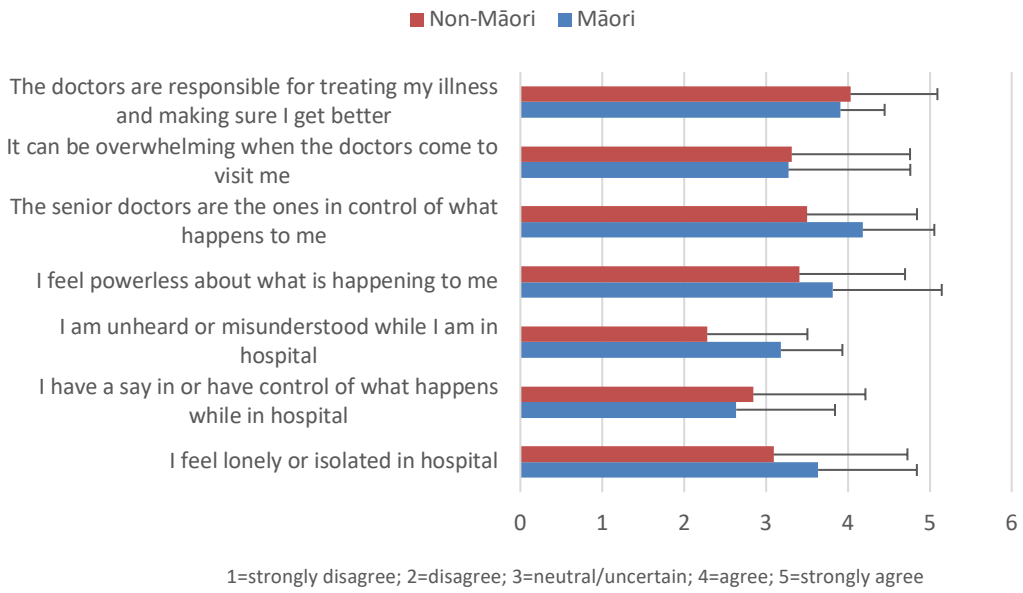

Figure 5: Mean Likert scale responses to perceptions of control statements in relation to ethnicity (Error bar = 1SD)

The graph in Figure 5 suggests Māori participants reported more likelihood of being unheard or misunderstood while in hospital comparatively to non-Māori participants. Secondary analysis of this statement found that the null hypothesis was rejected (p-value = 0.034), showing a statistically significant difference in views for this statement between Māori and non-Māori (Table 5). Also of note was the lesser variability of responses in standard deviation for Māori in this statement, which also indicates a greater significance for the responses for this group despite a smaller sample size.

Table 5: Statistical results for perceptions of control in relation to ethnicity (Māori & non-Māori)

Statement	Chi-square	P-value
The doctors are responsible for treating my illness and making sure I get better	10.656	0.216
It can be overwhelming when the doctors come to visit me	15.483	0.461
The senior doctors are the ones in control of what happens to me	11.777	0.824
I feel powerless about what is happening to me	3.393	0.940
I feel unheard or misunderstood in hospital	18.110	0.034*
I have control of what happens to me while in hospital	3.616	0.968
I feel lonely or isolated in hospital	8.207	0.495

Note: * = significant at the 5% level

Though no other statements in this section were found to have statistically significant differences according to ethnicity, it is worth noting the trend of answers (including both the means and standard deviations) seen in Figure 5. Mean Likert scale responses appear to indicate Māori participants were more likely than non-Māori participants to indicate greater feelings of loneliness and isolation while in hospital. Alongside this, Māori patients were more likely to agree that it was the senior doctors that were in control of what was to happen to them and were slightly more likely to disagree that they were in control of what happened while in hospital. The standard deviation for Māori participant responses for each of these three statements describe indicates lesser variability suggesting more unified responses. This is interesting considering the small sample size of Māori participants and may still hold significance though not quantifiable. Accordingly, Māori participants also generally appeared to perceive greater feelings of powerlessness than non-Māori participants.

5.8.3 Patient perception of control and power according to reason in hospital

According to the reason in hospital specified there were a number of mean Likert scale response findings for power and control statements which are demonstrated in the below graph (Figure 6).

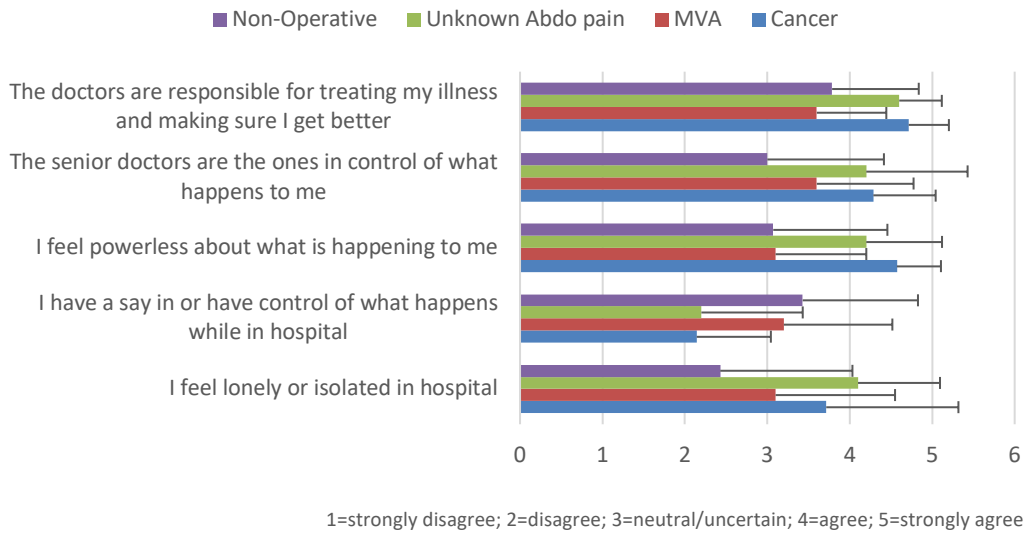

Figure 6: Mean Likert scale responses to perceptions of control statements in relation to reason in hospital (Error bar = 1SD)

On secondary analysis of data in relation to reason in hospital, statistically significant differences were observed in several responses related to the theme of control and power (Table 6). Statistically significant data were present for the statements of having control over what was happening and senior doctors being in control. Participants in the unknown diagnosis and in the diagnosis of cancer groups disagreed that they had control over what was happening to them and subsequently agreed that senior doctors were in control. This was a statistical difference to participants in the MVA and non-operative groups who were more neutral or slightly agreed with having some personal control and agreed less or were more neutral in their response to doctors being in control. Interestingly, there was a smaller variability noted in the responses made by participants with cancer despite the small sample size. This was observed particularly in the statements about senior doctors being in control, feeling powerless and having lack of control about what was happening, indicating a greater degree of significance with a diagnosis of cancer.

Table 6: Statistical results for perceptions of control in relation to reason in hospital

Statement	Chi-square	P-value
The doctors are responsible for treating my illness and making sure I get better	21.463	0.114
The senior doctors are the ones in control of what happens to me	22.711	0.011*
I feel powerless about what is happening to me	17.690	0.113
I have control of what happens to me while in hospital	21.874	0.014*
I feel lonely or isolated in hospital	15.669	0.099**

Note: * = significant at the 5% level
** = significant and the 10% level

It is also worth noting for a social science context, where statistically significant data is observed with values <0.10, that the statement of feeling lonely or isolated was also statistically significant. Feelings of loneliness and isolation were agreed with more by those with an unknown diagnosis and those diagnosed with cancer, when compared with the other groups that answered more neutrally. Furthermore, though not technically statistically significant, the statement about doctors being responsible for outcomes and the statement on feelings of powerlessness, also followed the same trend and were very close to being statistically significant in the social science context as seen in Table 6.

An interesting correlation detected throughout the statements when analysing the mean Likert scale responses according to reason in hospital, as depicted in Figure 6, were the similarities in responses between participants indicating their reason in hospital was due to cancer and abdominal pain or other gastrointestinal symptoms with an unknown diagnosis, when compared with patients in the other two groups (MVA and non-operative treatment with a known diagnosis). Perhaps psychologically for these participants this may indicate the immense fear and uncertainty characteristic to both a new cancer diagnosis and in the unknown waiting for a reason behind symptoms experienced and potential of being diagnosed with a severe health concern.

5.9 Perceptions of interactions with staff members

It is well documented that patient experiences, regardless of their demographic or the setting of which they access healthcare, are heavily influenced by the doctors, nurses and other health care staff they interact with (Jangland et al., 2016). Survey statements that were developed from the results of the thematic analysis from the qualitative phase, were based around the original theme of hierarchy and had particular emphasis on the participants' experience of interacting with and their perceived expectations of staff members. Six statements under this theme have been analysed in relation to ethnicity (Māori and non-Māori) as this was the only variable that showed statistically significant differences between the two groups.

5.9.1 Perceptions of interactions with staff members according to ethnicity (Māori & non-Māori)

The below graph indicates the mean Likert scale response differences between participants who identified as Māori and as non-Māori in relation to the statements on interactions with staff members (Figure 7).

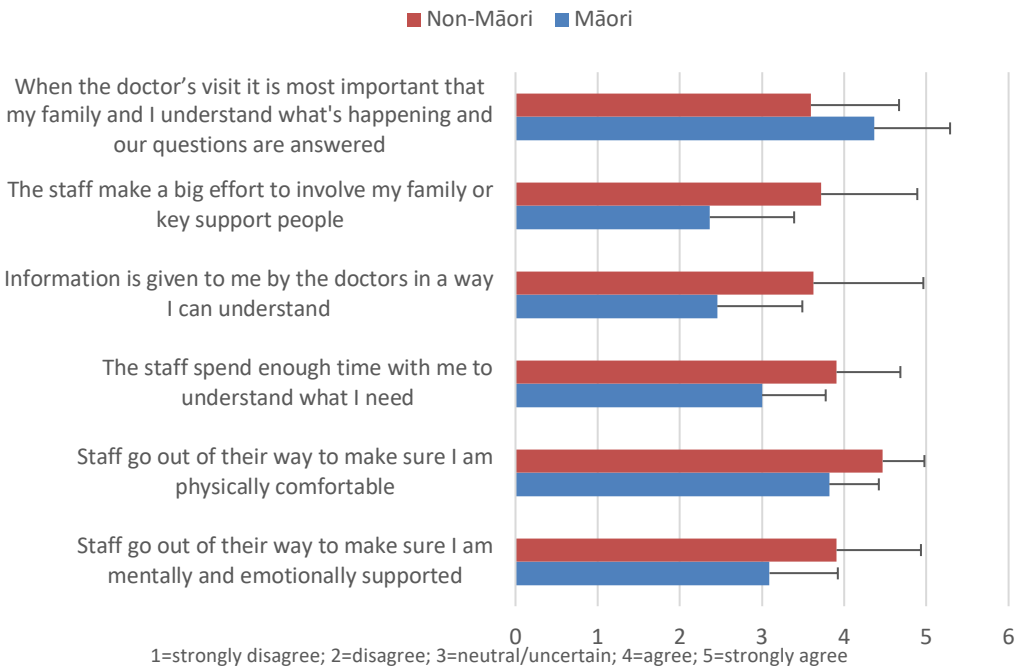

Figure 7: Mean Likert scale responses to interactions with staff statements in relation to ethnicity (Error bar = 1SD)

In a New Zealand context, multiple studies have found that Māori patients and their whānau perceive negative interactions with hospital staff, leading to distrust of the health system as a whole and resulting in more negative health outcomes (Graham & Masters-Awatere, 2020; Wilson & Barton, 2012). The most varying differences throughout analysis of all statements were the perceptions of interactions with staff members between Māori and non-Māori participants, a result that also aligns with literature gathered in the systematic reviews conducted by Graham and Masters-Awatere (2020) and Rahiri (2018).

Māori participants tended to report they disagreed slightly that staff made a big effort to involve their family or whānau, while non-Māori participants tended to slightly agree. The null hypothesis was rejected (p-value = 0.010) indicating there is a statistically significant difference between Māori and non-Māori for this statement (Table 7). This may suggest that Māori patients have differing expectations of care or needs that are not being met with regards to staff appropriately involving or communicating with whānau. Perhaps a reason for this experiential difference could be in the nuance of meaning behind whānau for Māori when compared to the Pakeha understanding of family, including the physical, emotional and spiritual dimensions which are based on whakapapa, as described by Walker (2011). Māori may tend to uphold whānau with a richer depth of meaning, comparatively to the Western understanding of family. Therefore in a hospital setting it is perhaps more meaningful for Māori when health professionals seek to include the wider whānau in care planning and communication. This could be an invaluable understanding for health care settings that should wish to uphold tikanga, customs and traditional values of Māori patients and their whānau.

Non-Māori participants were most likely to agree that staff spent enough time with them in order to understand what they needed, while Māori participants tended to answer neutrally towards this statement. The null hypothesis is rejected for this statement as it indicates there is a statistically significant difference between the two groups (Table 7). This implies there may be differing expectations or perceptions of time spent, or perhaps Māori generally feel neutrally toward the hypothesis that staff are giving them appropriate time in order to adequately recognise their needs.

Furthermore, the statement that staff ensure physical comfort for patients was generally agreed by both Māori and non-Māori participants however non-Māori participants were more likely to strongly agree with this statement. The null hypothesis for this statement is rejected also and shows a statistically significant difference between the two groups (Table 7). This may again suggest a difference of the perception of feeling comfortable in the hospital environment between Māori and non-Māori. This correlates with findings from the study by Wilson and Barton (2012) which saw Māori participants frequently report a belief that hospitals were not conducive to their wellbeing which subsequently saw them seek early discharges more frequently. This is another indication that, though the study is a decade old, true gains may not yet have been made to improve the current experiences of Māori in the hospital environment.

Furthermore, non-Māori participants were more likely to agree that staff went out of their way to provide mental and emotional support while Māori participants were more likely to have a neutral perception of this, a finding that is statistically significant in a social science context.

Table 7: Statistical results for perceptions of interactions with staff in relation to ethnicity (Māori & non-Māori)

Statement	Chi-square	P-value
When the doctor's visit the most important thing is that I understand what is happening and that myself and my family's questions get answered	13.090	0.130
The staff make a big effort to involve my family or key support people	15.644	0.010*
Information is given to me by the doctors in a way I can understand	12.210	0.244
The staff spend enough time with me to understand what I need	15.163	0.012*
Staff go out of their way to make sure I am physically comfortable	12.368	0.002*
Staff go out of their way to make sure I am mentally and emotionally supported	7.102	0.094**

Note: * = significant at the 5% level
** = significant at the 10% level

With regard to information being given to patients by doctors in a way that was understandable, non-Māori participants were more likely to slightly agree, whereas Māori participants were more likely to slightly disagree. While this statement was found to have no statistically significant differences between the two groups it may yet be meaningful due to the observed trend of mean and standard deviation as depicted in Figure 7. This statement showed less variability for Māori which may have increased significance due to the small sample size in this group. The results of the mean Likert scores also indicated that Māori were more likely to agree that the most important thing during doctors' rounds was for themselves and their family to understand what was happening and to have their questions answered, whereas non-Māori participants only slightly agreed. The finding from this statement again was very close to being statistically significant in a social science context, as per Table 7, and may still have significance despite not being quantifiable.

5.10 Perceptions of the health care environment

Studies have emphasised key barriers of person-centred care in the hospital environment are lack of resources and staffing (Mazurenko et al., 2015) and constraints of the physical hospital environment (Lloyd et al., 2018). A further six statements were selected from the survey surrounding the theme of the healthcare environment, including both hospital and primary care. As the context of this study is acute general surgery and it is well documented that acute health presentations increase as access to primary health services becomes more difficult, two statements were selected regarding the relationship participants have with a primary health care provider. The six statements were analysed according to the variables of gender, ethnicity, age and reason in hospital; however the only statistically significant data was found to exist in the responses according to ethnicity (Māori and non-Māori) which will be presented below.

5.10.1 Perceptions of the health care environment according to ethnicity (Māori & non-Māori)

Figure 8 illustrates the mean differences around perceptions of health care by ethnicity. The graph shows that there were some marked difference in perceptions between Māori and non-Māori participants according to the statements in the survey, with the

greater mean differences observed in access to and relationship with a general practitioner and the hospital environment. It is important to note that the variability, as illustrated by the error bar, was wide indicating a larger variation in responses. This relationship was explored statistically and the results presented in Table 8.

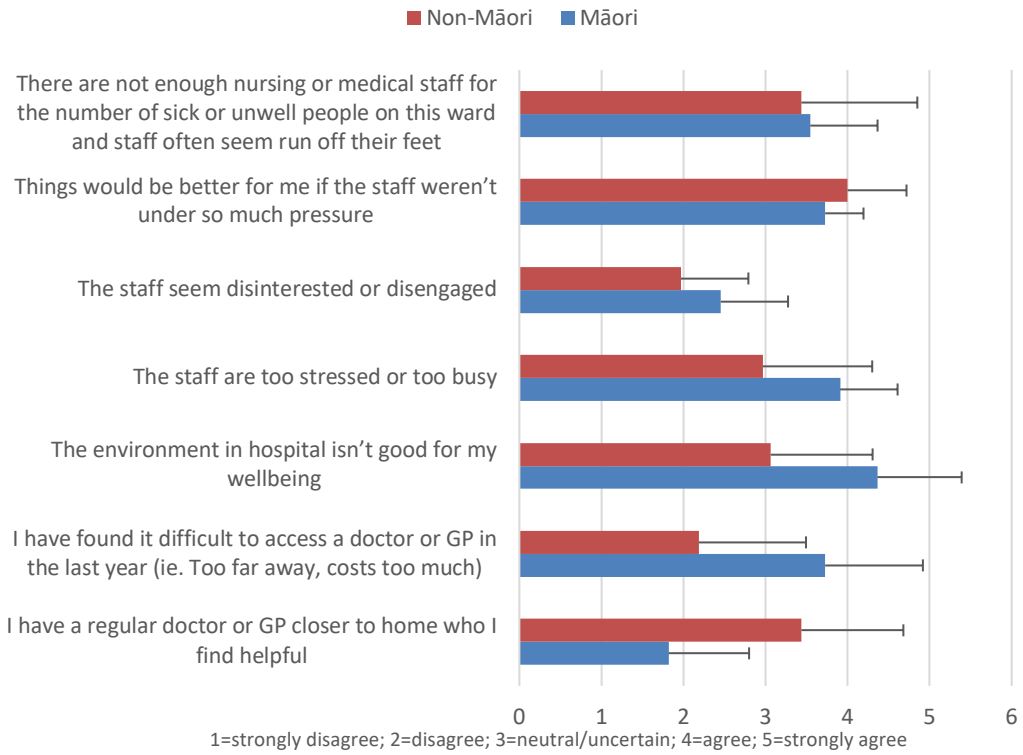

Figure 8: Mean Likert scale responses to perceptions of the health care environment in relation to ethnicity (Error bar = 1SD)

There was a significant statistical difference between Māori and non-Māori in regard to the hospital environment. As illustrated in Figure 8, Māori participants tended to considerably agree that the environment in hospital was negative for their wellbeing. Non-Māori participants on the other hand tended more to respond neutrally to this statement. Consequently, with regard to staff seeming disinterested or disengaged, both Māori and non-Māori disagreed however Māori only slightly disagreed which also showed statistical significance and may also indicate a difference in perception of interactions with staff.

Table 8: Statistical results for perceptions of the health care environment in relation to ethnicity (Māori & non-Māori)

Statement	Chi-square	P-value
There are not enough nursing or medical staff for the number of sick people on this ward and staff often seem run off their feet	5.734	0.316
Things would be better for me if the staff weren't under so much pressure	4.633	0.102
The staff seem disinterested or disengaged	13.473	0.029*
The environment in hospital isn't good for my wellbeing	19.152	0.003*
I have found it difficult to access a doctor or GP in the last year in the last year	15.155	0.001*
I have a regular doctor or GP closer to home who I find helpful	24.806	0.001*

Note: * = significant at the 5% level

There were also statistically significant differences between Māori and non-Māori participants with regard to access and perception of primary health care providers with the null hypothesis being rejected for these statements (Table 8). Māori participants were also more likely to report they had not visited a GP in the last year due to difficulty with access and were less likely to have a regular doctor or GP they found helpful. These findings suggest further evidence of the profound equity issue that has been suggested in recent New Zealand literature identified in systematic reviews regarding Māori health outcomes (Graham & Masters-Awatere, 2020; Rahiri et al., 2018). The findings also reinforce premise that Māori generally still experience discomfort in the health system and suggests equity for Māori is yet to be achieved in this area.

According to the Likert responses as illustrated in Figure 8, both Māori and non-Māori participants slightly agreed that there were insufficient nurses or doctors for the number of unwell people on the ward in question. Consequently, both groups also agreed that things would improve for them if the staff were not under as much pressure. The statements described above had no statistical difference between Māori and non-Māori participants thus the hypotheses remain that patients perceive staffing deficit as having a negative impact on their experiences and outcomes (Table 8).

5.11 Perceptions of all respondents to key survey statements

Without regard to demographic or descriptive detail, mean responses from all participants to nine of the key survey statements is found below (Figure 9). Though high variability indicated with answers regarding feelings of powerlessness, control and isolation, ultimately mean responses indicate more likelihood of participants feeling powerless, lacking control and feeling lonely while in hospital. More agreement was noted from the responses toward the doctors being in control and being responsible for health outcomes with lesser variability. Participants were generally in agreement that staff appear too stressed or too busy, that there were not enough staff and were in strong agreement that things would be better for them if staff were not under so much pressure. Lastly, all participants tended to agree that they would prefer conversation with staff rather than a formal tool or intervention with minimal variability for this statement.

Figure 9: Mean Likert scale responses to key questions for all participants (Error bar = 1SD)

5.11 Reliability and validity

As indicated in the methods chapter, kappa is a statistical test often used as an indicator of reliability and validity (Polit & Beck, 2021). It tests the answers of quantitative data collection methods such as surveys through the use of reverse statements, so that participants do not respond to survey statements with acquiescent bias, for example indicating a positive response repeatedly when filling in the survey without consideration of their true preference (Polit & Beck, 2021). A kappa gives a numerical rating to the chance agreement of two groups. A kappa of 0.81-1.00 indicates perfect agreement, 0.61-0.80 indicates substantial agreement, 0.41-0.60 indicates moderate agreement, 0.21-0.40 indicates fair agreement and 0.01-0.20 indicates no to only slight agreement (McHugh, 2012).

Reverse statements were incorporated into the survey conducted in the quantitative phase for analysis of kappa. The reverse statements were firstly aligned by recoding values for example a response of 1 became 5, 2 became 4, 4 became 2 and 5 became 1. The Likert responses were then collapsed so that 4 and 5 became 3, 3 became 2 and 1 and 2 became 1, to increase the sample sizes between agree and disagree responses (Table 9 and 10). The responses were then analysed using kappa and a moderate level of agreement was found to exist for the reverse statements within the survey, as per Table 11.

Table 9: Count of Likert responses (aligned and collapsed)

		Unheard and misunderstood*			
		3	**2**	**1**	**Total**
Listened to and views respected	**3**	33	7	0	40
	2	3	2	0	5
	1	0	1	7	8
	Total	36	10	7	53

Note: * refers to reverse question which has been aligned

Table 10: Count of Likert responses (aligned and collapsed)

		Staff disinterested, disengaged*			
		3	**2**	**1**	**Total**
Staff behaviour and attitude helpful	**3**	42	3	0	45
	2	1	1	2	4
	1	0	1	3	4
	Total	43	5	5	53

Note: * refers to reverse question which has been aligned

Table 11: Kappa analysis of reverse questions

Statement	kappa
I am listened to and my views are respected / I am unheard or misunderstood in hospital	0.538
The behaviour and attitude of staff is helpful to my wellbeing / Staff seem disinterested or disengaged	0.555

5.12 Quantitative summary

In utilising the patient experience survey, perspectives of acute general surgical patients were explored in more detail, with demographic data identifying statistically significant differences between groups. Of particular mention were differences expressed by Māori participants when compared with non-Māori participants, a trend that is also reflected in the nationwide Health Quality Safety Commission surveys of hospitalised adults (2021). Furthermore, experiences of patients differed particularly in regards to their reason in hospital, for example those with a newly diagnosed cancer as well as an unknown diagnosis tended to identify similar experiences of powerlessness, whereas patient presenting post a motor vehicle accident or with a diagnosed illness requiring non-operative treatment tended to report lesser feelings of powerlessness. There were no statistical differences observed in experiences of powerlessness and lack of control with regards to age or stage of life.

5.13 Results summary

This study presented several findings through triangulating the qualitative and quantitative data that was acquired. The findings add to New Zealand literature with a specific focus of acute general surgical health care. The study explored the current experiences of patients within this service at Waikato Hospital. It alluded to the

historically ingrained culture which places the biomedical framework as a controlling and overarching force. Though contributing to improved physical health outcomes, ultimately it does not enhance patient empowerment and uphold preferences, with nursing staff instead perceived as the key contributors to this. It was also identified that staff are struggling to provide holistic and person-centred care as a result of workplace stressors and burn out. Participants identified the attitudes and poor experiences of staff is a result of staffing and skill mix deficits in light of high acuity general surgical patient needs. Though a challenging process to undertake, the health system must look at ways of minimising the doctor-centric model that currently places immense pressure on our medical workforce and often inhibits a health professional's ability to provide patient-centred care.

The initial reception of interviewees toward the prospective implementation of a patient and whānau self-assessment tool was fairly negative, though some acknowledged the positive intention behind it. Patient interviewees were more supportive of enhancing meaningful conversations with health care workers, and this was reinforced by survey participants responses to statements around communication preferences. The quantitative data found that patients are fully aware of the environmental pressures which pervade the acute general surgical ward and there is a known understanding that lack of staffing does contribute to poorer experiences and outcomes for the patient. It was also identified that people perceive a great loss of control when becoming an acute general surgical patient, with a predominant reliance placed on doctors to return them back to health.

Based on the evidence acquired, there is obviously gains to be made with regards to up-skilling and supporting staff to engage in a more appropriate way with patients and according to their preferences, though acknowledges that in order to do this workforce stressors must be alleviated. The result of a workforce being unable to provide holistic care for patients has an even more compounding effect on Māori and further increases the gap in achieving equity. More intentional measures must be taken to ensure staff are supported to appropriately provide care for Māori. The overall findings have laid the foundation for further discussion which will occur in the following chapter.

Chapter VI: Discussion

Research is formalised curiosity. It is poking and prying with a purpose.

Zora Neale Hurston, 1891-1960

6.1 Introduction

With the Ministry of Health's goal of achieving health equity for all New Zealanders, a new health model, Te Whatu Ora (Health NZ), has been implemented as of July 2022. This is intended to transform the originally fragmented and complex system made up of multiple District Health Boards (Ministry of Health, 2022). The fundamental purpose of the transition was to further enable all New Zealander's equitable access to health services. The decision to nationalise the system was also a result of the need to improve the range, quality and consistency of services for all New Zealanders. While this innovation of a new health system is a welcome change, in order to test the quality and consistency of the changes over the next several years, identifying the experiences of patients utilising the health services under Te Whatu Ora will continue to be required. It is after all the experiences of the health service user that is the key indicator of the quality of a health care setting, with positive experiences known to correlate with improved health outcomes. Across the entirety of the health care spectrum, patient experiences and level of satisfaction will continue to be the fundamental test of the effectiveness of its systems. Waikato Hospital and acute general surgery, the context of this study, is not exempt from this, with the consideration of innovative ways to improve the service (including user experiences) continuing to be an imperative.

While this study sought to analyse the experiences of patients in an acute general surgical environment with an initial purpose to develop a patient self-assessment intervention to improve experiences, the reality of the research findings rendered the original intervention void. The findings instead were not only observed in the narratives of the individual and the shared patient experiences, but parallel to this, in the identification of staff experiences. This included both staff perceptions of the inpatient experience and, ultimately, their own experiences working within the complex and frequently ill-resourced hospital environment. Though the premise of

investigating ways of enhancing or improving patient experience is a worthy and important undertaking, investigating ways of improving the working conditions of health care workers must also be seen as a priority and the catalyst for improving patient experiences. Ultimately, though this study provides a narrative of the current patient experience, it also alludes to the dangers of framing improvements or interventions solely based on patient experiences without adequate investigation into the realities faced by staff working in the environment. This study adds to a broader group of literature on the experiences of hospitalised people and of health professionals working in an acute general surgical ward and provides insight into the power dynamics which pervade the environment for both patients and staff alike. This research sought to address the following questions:

1. What are the views of patients in relation to the acute inpatient general surgical stay?
2. What are the views of health professionals (nursing, medical and allied health staff) in relation to improving the acute inpatient general surgical stay?
3. To what extent would an acute patient and whānau self-assessment intervention be appropriate to implement for the improvement of patient and whānau experiences in an acute general surgical context?

The discussion presented in this chapter will be divided into three sections. The first section will briefly answer each of the research questions according to results from both the qualitative and quantitative data and in the context of the reviewed literature. The second section will articulate the meaning behind the results and paint a picture of the enhanced patient experience and what interventions are required for this. The final section will present the limitations, conclusions and implications for future health care practice as well as recommendations for further research.

6.1.1 Triangulation

Triangulation can be used in research to generate a more sophisticated understanding of the phenomena being studied by ensuring convergence of results between multiple sources (Creswell, 2015). This research triangulates both qualitative and quantitative

data within its mixed methods framework to enhance its credibility and to seek comprehensive answers to the research questions above. Both qualitative and quantitative data were triangulated with the findings in the literature review to expand understanding of the topic. A thorough review of the literature was the starting point for the study and formed the basis for the hypotheses. It explored the demographics of the New Zealand population who most commonly present for acute general surgical needs, including what influences their experience and the difficulties faced in the context of the study. It also explored patient empowerment and ways of improving the acute general surgical patient journey, including historical characteristics of the roles of patients and doctors. The review of literature also highlighted a number of international approaches used for the improvement of patient experiences and briefly alluded to the possibility of a revised approach being implemented in a New Zealand context.

Qualitative data in phase I were obtained through 18 semi-structured interviews, 12 with staff members and six with patients specific to an acute general surgical context. The findings of these interviews indicated many areas of improvement to the experiences of acute surgical patients, however much evidence also pointed to the proposed intervention being inadequate for the purpose of improving experiences. The findings of the interviews also alluded to the themes of powerlessness and lack of control for patients which altogether helped to guide the development of statements used in the patient surveys for phase II of the study. The quantitative phase, patient surveys, aimed to further advance and quantify understanding of patient experiences of the acute general surgical stay. The survey findings further corroborated the themes which emerged from the qualitative general inductive enquiry with numerical data. Ultimately, though the literature review indicated promising potential in favour of the proposed self-assessment intervention, data from the qualitative phase found it would not be suitable for the acute general surgical context of which it was intended, which will be further discussed in the next section.

Part 1: Research questions

6.2 What are the perceptions of patients in relation to the acute inpatient general surgical stay?

This research was interested in the views and experiences of people who present to hospital for acute general surgical needs and in exploring their journey. Finding answers to the above question was therefore important throughout all aspects of the study, including the literature review, qualitative and quantitative phases. This included the patient experience of admission and discharge, their interactions with medical personnel including doctors and nurses and other relevant allied health team members, theirs and their family's perceived role and expectations when compared with the reality and their insight into aspects of power and control in the healthcare environment.

A thorough literature review was undertaken at the commencement of this study. This highlighted an array of research in relation to the views and experiences of patients in an acute inpatient context. Factors such as unmet needs (including physical, psychosocial and spiritual), the constraints of the physical environment (including lack of privacy), the challenges of the admission and discharge processes, the level or quality of the relationships developed with health care professionals and the persons own health status (including their need for more invasive treatments or critical care admissions) all had an impact on patient experiences. The review of literature also pointed to two recent studies, one of which examined the discrepancy of outcomes between Māori and non-Māori requiring emergency laparotomy (Perioperative Mortality Committee, 2019), and the other investigating the discrepancy of outcomes for young Māori after major trauma (Perioperative Mortality Committee, 2021). Further searches identified a body of literature around power and control mechanisms of health care and the hierarchy that exists within the doctor-patient relationship. Literature was identified that details historical foundations of the paternalistic and strict biomedically focused world view (Parsons, 1951) which still permeates the culture of healthcare in the West today. Recent literature points to the destructive nature this culture or way of thinking has for health outcomes as it dehumanises and

disempowers the person receiving the health care (Timmermans, 2020). Other research found that health care that is patient-centred, making concerted efforts to reduce authoritarian style relationships, greatly improves patient experiences (Edvardsson et al., 2017; Rademakers et al., 2012).

The research found that all patient participants identified the degree of relationship with staff members, and particularly nursing staff, as central to their experience. Both positive and negative examples were used and ultimately, the health care staff's intentional upholding of the patient's values was perceived to be key to improving their experiences. For a New Zealand context, this research had an emphasis on understanding the views and experiences of Māori in the acute inpatient context and of identifying the similarities and discrepancies in experiences between them and non-Māori users of this service. The inequity concerns raised by key literature (Rumball-Smith et al., 2013; Wilson & Barton, 2012), were also highlighted in both the qualitative and quantitative components of this research. Both patient and staff interviews included representation from participants who identified as Māori and held a Māori worldview. Of note, from the two Māori patient interviewees, examples were given which identified times during their stay when values were not upheld by healthcare workers. There was also a proportion of survey respondents who identified as Māori and the views and opinions expressed by these participants showed a degree of unity in the responses as described in the quantitative findings section. Of most significance, there appears to be a difference in the experiences of Māori who present for acute general surgical health concerns, in comparison to their non-Māori counterparts in many of the statements, with Māori participants indicating more negative experiences of the setting overall.

Many of the components of powerlessness and hierarchy found in the literature were also identified in both the qualitative and quantitative phases of the research. Many interviewees described the need for health professionals to ensure they perceived patients as human beings and not as their illness. Many respondents from surveys also noted they believed doctors were fully responsible for and had control of their health outcomes, and that they themselves lacked control. This was significant according to descriptive statistics for reason in hospital and ethnicity, particularly between Māori

and non-Māori participants. When describing demographics, many interviewees noted the vulnerability and powerlessness they observed for older people in the acute surgical setting. Interestingly, this description from interviewees did not translate into the quantitative data, with no statistical significance being found in the comparison of answers to feelings of powerlessness and lack of control between age groups. This lack of significance could have been observed for varying reasons, with many older participants of the surveys responding from the lens of having adequate support from family. Alternatively, respondents from this age group perhaps may also not have answered truthfully or may have down played their feelings of isolation or negative perceptions, a finding which correlates with literature that investigates this phenomenon (Doron et al., 2011). Furthermore, feelings of vulnerability and powerlessness are likely to permeate all demographics of people regardless of age and depended more on other descriptive statistics. Responses to this statement when comparing between gender groups and when comparing individuals based on their health concern, showed females were more likely to experience powerlessness than males. Furthermore, people with a cancer diagnosis or with no known diagnosis were more likely to experience feelings of powerlessness than people admitted post a motor-vehicle accident or with a known non-operative treatment or less serious health condition.

6.3 What are the views of health professionals (nursing, medical and allied health staff) in relation to improving the acute inpatient general surgical experience?

A second research question on the perceptions held by staff members was also addressed in this study. Initially this question was posed as patient-centric in that staff members within the general surgical specialty, as frequent interactors with the patient demographic in question, were assumed to be in a position to comment on their perception of the acute general surgical patient experience. However, the parameters of the question were also expanded to include the staff perceptions of the specialty as a whole, encapsulating the staff members experiences and challenges of their roles. This included difficulties such as need for more resources, concerns for staff wellbeing

and burn out, staff not feeling valued and lack of senior workforce in the face of the heavy workloads and high patient acuity. This question was predominantly addressed in the qualitative phase of the research, in the interviews with staff members including nurses, doctors and allied health staff specific to the general surgical specialty.

As the overall complexity of acute general surgical patients increase, with the phrases high acuity or multiple co-morbidities used commonly to describe this cohort, so too does the need for greater resource allocation. This may include the need for increased staff numbers, implementing staff wellbeing initiatives and providing further training and support for staff to take on greater responsibility. While currently staff are able to monitor and provide care for the physical health of the patients who utilise the service, the ability for staff to prioritise the other more nuanced aspects of the patient's experience is perceived as unmanageable. Enabling preferences to be met, person-centred care principles upheld and empowering people to make true informed decisions about the care they are to receive is at present not able to be prioritised by staff, particularly for medical and nursing personnel. Though this is seen by staff as a negative thing, with all staff knowing the importance of person-centred care, the immense physical health care needs and overall high acuity of the acute general surgical population is currently too excessive to enable time to be invested into the therapeutic and relational aspects of care. Staff are limited in their capacity to provide person-centred care due to their mental and emotional responses to, and the practical outworking's of, their heavy workloads. All staff members interviewed explored the difficulties they encounter in managing limited time in the face of the overwhelming needs for the acutely unwell patients utilising the service. All interviewees from the medical profession expressed their desire to be able to take the time with their patients and were evidently disappointed that the nature and demands of their roles made them unable to provide the type of person-centred care they wished to. All nursing and allied health participants also described their dissatisfaction at the culture of the medical profession and the perceived objectifying of patients based on their health diagnosis. As quoted by one participant "they're [the doctors] leveraging off our therapeutic relationships with patients," inferring that the person-centred side of medicine relies solely on nurses.

As this topic became more an emphasis throughout the staff interviews, it was investigated further in the quantitative phase of the research. Participants were asked to indicate their level of agreement of staff being too busy or too stressed, spending enough time with them to identify their needs and if there were enough nursing or medical staff for the number of unwell patients. Ultimately, all participants were more likely to respond they believed there were not enough staff members for the number of unwell people and that things would improve for them if the pressure on staff members could be eased. This perception was also heightened for Māori respondents who were more likely to report feeling that staff were disengaged, did not spend enough time with them, did not meet their physical needs and did not keep their whānau updated, when compared with non-Māori respondents. Ultimately, it appears patients are aware of the stretched medical and nursing workforce and know that any suffering they experience can be a direct result of the staffing deficits.

6.4 To what extent would an acute patient and whānau self-assessment intervention be appropriate to implement for the improvement of patient and whānau experiences in an acute general surgical context?

A key concept of the research was to explore that of a patient self-assessment intervention; thus the above question was posed. The purpose of exploring the literature was to assess the efficacy of the notion of patient self-assessment for other context and understand if there would be any application in the Waikato acute general surgical context. The literature provided evidence of patient self-assessment interventions and tools utilised for patient empowerment in many health contexts internationally. These included the use of technology for patient-generated health data to enhance patient engagement and participation in clinical care (Burns et al., 2019; Jim et al., 2020; Murthy & Wood, 2015), as well as patient self-assessment tools which have been found to be a valuable supplementary information tool alongside a clinician-led history taking or health assessment (Hirshfield-Bartek et al., 1990; Miyamichi et al., 2012; Strömgren et al., 2001; Wasson et al., 1999), for the acutely unwell person (Miyamichi et al., 2012), and for the older person (Boucher et al., 2019). Other studies

also aimed to increase the presence of patient preferences in clinical notes with positive outcomes found (Dirksen et al., 2013; Eldh et al., 2015; Jerofke-Owen et al., 2020). When the topic of a patient self-assessment intervention was raised in the qualitative phase amongst staff participant interviewees, overwhelmingly the responses given were around the practicality of having another intervention or paper-based tool for use with many staff participants being dubious about the implementation. There was concern raised around the follow up and what would happen with the information that patients and their families provided in a point of admission self-assessment. Many patient and staff participants also raised concern that the acutely unwell person would not be able to provide information in a written format. While all interviewees agreed that it was pertinent for people experiencing acute health issues to have immediate support systems known or accessible to the patient and wider health care team even if via phone, all patient participants agreed they would prefer this as a conversation rather than written document.

Though the patient and staff interviews found clear evidence that the proposed patient and whānau self-assessment intervention would likely not be an appropriate tool to implement in its initially intended format, it was important to still quantify this further in the second phase of research. Embedded into the patient surveys was a question around preferences with regards to communications styles. When asked about whether patients prefer written communication in comparison to engaging in verbal conversation with a member from the health care team, survey respondents overwhelmingly strongly agreed a meaningful conversation with a health professional was preferred. The next section will explore the meaning behind the findings of this research and articulate recommendations in improving the patient experience, including how to foster meaningful interactions for patients and health care staff members.

Part 2: Creating the perfect acute general surgical environment

6.5 The enhanced general surgical patient experience: a biodynamic gardening metaphor

A biodynamic garden can be used to illustrate what interventions are needed in a general surgical ward environment to enhance the patient experience (Figure 10). Biodynamic gardening is a systems approach, where the garden is viewed as a living whole where each activity affects everything else. A successful biodynamic garden is determined by the quality and intention placed within its layers. At the primeval stage is the bedrock, a foundation of the garden which is pivotal in ensuring the garden remains in place and does not slip away. A sturdy bedrock is vital if the gardener plans to fill up the garden to its highest capacity. At the most rudimentary level in a health environment such as general surgery, there must be an adequate bedrock of staff numbers in relation to the quantity of patients expected to present and the acute and often complicated health care demands they require. A successful bedrock may change slightly over time, as with the coming and going of a staffing team, but the foundations will remain and will mix with the subsoil to create rocks and mineral deposits, also accumulating a layer of water. The subsoil layer is initiated from the bedrock of adequate staffing. This subsoil layer represents the enabling of all staff to develop in competencies and skills while ensuring the foundational staffing numbers remain at a safe level.

The most significant layer of a biodynamic garden bed is that of the organic soil. The nutrient rich organic soil supports and nourishes the developing root systems which are unique to every plant. The sustenance provided by the organic soil to the root systems ensures the exceptional quality of the individual plants. In this metaphor the organic soil refers to the enhanced wellbeing of health care professionals who work face to face with patients. On top of the bedrock of safe staffing, the subsoil of ensuring training and competencies are met, the organic soil is the investment into the wellbeing of and the acknowledgement of value of the staff themselves. The adding of organic soil into a garden metaphorically implies an action of adding to or improving

the working conditions of the workforce. The capacity for health care professionals to engage in person-centred care, thus is a direct result of working conditions and an environment which supports staff wellbeing.

This nurturing of the soil that must occur from an outside source, namely the wider organisation (Te Manawa Taki / Te Whatu Ora), then leads to an enrichment and strengthening of the plants. It is the organic soil that interfaces with each plant's complex root systems and the nutrients added enables them to expand their root systems for the improved quality of the plants. The improved health outcomes of our patients, the produce and plants that are grown in this garden, depends entirely on the enrichment of this organic soil. The strong and healthy root systems grown refers to the ability for our patients to have each of their unique values and needs upheld throughout their inpatient journey.

Soil layers aside, the garden itself is under constant pressure from its outside environment with weather conditions exerting a powerful and often overwhelming force over the garden. This force is required for the health of the plants and while it can be perceived as harsh and uncaring, it is fundamental in ensuring the plants survive. In this metaphor, the weather represents the diagnosis, the treatment and the medical/surgical interventions which exist under the biomedical model. This research highlighted many of the perceptions from both patients and staff towards the medical model of care. Many staff participants articulated a negative perception toward the biomedical model of diagnosis and treatment due to its hindering of person-centred care principles, such as developing therapeutic relationships. Ultimately, medicine and surgical intervention the way it currently operates is an ingrained necessity at present. Though it is an imperfect model, with both patients and nursing, medical and allied health staff showing frustration at its limited approach, it is a vital structure in the present context in treating acute illnesses.

While plants do have the ability to survive in harsh weather conditions, lack of a healthy root system and lack of nutrients leads to deficiencies in the plants attributes such as flavour, colour, size and ability to tolerate disease. Likewise, patients can get better and have their acute surgical illnesses fixed in the short term by medical intervention

itself. A workplace which lacks the nutrients, for example fails to support the functional capacity of staff (their mental, emotional, spiritual and physical wellbeing), leaves staff with only the capability of addressing the surface level of acute health concerns and cannot truly enhance patient experiences.

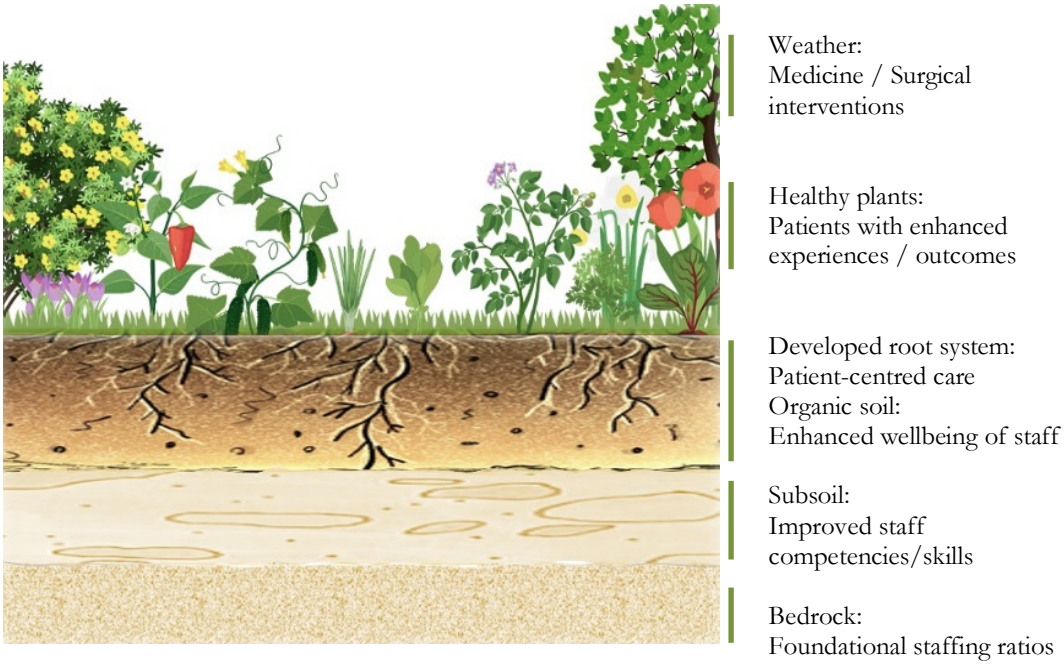

Figure 10: A biodynamic garden: improving the soil leads to enhanced outcomes

6.6 Improving health care staff member's capacity to provide person-centred care

Framing the discussion around improving patient experiences is ineffective if the capacity of the health care workforce is not expanded. Attempting to improve patient experiences is irrelevant without having personnel with the ability to invest in the person-centred, holistic and patient-empowering elements of care that stem from the ability and time for staff to engage in meaningful conversations with patients and their families. Many staff begin a career in health having a strong desire to improve health outcomes and patients experiences and wish to use holistic health care models, catering for more than just their physical health. However, in discussions in the interviews with staff members this is not currently the reality and is perceived as unattainable in light of current workplace stressors. This sentiment can be summed up through a quote from a senior registered nurse participant during the interview:

> *I just wish we all had the time to care for patients like we really want to. And the sad thing is that the days that you do have more time, everyone just sort of like catches their breath. You don't have the capacity to do all those things that you really think would be really neat to do.*
>
> Staff participant 1, senior RN

6.7 Why not self-assessment?

This research sought to investigate ways of improving the patient experience, with the introduction of a patient self-assessment intervention hypothesised to improve the experience. However, the current influence and power of biomedical intervention undermines person-centred and holistic health care models. Thus, the intervention was deemed inadequate to change experiences or to shift the power imbalance between the patient and health care professional. Perhaps the very premise of staff perceiving the patient and whānau self-assessment as not sufficient, alludes to the power and control mechanisms that the health system is under. The idea of patients and their family having a voice, amidst the array of clinical and medical assessments is subconsciously seen as too great a burden for the patient. The assumption that patients and perhaps their family do not have capacity for identifying their health needs and what is happening assumes they are vulnerable and thus unable to articulate their foundational needs, which alludes greatly to the historical sick role. At present, patients in this acute general surgical ward identify they want to have more meaningful conversations with health staff, where they feel heard and understood, and where their families can also be well informed. They believe that having more opportunity for meaningful conversations with staff, particularly doctors and nurses, would to be key to improving their experience.

6.8 An empowered workforce leads to enhanced patient experiences and outcomes

Instead of the originally proposed patient self-assessment intervention, interventions which improve the wellbeing of staff and increase the capacity for staff to engage in more meaningful ways with patients is recommended. Empowering the workforce employed to care for this complex and often acutely unwell cohort of patients is the first step in improving both the patient experiences and outcomes. Participants of this

study have spoken of a number of key foundational changes that would directly benefit the capacity of the workforce, and particularly registered nurses, to fulfil their role as patient advocates and provide care that is effective both for the physical and holistic needs of the patients and their families. As noted by many interview participants, it is nurses who are currently positioned most appropriately to offer enhancement of patient experiences. This was identified in discussions and investigations into the ward round, for example with the nurse's ability to act as a buffer when present during doctor rounds. It was also identified as a potential improvement to patient experiences when nurses were able to be enthusiastic about and engage in more thoughtful bedside handovers, promoting a patient-centred model of care.

6.9 Enhancement of senior nursing roles

In light of this notion of a need for interventions which improve the capacity for nurses to provide holistic care, one recommendation that was suggested was the appointment of an associate charge nurse manager in this area. This would fall under the foundational (or bedrock) category of appropriate staffing. This was identified by a number of registered nursing participants as a beneficial intervention to alleviate some of the pressure placed on the wider nursing team and further safeguard both the physical and holistic needs of all patients and their families. It was also acknowledged that other areas in the same field of acute general surgery had implemented an associate charge nurse manager and identified that staff had a more positive outlook on their work environment.

6.10 Equity focus

With a large focus on achieving equity prominent in New Zealand health at present, this study also identified severe discrepancies in experiences for Māori. The challenges which exist for staff at a baseline level with regards to being unable to provide person-centred and holistic care is further amplified for Māori. In this study, Māori participants reported a greater incidence of feeling unheard and misunderstood, not having their mental and emotional support needs met, feeling that staff weren't involving whānau to the extent they would deem acceptable and reported they also were not having their physical health needs met to the same extent as non-Māori. This

suggests an equality instead of equity tension, where all patients may be receiving the same treatment, however Māori are perceiving their own needs as vastly different to that of non-Māori, and subsequently staff are failing to be able to accommodate this. Thus there is an imbalance in expectations of needs and ability for staff to accommodate needs. This suggests a greater need for implementation of Māori advocacy roles, such as a general surgical Clinical Nurse Specialist for Māori patients and whānau to assist in navigating the complexities of acute general surgical intervention.

6.11 What does an empowered workforce look like?

Ultimately, the bedrock of safe staffing and application of senior nursing roles such as an associate charge nurse manager and clinical nurse specialist to enhance advocation for Māori in general surgery is indicated. On top of this, investment into the wellbeing of the workforce (addition of organic soil), is highly recommended. Staff wellbeing interventions must include engagement with staff of the range of services they wish to see and ensure the services are available to all staff including those working night shifts. Staff wellbeing intervention opportunities could include the offer of a free meal per shift worked, more flexible rostering, a staff wellness representative per ward and a staff chaplaincy support service. Greater gains should also be made in ensuring clear and consistent messaging on the value of staff health and wellbeing. Senior management must recognise their responsibility in supporting staff and improve the culture of encouraging staff, such as being able to offer staff performance appraisals more regularly. The appointment of key personnel, namely associate charge nurse manager and clinical nurse specialist for Māori as well as any wellness interventions should also be frequently evaluated by staff to assess the efficacy of them.

Part 3: Limitations, conclusions and implications

6.12 Limitations

All research methodologies contain various limitations (Creswell & Plano Clark, 2017). While a mixed method approach is argued to provide a more holistic answer to the research question posed (Bryman, 2016), it must be noted that the approach also contains greater resource implications. For example, a mixed method approach requires sufficient time to collect and analyse both quantitative and qualitative data. There is also a requirement for appropriate research personnel with expertise in both qualitative, quantitative and mixed method research. For successful mixed method research design, it is essential for the researcher to make note of limitations from the commencement of the study to plan and reduce the effects of the limitations (Schneider & Fuller, 2018).

6.12.1 Methodology limitations

While these limitations do exist, it is a strength of mixed method research that researchers can be creative when designing and integrating the qualitative and quantitative elements (Halcomb, 2019). As described by Creswell and Plano Clark (2017), the interaction of a mixed method research design can be simultaneous or sequential. For example, as demonstrated in the design of this research, the qualitative phase preceded that of the quantitative; a sequential interaction. The results of this research were triangulated with the development of the quantitative phase based on results of the qualitative data. A limitation of this type of sequential design was that, due to the limited time and ability to collect qualitative data, the quantitative data set may have missed some of the key issues which arose from the participant interviews. Subsequently, as the qualitative phase employed and informed the development of the quantitative phase, the potential advantage of having thoroughly combined or concurrent qualitative and quantitative elements may be a limitation. As described by Halcomb (2019), a reader could speculate both phases as two separate studies and with differing implications of results. Ultimately in this study, an attempt has been made to ensure inferences have been drawn from the outcomes of the mixed methods study as a whole, rather than from the individual components.

Phase I of the study consisted of the obtaining of empirical data from interviews with staff members and patients using a general inductive enquiry. Literature argues that interview techniques can contain various limitations which may result in variation in quality of the data collected. The Hawthorn effect, a phenomenon whereby individuals being studied change their baseline behaviour out of the knowledge of being observed, has the potential to produce biased results. This is also exacerbated by power dynamics present between interviewer and interviewee. For the patient participant interviews the lead researcher conducted all interviews while being a known member of the nursing team assigned to care for the patient participant, even though they were never the person's primary nurse. Consistency of interviews were maintained by utilising the same set of questions and also by all 18 interviews being conducted by the single lead researcher. It must also be noted that the lead researcher likely became accustomed to the way in which the interviews were conducted and may have enabled more elaboration of ideas for certain participants rather than others due to subconscious bias or due to an overall desire to produce meaningful results. Ultimately, the use of interviews allowed ability to investigate participants perceptions and understand the acute general surgical patient journey from the perspective of patients and staff. It also enabled the researcher to gain understanding of the challenges to improving the patient journey as a whole and, ultimately, formed the decision to exclude the proposed self-assessment intervention, instead developing survey questions for further investigation.

As discussed previously, phase II consisted of the distribution of a survey to originally acutely admitted patients on or near to their day of discharge from the general surgical ward. There were several limitations evident in this method of data collection. Some obvious limitations to this method are the possibility of poor response rates, inability for participants to understand or clarify statements or incomplete responses. Use of statements with Likert scale responses ensured participants only need circle their opinion on the scale. Surveys were distributed at a time during or near to the shift handover thus the lead researcher had some support from the nursing personnel available on the days in encouraging patient participants to complete the surveys. For example, ensuring needs were met prior to the lead researcher approaching the patient, thus improving the response rates. The number of statements utilised in the survey and the use of language was also considered. The lead researcher attempted to ensure

plain language was used for a wider group of participants to have access and ability to complete the survey and in a shorter period of time. The survey collected demographic data while helping to maintain confidentiality by encouraging participants not to provide their name. However, some participants may still have been not willing to answer truthfully or provide negative responses with the knowledge that the lead researcher was a member of the wider health care team that may had provided them indirect care, thus biased answers could still have been present.

6.12.2 Study limitations

While the lead researcher was aware of many limitations of mixed method studies in general and made careful consideration to reduce the limitations, several limitations still occurred throughout the research process. A noteworthy limitation of this research was the cross-sectional nature of both the interviews and the surveys in that they occurred at a single point in time and with the specific cohort of participants available on the ward in question, for example the patients on the surgical ward who were present during the dates of data collection. Instead of conducting interviews and distributing surveys over only a two-month period, a more longitudinal study where data was collected over a longer period, may have produced greater depth of results. Topical events occurring simultaneously could have altered the experience of those who were interviewed or surveyed over the two months, for example lockdown periods within the coronavirus pandemic or certain policies or events present on the days of data collection.

A further limitation of the study was both the sample sizes of the interviews and of the surveys, with difficulty faced by the lead researcher in enrolling participants into both phases of the study. Varying reasons for this included the lead researcher being the only personnel available to enrol participants in the study alongside exterior commitments of their professional role in the environment itself. This may again have been improved with a more longitudinal styled study however due to the limited time allocated to gather data was not possible in the context of this postgraduate level research. Another limitation may have been perceived in having not designed a survey for staff members, however the interviews with staff members produced data saturation so further investigations were not required in this instance.

Furthermore, as the lead researcher conducted interviews with their own work colleagues, some of whom the researcher had more familiarity with than others due to being of the same profession, bias could develop as the lead researcher may have subconsciously placed greater weight on responses from colleagues of their own profession. There would have been some benefit in having an external researcher conduct the study or for a different acute general surgical ward to be studied. However, due to shared staff personnel between ward environments and the nature of the study needing to be directed by the lead researcher with the Bachelor of Nursing (Honours) qualification involved, this was not possible.

6.13 Conclusions

The challenges faced within acute general surgery are becoming more complex both nationally and internationally with life expectancies rising and the increase of comorbidities (Deng et al., 2020), alongside growing workforce shortages (Moloney et al., 2017). Pressure is placed on the nationalised health system, Te Whatu Ora, to create a more effective and innovative health care system that better serves its future population. In order to foster person-centred care interactions in all health professional-patient relationships it is vital that it does not operate at only a foundational or bedrock level of staffing, but that the capacity of the workforce and culture of the workplace is enhanced to improve patient experiences directly. While organisational and national change occurs with the hopeful implementation of more appropriate staffing, training and support for the health workforce, there is also innovative thinking which needs to occur at the micro level of each health care setting. This study sought to explore and summarise the current experiences of patients requiring acute general surgical care, and as a result also identified the day to day challenges faced by the health workforce. An enhanced patient experience stems from improving the working conditions of the staff who are providing direct patient care.

6.14 Implications for practice

There are a number of implications for practice that this study delivers. Though the setting was an acute general surgical context at Waikato Hospital, this study also has important implications for ward environments across New Zealand hospitals. These

environments under the new Health New Zealand model are no longer separated by district health boards thus will likely begin to amalgamate relevant cultures and practises. Findings from staff interviews indicate the most immediate need is for investment into the health workforce, both at a foundational or bedrock level of staffing and in wellbeing interventions for staff. Before improvements can be made to the patient experience, stability of staffing and improvements to staff wellbeing measures and greater supports and benefits for staff need to be addressed.

Although the smaller sample size of the patient and staff interviews were considered a limitation, in comparison to a similar study which was conducted by three health professionals holding PhDs including 12 focus group discussions with patients, physicians, nurses and other health staff (Mazurenko et al., 2015), the sample size of 18 interviewees was appropriate for the individual lead researcher. Similar studies rarely employed a mixed method design where both empirical and numerical data types were collected by patients, often only employing a strictly qualitative design (Jangland et al., 2016; Mazurenko et al., 2015; Nepal et al., 2020; Park et al., 2021). Many studies which focus on patient experiences fail to also investigate the perceptions of medical staff on the patient experience and uphold the wealth of knowledge that these staff possess in commenting on ways of improving experiences (Jangland et al., 2016; Petersen et al., 2021). This mixed method study has overall provided a valuable perspective of the acute general surgical environment in New Zealand as it stands, from the personal accounts of both the users and the providers of the service.

Many similar studies have been done on the experiences of Māori patients in New Zealand hospitals (Wilson & Barton, 2012). While this study did not originally intend to focus specifically on Māori, findings from both the qualitative and quantitative phases have indicated a profound difference in responses from Māori participants when compared with non-Māori participants. This further emphasises the need to continue to re-evaluate how health care is designed and provided to tangata whenua, with the vast potential for change initiated with the launch of Te Aka Whai Ora / Māori Health Authority.

While the proposed patient and whānau self-assessment intervention was not viewed as appropriate or likely to be effective when presented in the interviews to patient and staff member participants, the investigation of how to more effectively provide holistic patient centred care and utilising elements of patient generated health data and patient self-assessment is still recommended. The international body of literature surrounding patient generated health data (Burns et al., 2019; Demiris et al., 2019; Jim et al., 2020; Lindroth et al., 2018; Murthy & Wood, 2015), and patient self-assessment (Boucher et al., 2019; Boucher et al., 2021; Hirshfield-Bartek et al., 1990; Miyamichi et al., 2012; Mora et al., 2008; Smith & Goldman, 2011; Stokes et al., 2016; Strömgren et al., 2001; Wasson et al., 1999) have found promising results for improving inpatient experiences in many contexts. The patient self-assessment is still a relatively foreign concept in a New Zealand health care environment, with no literature available on the subject. This indicates New Zealand health care has catching up to do to incorporate a more nuanced and modernised system which fosters a greater sense of patient and family control, though the foundational aspects of safe staffing and improved working conditions must occur first for any patient-centred interventions to be truly effective.

6.15 Policy implications

In light of the recent shift to a nationalised health system, policies related to identifying and improving patient experience will continue to integrate across contexts. As continuously emphasised by staff in their interviews, improving patient experience is important however to do this effectively, structures, boundaries and roles must be developed to protect and enhance workforce capabilities. The development of the workforce and application of safe staffing ratios has already commenced particularly for nursing with nationwide role out of the Ministry of Health's Care Capacity Demand Management (2021a). However, to further promote the principles of patient centred care across all health care worker and patient interactions, staffing levels need to not just be considered "safe" but must be enhanced to ratios which foster the ability for health workers to engage in culturally safe, holistic and empowering interactions with patients and their families.

Concerns have been raised by a foundational nursing union on the current ability to attract young New Zealanders into the professional and to retain nurses considering

the perceived poor working conditions, including short staffing and prolonged pay negotiations. A recent study on the factors attributed to why New Zealand nurses are leaving the profession found that loss of ability to express a cherished value of caring, heavy workload demands and unfair pay were most commonly expressed (Moloney et al., 2017). Likewise, a recent letter sent to Parliament from a group of New Zealand doctors raises further concerns of the workforce crisis. Staff fatigue and burn out has been reported across all areas of medicine with no medical specialty exempt from the workforce staffing deficits (Newshub, 2022). General surgeons at Waikato Hospital have recently sent a letter indicating their concern to the Minister of Health. The described that the workforce of general surgery at Waikato Hospital is under such pressure that only acute surgery including trauma and cancer surgeries are occurring. They have reported this is due to the exodus of a number of key staff, and of most notable mention was nurses. Suggestions raised for implementation of policy to improve retention rates, as well as attracting new nurses into the profession included offering incentives such as free parking, meals and childcare as well as fee's free nursing training, cancelling student loans and adding nurses and allied health professionals to the top of the immigration list.

A key policy of Te Whatu Ora is the development and fostering of the health workforce, with aims to have the health workforce concerns improved within five years. At present there are policies which have been introduced to improve the ability for overseas health care workers to gain swifter entry into the country and receive residency at a faster pace, for example a Singapore recruitment campaign to attract nurses to work in New Zealand, financial incentives for ex-nurses to return to the profession as well as recruitments drives happening through local media and entertainment agencies (Radio New Zealand, 2022). However, while pay equity continues to await mediation through the Employment Relations Authority, there is a current stalemate within the nursing profession and thousands of job vacancies and staffing deficits continue to prevail. Time will tell whether policies currently being implemented will be effective at improving working conditions and whether the workforce concerns will be diminished within five years, as proposed by the Ministry of Health.

6.16 Directions for future research

Investigation into patient experiences should continue to occur across all contexts as a reflection of the quality of the services and to evaluate the effectiveness of the health care context. Further research should be undertaken which investigates what will improve working conditions for current health care professionals, alongside investigating the reasons behind why nurses are leaving the profession and interventions to retain nurses or attract them back into the profession.

Appendices

Appendix I: Research registration and sign off

Register your Research

Waikato District Health Board

Department/Service Sign-off

Dept/Service /Org	Role	Name	Signature	Date signed
As Clinical Director/Clinical Unit Leader/Nurse Director, by signing this I confirm • I have discussed the research project and resource implication for this department with the principal investigator and that the Principal Investigator has discussed these resource implications with any affected services / staff members. • All researchers/students from the department involved in the research project have the skills, training and experience necessary to undertake their role. • I support the research project being conducted; and confirm there are suitable and adequate facilities and resources for the research project to be conducted at this site.				
General Surgery	Nurse Director	Kim Holt		6/9/2021
As Director / Executive Director / Chief Advisor, by signing this I confirm: • All costs incurred by Waikato DHB Unit/Service in regard to the research project are included in an approved research budget (including those costs which will be incurred by contributing units, eg laboratory). For studies involving researcher time only, the researcher has the time to undertake the study. • Research is not commenced until all required approvals have been obtained.				
Surgical & Critical Care	Director	David Nicholson		6/9/2021
Hospital & Community	Executive Director	Chris Lowry		2/9/21
Te Puna Oranga	Māori Research Review Ctte	Nina Scott	*SEE LETTER ATTACHED*	

Please return to the Research Office (via Sarah Brodnax, Level 2 Hockin) along with required documents as identified in the checklist for final approval.

Office use only:
Quality & Patient Safety, Waikato DHB

It is the responsibility of the Director of Quality & Patient Safety to ensure that the research approval process has been followed, that required internal and external approvals are evident and that the research project fits within the strategic direction of Waikato DHB.

Signature: Margaret Fisher **Date:** 01 / 10 / 2021

Name: MARGARET FISHER **Position:** CMO

RD021090 GenSurg Patient Experience (Drake).docx

Appendix II: Māori ethics approval

Te Puna Oranga Māori Research Review Committee

27 September 2021

Re: Māori Consultation for 'Exploring perceptions of the acute inpatient experience in a general surgical ward and the impact of a patient and family / whānau self-assessment tool.'

Name of Applicant: Emma Drake

Tēnā Koe Emma,

Thank you for submitting the above research proposal to the Waikato DHB Te Puna Oranga Māori Research Review Committee for Māori consultation. The research application has been reviewed in order to support and prompt the researcher to think about how this research will improve health outcomes and eliminate inequity for Māori living within the Waikato DHB region.

1. The Committee acknowledges the researchers for collecting ethnicity data as part of a demographic background of the participant to improve data collection for Māori in order to improve Māori health outcomes and reduce inequity for Māori.

2. The Committee encourages the research team to actively recruit equal numbers of Māori and Non-Māori. Any Research that involves Māori participation would require sufficient face to face time for fully informed consent to occur. Inclusion of the whānau of the Māori participant should be encouraged to support the continued engagement of the Maori participant in the research process.

3. The Committee encourages all research that involves participation of individuals, especially Māori participants to fully inform them regarding the detail of tissue collection. One consent form for the current use of Tissue. One consent form for the future use of tissue (this should be clear to the participant).

4. Studies using retrospective data must respect Maori data as outlined in Te Mana Raraunga: ***5.1 Respect***. *The collection, use and interpretation of data shall uphold the dignity of Māori communities, groups and individuals. Data analysis that stigmatises or blames Māori can result in collective and individual harm and should be actively avoided.*

   Reference: Te Mana Raraunga: Principles of Māori Data Sovereignty. Brief #1 | October 2018. https://static1.squarespace.com/static/58e9b10f9de4bb8d1fb5ebbc/t/5bda208b4ae237cd89ee16e9/1541021836126/TMR+Ma%CC%84ori+Data+Sovereignty+Principles+Oct+2018.pdf (Accessed August 2019)

5. If cultural issues arise for the Māori participant during any research, they will inform the research team during the study that an issue has occurred. Cultural issues may not be obvious to the participant or the researcher prior to commencement of the research.

6. The Committee encourages the research team to continue to consult with Te Puna Oranga, Māori Health service at any time, should they have any further queries.

7. Feedback regarding this research is appreciated and can be shared back to the Kaunihera Kaumatua via Te Puna Oranga Māori Health Service

The Committee endorses this research proposal with the consideration of the above cultural recommendations where appropriate and requests the researcher to collect ethnicity data for all study participants seen at Waikato DHB for our own internal records.

Dr Nina Scott
Te Puna Oranga-Maori Health Service

Appendix III: HREC ethics approval

The University of Waikato
Private Bag 3105
Gate 1, Knighton Road
Hamilton, New Zealand

Human Research Ethics Committee
Roger Moltzen
Telephone: +64021658119
Email:humanethics@waikato.ac.nz

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

14 June 2021

Emma Drake
Te Huataki Waiora School of Health
DHECS
By email: ed74@students.waikato.ac.nz

Dear Emma

HREC(Health)2021#34 : Exploring perceptions of the acute inpatient experience in a general surgical ward and the impact of a patient and family / whanau self-assessment tool

Thank you for your responses to the Committee feedback.

We are now pleased to provide formal approval for your project.

Please contact the committee by email (humanethics@waikato.ac.nz) if you wish to make changes to your project as it unfolds, quoting your application number with your future correspondence. Any minor changes or additions to the approved research activities can be handled outside the monthly application cycle.

We wish you all the best with your research.

Regards,

Emeritus Professor Roger Moltzen MNZM
Chairperson
University of Waikato Human Research Ethics Committee

Appendix IV: Staff participant information sheet

Improving acute patient and whānau experiences in General Surgery

STAFF PARTICIPANT INFORMATION SHEET

PRINCIPAL RESEARCHER
Emma Drake | Registered Nurse | Ward M12 (General Surgery)
07 839 3399 Ext. 96512 | emma.drake@waikatodhb.health.nz

PURPOSE OF STUDY:
The purpose of this study is to identify the views of staff on the acute admissions processes in ward M12 (General Surgical specialty) at Waikato Hospital. The desired outcome of the study is to identify areas of improvement that could be made to acute admissions; what we are doing well, what we are not doing well, your views on ways we could improve the overall communication between staff members. Ultimately, we hope this information can be used to improve the experiences of our patients and their whānau in this service.

YOUR PART:
You are invited to participate in a one-off discussion of up to 30 minutes duration with the lead researcher in a private meeting room on the ward. The discussion will be recorded on a device for the purpose of transcribing the discussion and any questions and answers. You are welcome to have a support person present during the interview. Once transcribed, the written information will be kept in a secure location with the lead researcher's supervisor (Matthew Parsons) who otherwise does not have any association with M12.

CONFIDENTIALITY:
Your responses in this discussion will be anonymous. Please do not state any identifying information during the interview. Every effort will be made by the researcher to preserve your confidentiality including the following:

- Assigning code names for participants that will be used on all research notes and documents
- Keeping notes, interview transcriptions, and any other identifying participant information in a secure file.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time within three weeks after the date of your interview and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the interviewer. If you withdraw from the study, your data will be returned to you or destroyed. You are welcome to receive a copy of the interview transcript and are welcome to make revisions to your answers at any time within three weeks after the date of your interview. You can decline to answer any questions that you wish at any time during the interview.

Please contact Emma Drake (contact details at top of page) if you wish to withdraw or revise your responses within three weeks after the date of your interview. All research data will be used to form a publication and as a part of a Thesis for a Bachelor of Nursing (Honours). If you wish to receive a copy of the finished research or your interview transcript please leave a contact email on your consent form.

Study Approved by the University of Waikato HREC (Approval number HREC(Health)2021#34)

Appendix V: Staff participant consent form

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Improving acute patient and whānau experiences in General Surgery

STAFF PARTICIPANT CONSENT FORM

[A completed copy of this form should be retained by both the researcher and the participant]

Name of person interviewed: _____

I have received a copy of the Information Sheet describing the research project. Any questions that I have, relating to the research, have been answered to my satisfaction. I understand that I can ask further questions about the research at any time during my participation, and that I can withdraw my participation at any time up to three weeks after the date of the interview.

During the interview, I understand that I do not have to answer questions unless I am happy to talk about the topic. I can stop the interview at any time, and I can ask to have the recording device turned off at any time.

When I sign this consent form, I will retain ownership of my interview, but I give consent for the researcher to use the interview for the purposes of the research outlined in the Information Sheet. I understand that my identity will remain confidential in the presentation of the research findings

Please complete the following checklist. Tick [✓] the appropriate box for each point.	**YES**	**NO**
[I wish to view the transcript of the interview.]		
[I wish to receive a copy of the findings.]		
If you answered yes to either of the above, please write your contact email or phone number below		

Participant:		**Researcher:**	Emma Drake
Signature:		**Signature:**	
Date:		**Date:**	
Contact:		**Contact:**	emma.drake@waikatodhb.health.nz

Appendix VI: Patient participant information sheet

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Exploring the views of people and their families / whānau on their acute general surgical experience.
PATIENT PARTICIPANT INFORMATION SHEET

PRINCIPAL RESEARCHER
Emma Drake | Registered Nurse | Ward M12 (General Surgery)
07 839 3399 Ext. 96512 | emma.drake@waikatodhb.health.nz

PURPOSE OF STUDY:

You are being asked to take part in a study on the experiences of people who, like yourself, have required urgent or acute general surgical care. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Please ask the interviewer if there is anything that is not clear or if you need more information.

The purpose of this study is to identify the views and experiences of people who have been admitted acutely, that is emergently or without prior planning, to a general surgical ward at Waikato Hospital. Our aim is to identify areas of improvement that could be made for people admitted acutely to our service. We want to find out what we are doing well, what we are not doing well and hear about your perspective on the overall day-to-day life on the ward.

YOUR PART:

You are invited to participate in a one-off discussion of up to 30 minutes duration. Due to current restrictions to visitors at Waikato Hospital, any members of your family / whānau or key support people that you would like to be included in the conversation can be phoned to participate during the discussion.

The meeting will happen in a private meeting room on the ward, on or before the day you are discharged home. The discussion, which will be question and answer style, will be facilitated by Emma Drake who is a Registered Nurse on a different general surgical ward to this one. You will therefore not have had Emma as your primary bedside nurse at any time during your stay in hospital and no details or information you discuss will be shared with any staff from this ward and will not influence the care you receive. The discussion will be recorded on a device for the purpose of transcribing the discussion and any questions and answers. Once transcribed, the written information will be kept in a secure location.

You are welcome to have a Kaitiaki or Māori cultural support person present during the interview - please let Emma know if you would like this arranged. To contact Te Puna Oranga Māori Health Service call 07 839 8899.

CONFIDENTIALITY:

Your responses in this discussion will be anonymous. Please do not state any identifying information during the interview. Every effort will be made by the researcher to preserve your confidentiality include: Assigning code names for participants that will be used on all research notes and documents. Keeping notes, interview transcriptions, and any other identifying participant information in a secure file.

VOLUNTARY PARTICIPATION:

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time within three weeks after the date of your interview and without giving a reason.

Withdrawing from this study will not affect the relationship you have, if any, with the researcher or interviewer. If you withdraw from the study, your data will be returned to you or destroyed. You are welcome to receive a copy of the interview transcript and are welcome to make revisions to your answers at any time within three weeks after the date of your interview. You can decline to answer any questions that you wish at any time during the interview.

Please contact Emma Drake (contact details on front sheet) if you wish to withdraw or revise your responses within three weeks after the date of your interview. All research data will be used to form a publication and as a part of a Thesis for the lead researchers Bachelor of Nursing (Honours). If you wish to receive a copy of your transcript or the finished research please leave a contact email on your consent form.

Study Approved by the University of Waikato HREC (Approval number HREC(Health)2021#34)

Appendix VII: Patient participant consent form

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Exploring the views of people, and their families / whānau of their acute general surgical experience.

PATIENT PARTICIPANT CONSENT FORM

[A completed copy of this form should be retained by both the researcher and the participant]

Name of person interviewed: _____

I have received a copy of the Information Sheet describing the research project. Any questions that I have, relating to the research, have been answered to my satisfaction. I understand that I can ask further questions about the research at any time during my participation, and that I can withdraw my participation at any time up to three weeks after the date of the interview.

During the interview, I understand that I do not have to answer questions unless I am happy to talk about the topic. I can stop the interview at any time, and I can ask to have the recording device turned off at any time.

When I sign this consent form, I will retain ownership of my interview, but I give consent for the researcher to use the interview for the purposes of the research outlined in the Information Sheet. I understand that my identity will remain confidential in the presentation of the research findings.

Please complete the following checklist. Tick [✓] the appropriate box for each point.	**YES**	**NO**
[I wish to view the transcript of the interview.]		
[I wish to receive a copy of the findings.]		
If you answered yes to either of the above, please write your contact email or phone number below:		

Participant:		**Researcher:**	Emma Drake
Signature:		**Signature:**	
Date:		**Date:**	
Contact:		**Contact:**	emma.drake@waikatodhb.health.nz

Appendix VIII: Patient Survey

Survey about your experience of being in hospital

Please indicate to what extent you agree or disagree with the following statements:

1. I am given the opportunity to ask questions

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

2. I am listened to and my views and opinions are respected by the health care team

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

3. I feel lonely or isolated in hospital

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

4. I have a say in or have control of what happens while in hospital

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

5. Staff go out of their way to make sure I am physically comfortable

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

6. Staff go out of their way to make sure I am mentally and emotionally supported

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

7. The staff are too stressed or too busy

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

8. My family or key support people are aware of what's happening or what the plan is

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

9. I am unheard or misunderstood while I am in hospital

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

10. The staff spend enough time with me to understand what I need

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

11. Information is given to me by the doctors in a way I can understand

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

12. The staff are easily contactable to ask a question or get advice from

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

13. I wish my family or key support people were able to be more involved

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

14. The behaviour and attitude of staff has been helpful to my wellbeing

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

15. The staff seem disinterested or disengaged

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

16. I feel powerless about what is happening to me

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

17. The senior doctors are the ones in control of what happens to me

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

18. I would prefer to have a conversation with a nurse or doctor instead of writing things down

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

19. The environment in hospital isn't good for my wellbeing

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

20. The staff make a big effort to involve my family or key support people

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

21. Things would be better for me if the staff weren't under so much pressure

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

22. It is helpful and a positive experience for me when the nurses involve me in their bedside handover when there is a shift changeover

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

23. There are not enough nursing or medical staff for the number of sick or unwell people on this ward and staff often seem run off their feet

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

24. It can be overwhelming when the doctors come to visit me

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

25. The doctors are responsible for treating my illness and making sure I get better

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

26. When the doctor's visit me the most important thing is that I understand what is happening and that myself and my family's questions get answered

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

27. It is important that the senior doctors are the ones that update my family and I on my progress

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

28. I have a regular doctor or GP closer to home who I find helpful

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

29. I have found it difficult to access a doctor or GP in the last year (ie. Too far away, costs too much)

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

30. I've used a cellphone often to communicate with my family and/or friends while in hospital

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

For research purposes please indicate the following:

Age: ____ Gender: ____ Ethnicity: _____

Reason for coming to hospital: _____

Please note that anything you say on this form is confidential and will not influence on your care. You are not required to write your name on this form.
The results from this survey will be used as a part of a research thesis on patient experiences in a hospital setting. Thank you for your participation in this research.

References

Agozzino, E., Borrelli, S., Cancellieri, M., Carfora, F. M., Di Lorenzo, T., & Attena, F. (2019). Does written informed consent adequately inform surgical patients? A cross sectional study. *BMC medical ethics*, *20*(1), 1-1. https://doi.org/10.1186/s12910-018-0340-z

Aitken, J., Griffiths, B., O"Loughlin, E., Fletcher, D., Van Aker, J., Treacy, J., & Watters, D. (2020). *Australian and New Zealand Emergency Laparotomy Audit - Quality Improvement (ANZELA-QI)*. Royal Australasian College of Surgeons. https://www.surgeons.org/en/research-audit/morbidity-audits/morbidity-audits-managed-by-racs/anz-emergency-laparotomy-audit-quality-improvement#Resources

Alves, A., Civet, A., Laurent, A., Parc, Y., Penna, C., Msika, S., Hirsch, M., & Pocard, M. (2021). Social deprivation aggravates post-operative morbidity in carcinologic colorectal surgery: Results of the COINCIDE multicenter study. *Journal of Visceral Surgery*, *158*(3), 211-219. https://doi.org/10.1016/j.jviscsurg.2020.07.007

An, D. (2015). Discharge Planning from Hospital to Home. *Online J Issues Nurs*, *20*(2), 13. https://doi.org/10.3912/OJIN.Vol20No02CRBCol01

Angelmar, R., & Bermann, B. (2007). *Patient empowerment and efficient health outcomes: Financing sustainable healthcare in Europe*. European Health Management Association. https://media.sitra.fi/2017/02/28141943/The_Cox_Report-2.pdf#page=139

Arakelian, E., Swenne, C. L., Lindberg, S., Rudolfsson, G., & von Vogelsang, A. C. (2017). The meaning of person-centred care in the perioperative nursing context from the patient's perspective - an integrative review. *Journal of clinical nursing*, *26*(17-18), 2527-2544. https://doi.org/10.1111/jocn.13639

Arlidge, B., Abel, S., Asiasiga, L., Milne, S. L., Crengle, S., & Ameratunga, S. N. (2009). Experiences of whānau/families when injured children are admitted to hospital: a multi-ethnic qualitative study from Aotearoa/New Zealand. *Ethnicity & health*, *14*(2), 169-183. https://doi.org/10.1080/13557850802307791

Bagnasco, A., Dasso, N., Rossi, S., Galanti, C., Varone, G., Catania, G., Zanini, M., Aleo, G., Watson, R., Hayter, M., & Sasso, L. (2020). Unmet nursing care needs on medical and surgical wards: A scoping review of patients' perspectives. *Journal of clinical nursing*, *29*(3-4), 347-369. https://doi.org/10.1111/jocn.15089

Bailey, E. A., Wirtalla, C., Sharoky, C. E., & Kelz, R. R. (2018). Disparities in operative outcomes in patients with comorbid mental illness. *Surgery*, *163*(4), 667-671. https://doi.org/10.1016/j.surg.2017.09.029

Balasubramaniam, S., & Civil, I. (2022). Trauma system in New Zealand. *Emergency and Critical Care Medicine*, *2*(2). https://doi.org/10.1097/EC9.0000000000000044

Barazanchi, A. W. H., Xia, W., Taneja, A., MacCormick, A. D., Lightfoot, N. J., & Hill, A. G. (2020). Multidisciplinary survey of current and future use of emergency laparotomy risk assessment scores in New Zealand. *Anaesthesia and intensive care*, *48*(3), 236-242. https://doi.org/10.1177/0310057X20907102

Barry, M. J., & Edgman-Levitan, S. (2012). Shared Decision Making — The Pinnacle of Patient-Centered Care. *The New England journal of medicine*, *366*(9), 780-781. https://doi.org/10.1056/NEJMp1109283

Basic, D., Huynh, E., Gonzales, R., & Shanley, C. (2018). Structured interdisciplinary bedside rounds, in-hospital deaths, and new nursing home placements among older inpatients. . *Clin Interv Aging*, *13*, 2289-2294. https://doi.org/10.2147/CIA.S171508

Bauer, A. M., Iles-Shih, M., Ghomi, R. H., Rue, T., Grover, T., Kincler, N., Miller, M., & Katon, W. J. (2018). Acceptability of mHealth augmentation of Collaborative Care: A mixed methods pilot study. *Gen Hosp Psychiatry*, *51*, 22-29. https://doi.org/10.1016/j.genhosppsych.2017.11.010

Beaton, A., O'Leary, K., Thorburn, J., Campbell, A., & Christey, G. (2019). Improving patient experience and outcomes following serious injury. *N Z Med J*, *132*(1494), 15-25. https://doi.org/10.5334/ijic.s3079

Boucher, V., Lamontagne, M. E., Lee, J., Carmichael, P. H., Déry, J., & Émond, M. (2019). Acceptability of older patients' self-assessment in the Emergency Department (ACCEPTED)-a randomised cross-over pilot trial. *Age Ageing*, *48*(6), 875-880. https://doi.org/10.1093/ageing/afz084

Boucher, V., Lamontagne, M. E., Lee, J., & Émond, M. (2021). Self-assessment of functional status in older emergency department patients: a cross-over randomized pilot trial. *Canadian Journal of Emergency Medicin*, *23*(3), 337-341. https://doi.org/10.1007/s43678-020-00073-9

Boyd-Carson, H., Gana, T., Lockwood, S., Murray, D., & Tierney, G. M. (2020). A review of surgical and peri-operative factors to consider in emergency laparotomy care. *Anaesthesia*, *75*(1), 75-82. https://doi.org/10.1111/anae.14821

Bridges, J., Collins, P., Flatley, M., Hope, J., & Young, A. (2020). Older people's experiences in acute care settings: Systematic review and synthesis of qualitative studies. *International Journal of Nursing Studies*, *102*(1), 103469. https://doi.org/10.1016/j.ijnurstu.2019.103469

Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.

Burns, K., McBride, C. A., Patel, B., FitzGerald, G., Mathews, S., & Drennan, J. (2019). Creating consumer-generated health data: Interviews and a pilot trial exploring how and why patients engage. *Journal of Medical Internet Research*, *21*(6), Article e12367. https://doi.org/10.2196/12367

Callus, E., Pagliuca, S., Bertoldo, E. G., Fiolo, V., Jackson, A. C., Boveri, S., De Vincentiis, C., Castelvecchio, S., Volpe, M., & Menicanti, L. (2020). The Monitoring of Psychosocial Factors During Hospitalization Before and After Cardiac Surgery Until Discharge From Cardiac Rehabilitation: A Research Protocol. *Front Psychol*, *11*(1), 2202. https://doi.org/10.3389/fpsyg.2020.02202

Chaboyer, W., McMurray, A., & Wallis, M. (2010). Bedside nursing handover: a case study. *Int J Nurs Pract*, *16*(1), 27-34. https://doi.org/10.1111/j.1440-172X.2009.01809.x

Chang, S. H., Maney, K. M., Mehta, V., & Langford, R. M. (2010). Pain assessment and management in medical wards: an area of unmet need. *Postgraduate Medical Journal*, *86*(1015), 279. https://doi.org/10.1136/pgmj.2008.076497

Chernock, B., Hwang, F., Berlin, A., Pentakota, S. R., Singh, R., Singh, R., & Mosenthal, A. C. (2020). Emergency abdominal surgery in patients presenting from skilled nursing facilities: Opportunities for palliative care. *The American Journal of Surgery*, *219*(6), 1076-1082. https://doi.org/10.1016/j.amjsurg.2019.09.015

Childress, J. F., & Childress, M. D. (2020). What Does the Evolution From Informed Consent to Shared Decision Making Teach Us About Authority in Health Care? *AMA J Ethics*, *22*(5), E423-429. https://doi.org/10.1001/amajethics.2020.423

Cole, J., Kiriaev, O., Malpas, P., & Cheung, G. (2017). 'Trust me, I'm a doctor': a qualitative study of the role of paternalism and older people in decision-making when they have lost their capacity. *Australas Psychiatry*, *25*(6), 549-553. https://doi.org/10.1177/1039856217734741

Conrad, P. (2007). Eliot Freidson's revolution in medical sociology. *Health (London, England : 1997)*, *11*(2), 141-144. https://doi.org/10.1177/1363459307074688

Creswell, J. W. (2015). *A concise introduction to mixed methods research*. SAGE Publications.

Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.

De Freitas, L., Goodacre, S., O'Hara, R., Thokala, P., & Hariharan, S. (2018). Interventions to improve patient flow in emergency departments: an umbrella review. *Emerg Med J*, *35*(10), 626-637. https://doi.org/10.1136/emermed-2017-207263

Demiris, G., Iribarren, S. J., Sward, K., Lee, S., & Yang, R. (2019). Patient generated health data use in clinical practice: A systematic review. *Nursing Outlook*, *67*(4), 311-330. https://doi.org/10.1016/j.outlook.2019.04.005

Deng, C., Mitchell, S., Paine, S., & Kerse, N. (2020). Retrospective analysis of the 13-year trend in acute and elective surgery for patients aged 60 years and over at Auckland City Hospital, New Zealand. *Journal of epidemiology and community health*, *74*(1), 42-47. https://doi.org/10.1136/jech-2019-212283

Deng, Y., Chang, L., Yang, M., Huo, M., & Zhou, R. (2016). Gender Differences in Emotional Response: Inconsistency between Experience and Expressivity. *PLoS One*, *11*(6), e0158666. https://doi.org/10.1371/journal.pone.0158666

Denzin, N. K., & Lincoln, Y. S. (2005). *The SAGE handbook of qualitative research* (3rd ed.). SAGE Publications.

Dicker, B., Todd, V. F., Tunnage, B., Swain, A., Conaglen, K., Smith, T., Brett, M., Laufale, C., & Howie, G. (2019). Ethnic disparities in the incidence and outcome from out-of-hospital cardiac arrest: A New Zealand observational study. *Resuscitation*, *145*(1), 56-62. https://doi.org/10.1016/j.resuscitation.2019.09.026

Dillström, M., Bjerså, K., & Engström, M. (2017). Patients' experience of acute unplanned surgical reoperation. *Journal of Surgical Research*, *209*(1), 199-205. https://doi.org/10.1016/j.jss.2016.09.060

Dirksen, C. D., Utens, C. M., Joore, M. A., van Barneveld, T. A., Boer, B., Dreesens, D. H., van Laarhoven, H., Smit, C., Stiggelbout, A. M., & van der Weijden, T. (2013). Integrating evidence on patient preferences in healthcare policy decisions: protocol of the patient-VIP study. *Implementation science : IS*, *8*, 64. https://doi.org/10.1186/1748-5908-8-64

Doron, I., Gal, I., Shavit, M., & Weisberg-Yosub, P. (2011). Unheard voices: complaint patterns of older persons in the health care system. *Eur J Ageing*, *8*(1), 63-71. https://doi.org/10.1007/s10433-011-0177-5

Duncan, T. E., & Duncan, S. C. (2004). A Latent Growth Curve Modeling Approach to Pooled Interrupted Time Series Analyses. *Journal of psychopathology and behavioral assessment*, *26*(4), 271-278. https://doi.org/10.1023/B:JOBA.0000045342.32739.2f

Edvardsson, D., Watt, E., & Pearce, F. (2017). Patient experiences of caring and person-centredness are associated with perceived nursing care quality. *J Adv Nurs*, *73*(1), 217-227. https://doi.org/10.1111/jan.13105

Eijsvoogel, C. F., Peters, R. W., Budding, A. J., Ubbink, D. T., Vermeulen, H., & Schep, N. W. (2014). Implementation of an acute surgical admission ward. *Br J Surg*, *101*(11), 1434-1438. https://doi.org/10.1002/bjs.9605

Ekman, I., Wolf, A., Olsson, L., Taft, C., Dudas, K., Shaufelberger, M., & Swedberg, K. (2012). Effects of person-centred care in patients with chronic heart failure. The PCC_HF study. . *European Heart Journal*, *33*(9), 1112–1119. . https://doi.org/10.1093/eurheartj/ehr306

Eldh, A. C., Luhr, K., & Ehnfors, M. (2015). The development and initial validation of a clinical tool for patients' preferences on patient participation – The 4Ps. *Health expectations : an international journal of public participation in health care and health policy*, *18*(6), 2522-2535. https://doi.org/10.1111/hex.12221

Evans, D. (2003). Hierarchy of evidence: a framework for ranking evidence evaluating healthcare interventions. *Journal of clinical nursing*, *12*(1), 77-84. https://doi.org/10.1046/j.1365-2702.2003.00662.x

Everall, A. C., Guilcher, S. J. T., Cadel, L., Asif, M., Li, J., & Kuluski, K. (2019). Patient and caregiver experience with delayed discharge from a hospital setting: A scoping review. *Health Expect*, *22*(5), 863-873. https://doi.org/10.1111/hex.12916

Eyles, H., & Mhurchu, C. (2009). Does tailoring make a difference? A systematic review of the long-term effectiveness of tailored nutrition education for adults. *Nutrition Review*, *67*(8), 464-480. https://doi.org/10.1111/j.1753-4887.2009.00219.x

Feo, R., Donnelly, F., Jangland, E., Feo, R., Donnelly, F., Muntlin Athlin, Å., & Jangland, E. (2019). Providing high-quality fundamental care for patients with acute abdominal pain. *Journal of health organisation and management.*, *33*(1), 110-123. https://doi.org/10.1108/JHOM-02-2018-0037

Fetters, M. D., & Molina-Azorin, J. F. (2017). The Journal of Mixed Methods Research Starts a New Decade: The Mixed Methods Research Integration Trilogy and Its Dimensions. *Journal of mixed methods research*, *11*(3), 291-307. https://doi.org/10.1177/1558689817714066

Flick, U. (2006). *An Introduction to Qualitative Research* (3rd ed.). SAGE Publications.

Flick, U. (2018). *Doing triangulation and mixed methods*. SAGE Publications.

Foucault, M. (2003). *The Birth of the Clinic* (3rd ed.). Routledge. https://doi.org/10.4324/9780203715109

Freidson, E. (1960). Client Control and Medical Practice. *American Journal of Sociology*, *65*(1), 374–382. https://doi.org/DOI:10.1086/222726

Graham, R., & Masters-Awatere, B. (2020). Experiences of Māori of Aotearoa New Zealand's public health system: a systematic review of two decades of published qualitative research. *Aust N Z J Public Health*, *44*(3), 193-200. https://doi.org/10.1111/1753-6405.12971

Halcomb, E. J. (2019). Mixed methods research: The issues beyond combining methods. *Journal of advanced nursing*, *75*(3), 499-501. https://doi.org/10.1111/jan.13877

Hammersley, M. (1996). The relationship between qualitative and quantitative research: Paradigm loyalty versus methodological eclecticism. In J. T. E. Richardson (Ed.), *Handbook of qualitative research methods for psychology and the social sciences* (pp. 159-174). Oxford: BPS Blackwell.

Harari, D., Hopper, A., Dhesi, J., Babic-Illman, G., Lockwood, L., & Martin, F. (2007). Proactive care of older people undergoing surgery ('POPS'): designing, embedding, evaluating and funding a comprehensive geriatric assessment service for older elective surgical patients. *Age Ageing*, *36*(2), 190-196. https://doi.org/10.1093/ageing/afl163

Harvey, M., & Land, L. (2017). *Research methods for nurses and midwives: Theory and practice*. SAGE Publications Limited, London.

Haskins, L., Phakathi, S., Grant, M., & Horwood, C. (2014). Attitudes of nurses towards patient care at a rural district hospital in the Kwazulunatal Province Of South Africa. *Africa Journal of Nursing and Midwifery*, *16*(1), 32-44. https://doi.org/10.25159/2520-5293/1485

Health and Disability Commission. (1996). *Code of Health and Disability Services Consumers' Rights*. Wellington, NZ: Health and Disability Commission

Health Quality and Safety Commission. (2021). *Patient experience: Growing evidence tells us that patient experience is a good indicator of the quality of health services*. Retrieved November 22 2021 from https://www.hqsc.govt.nz/our-data/health-quality-and-safety-indicators/patient-experience/

Henly, S. J. (2016). *Routledge international handbook of advanced quantitative methods in nursing research*. Routledge, Taylor & Francis Group.

Hirshberg, E. L., Butler, J., Francis, M., Davis, F. A., Lee, D., Tavake-Pasi, F., Napia, E., Villalta, J., Mukundente, V., Coulter, H., Stark, L., Beesley, S. J., Orme, J. F., Brown, S. M., & Hopkins, R. O. (2020). Persistence of patient and family experiences of critical illness. *BMJ open*, *10*(4), e035213. https://doi.org/10.1136/bmjopen-2019-035213

Hirshfield-Bartek, J., Dow, K. H., & Creaton, E. (1990). Decreasing documentation time using a patient self-assessment tool. *Oncology Nursing Forum*, *17*(2), 251-255. https://pubmed.ncbi.nlm.nih.gov/2315189/

Holch, P., Warrington, L., Bamforth, L. C. A., Keding, A., Ziegler, L. E., Absolom, K., Hector, C., Harley, C., Johnson, O., Hall, G., Morris, C., & Velikova, G. (2017). Development of an integrated electronic platform for patient self-report and management of adverse events during cancer treatment. *Ann Oncol*, *28*(9), 2305-2311. https://doi.org/10.1093/annonc/mdx317

Hoog, S. A. J. J., Dautzenberg, M., Eskes, A. M., Vermeulen, H., & Vloet, L. C. M. (2020). The experiences and needs of relatives of intensive care unit patients during the transition from the intensive care unit to a general ward: A qualitative study. *Australian Critical Care*, *33*(6), 526-532. https://doi.org/10.1016/j.aucc.2020.01.004

Iacono, T., Bigby, C., Unsworth, C., Douglas, J., & Fitzpatrick, P. (2014). A systematic review of hospital experiences of people with intellectual disability. *BMC health services research*, *14*(1), 505. https://doi.org/10.1186/s12913-014-0505-5

Jangland, E., Kitson, A., & Muntlin Athlin, Å. (2016). Patients with acute abdominal pain describe their experiences of fundamental care across the acute care episode: a multi-stage qualitative case study. *Journal of advanced nursing*, *72*(4), 791-801. https://doi.org/10.1111/jan.12880

Jerofke-Owen, T., & Dahlman, J. (2019). Patients' perspectives on engaging in their healthcare while hospitalised. *J Clin Nurs*, *28*(1-2), 340-350. https://doi.org/10.1111/jocn.14639

Jerofke-Owen, T., Garnier-Villarreal, M., Fial, A., Tobiano, G., Jerofke-Owen, T., & Garnier-Villarreal, M. (2020). Systematic review of psychometric properties of instruments measuring patient preferences for engagement in health care. *Journal of advanced nursing.*, *76*(8), 1988-2004. https://doi.org/10.1111/jan.14402

Jim, H. S. L., Hoogland, A. I., Brownstein, N. C., Barata, A., Dicker, A. P., Knoop, H., Gonzalez, B. D., Perkins, R., Rollison, D., Gilbert, S. M., Nanda, R., Berglund, A., Mitchell, R., & Johnstone, P. A. S. (2020). Innovations in research and clinical care using patient-generated health data. *CA: A Cancer Journal for Clinicians*, *70*(3), 182-199. https://doi.org/10.3322/caac.21608

Jones, D., Musselman, R., Pearsall, E., McKenzie, M., Huang, H., & McLeod, R. S. (2017). Ready to Go Home? Patients' Experiences of the Discharge Process in an Enhanced Recovery After Surgery (ERAS) Program for Colorectal Surgery. *Journal of Gastrointestinal Surgery*, *21*(11), 1865-1878. https://doi.org/10.1007/s11605-017-3573-0

Kalánková, D., Stolt, M., Scott, P. A., Papastavrou, E., & Suhonen, R. (2021). Unmet care needs of older people: A scoping review. *Nurs Ethics*, *28*(2), 149-178. https://doi.org/10.1177/0969733020948112

Kang, E., Gillespie, B. M., Tobiano, G., & Chaboyer, W. (2018). Discharge education delivered to general surgical patients in their management of recovery post discharge: A systematic mixed studies review. *International Journal of Nursing Studies*, *87*(1), 1-13. https://doi.org/10.1016/j.ijnurstu.2018.07.004

Kaplan, A. (2017). *The Conduct of Inquiry: Methodology for Behavioral Science* (1st ed.). Routledge. https://doi.org/10.2307/2105486

Kingsley, C., & Patel, S. (2017). Patient-reported outcome measures and patient-reported experience measures. *BJA Education*, *17*(4), 137-144. https://doi.org/10.1093/bjaed/mkw060

Klose, K., Kreimeier, S., Tangermann, U., Aumann, I., Damm, K., & on behalf of the, R. H. O. G. (2016). Patient and person-reports on health care: preferences, outcomes, experiences and satisfaction. *Health Economics Review*, *6*(1), 18. https://doi.org/10.1186/s13561-016-0094-6

Koffman, J., Yorganci, E., Murtagh, F., Yi, D., Gao, W., Barclay, S., Pickles, A., Higginson, I., Johnson, H., Wilson, R., Bailey, S., Ewart, C., & Evans, C. (2019). The AMBER care bundle for hospital inpatients with uncertain recovery nearing the end of life: the ImproveCare feasibility cluster RCT. *Health Technol Assess*, *23*(55), 1-150. https://doi.org/10.3310/hta23550

Kornhaber, R., Walsh, K., Duff, J., & Walker, K. (2016). Enhancing adult therapeutic interpersonal relationships in the acute health care setting: an integrative review. *J Multidiscip Healthc*, *9*(1), 537-546. https://doi.org/10.2147/jmdh.S116957

Kullberg, A., Sharp, L., Dahl, O., Brandberg, Y., & Bergenmar, M. (2018). Nurse perceptions of person-centered handovers in the oncological inpatient setting: A qualitative study. *Int J Nurs Stud*, *86*(1), 44-51. https://doi.org/10.1016/j.ijnurstu.2018.06.001

Langberg, E. M., Dyhr, L., & Davidsen, A. S. (2019). Development of the concept of patient-centredness - A systematic review. *Patient Educ Couns*, *102*(7), 1228-1236. https://doi.org/10.1016/j.pec.2019.02.023

Légaré, F., Adekpedjou, R., Stacey, D., Turcotte, S., Kryworuchko, J., Graham, I. D., Lyddiatt, A., Politi, M. C., Thomson, R., Elwyn, G., & Donner-Banzhoff, N. (2018). Interventions for increasing the use of shared decision making by healthcare professionals. *Cochrane Database Syst Rev*, *7*(7), Cd006732. https://doi.org/10.1002/14651858.CD006732.pub4

Lilley, E. J., Cooper, Z., Schwarze, M. L., & Mosenthal, A. C. (2018). Palliative Care in Surgery: Defining the Research Priorities. *Ann Surg*, *267*(1), 66-72. https://doi.org/10.1097/sla.0000000000002253

Lindroth, T., Islind, A. S., Steineck, G., & Lundin, J. (2018). From Narratives to Numbers: Data Work and Patient-Generated Health Data in Consultations. *Stud Health Technol Inform*, *247*(1), 491-495. https://doi.org/10.3233/978-1-61499-852-5-491

Linkhorn, H., & Hsee, L. (2017). Ageing acute surgical population: the Auckland experience. *ANZ journal of surgery*, *87*(3), 149-152. https://doi.org/10.1111/ans.13841

Lloyd, B., Elkins, M., & Innes, L. (2018). Barriers and enablers of patient and family centred care in an Australian acute care hospital: perspectives of health

managers. *Patient Experience Journal*, *5*(3), 55-64. https://doi.org/10.35680/2372-0247.1270

Mako, T., Svanang, P., Bjersa, K., Mako, T., Svanäng, P., & Bjerså, K. (2016). Patients' perceptions of the meaning of good care in surgical care: a grounded theory study. *BMC nursing.*, *15*(1). https://doi.org/10.1186/s12912-016-0168-0

Mangin, D., Stephen, G., Bismah, V., & Risdon, C. (2016). Making patient values visible in healthcare: a systematic review of tools to assess patient treatment priorities and preferences in the context of multimorbidity. *BMJ open*, *6*(6), e010903. https://doi.org/10.1136/bmjopen-2015-010903

Mazurenko, O., Zemke, D., Lefforge, N., Shoemaker, S., & Menachemi, N. (2015). What Determines the Surgical Patient Experience? Exploring the Patient, Clinical Staff, and Administration Perspectives. *Journal of Healthcare Management*, *60*(5). https://journals.lww.com/jhmonline/Fulltext/2015/09000/What_Determines_the_Surgical_Patient_Experience_.7.aspx

Mbuzi, V., Fulbrook, P., & Jessup, M. (2017). Indigenous cardiac patients' and relatives' experiences of hospitalisation: A narrative inquiry. *Journal of clinical nursing*, *26*(23-24), 5052-5064. https://doi.org/10.1111/jocn.14005

McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochem Med (Zagreb)*, *22*(3), 276-282. https://doi.org/10.11613/BM.2012.031

Medical Council of New Zealand. (2020). *Statement on cultural safety and He Ara Hauora Māori: A Pathway to Māori Health Equity*. Medical Council of New Zealand. Retrieved July 22 2021 from https://www.mcnz.org.nz/about-us/news-and-updates/statement-on-cultural-safety/

Medical Council of New Zealand. (2021). *General Surgery*. Medical Council of New Zealand. Retrieved September 29 2021 from https://www.mcnz.org.nz/registration/scopes-of-practice/vocational-and-provisional-vocational/types-of-vocational-scope/general-surgery/

Meissner, W., & Zaslansky, R. (2019). A survey of postoperative pain treatments and unmet needs. *Best Practice & Research Clinical Anaesthesiology*, *33*(3), 269-286. https://doi.org/10.1016/j.bpa.2019.10.003

Mertens, D. M., & Hesse-Biber, S. (2012). Triangulation and Mixed Methods Research: Provocative Positions. *Journal of mixed methods research*, *6*(2), 75-79. https://doi.org/10.1177/1558689812437100

Meterko, Wright, S., Lin, H., Lowy, E., & Cleary, P. (2010). Mortality among patients with acute myocardial infarction: the influences of patient-centered care and evidence-based medicine. *Health Serv Res*, *45*(5), 1188-1204. https://doi.org/10.1111/j.1475-6773.2010.01138.x

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis : an expanded sourcebook* (2nd ed.). SAGE Publications.

Ministry of Health. (2011). *Target more elective operations: Improved access to elective surgery*. Ministry of Health, New Zealand. Retrieved August 23 2021 from https://www.moh.govt.nz/notebook/nbbooks.nsf/0/D4D15CB373747ECCCC25786F0079D9AE/$file/targeting-electives-health-target.pdf

Ministry of Health. (2018). *Achieving Equity in Health Outcomes: Highlights of important national and international papers*. Ministry of Health, New Zealand. Retrieved July 29 2021 from https://www.health.govt.nz/publication/achieving-equity-health-outcomes-highlights-selected-papers

Ministry of Health. (2019). *Acute and elective patient discharge volumes for Waikato DHB*. Ministry of Health, New Zealand. Retrieved July 21 2021 from http://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/hospital-surgical-activity-data-and-stats/explanation-hospital-surgical-activity-data

Ministry of Health. (2021a). *Care Capacity Demand Management: Safe Staffing, Healthy Workplaces*. Ministry of Health, New Zealand. Retrieved August 22 2022 from https://www.ccdm.health.nz/

Ministry of Health. (2021b). *Population of Waikato DHB*. Ministry of Health, New Zealand. Retrieved December 19 2021 from https://www.health.govt.nz/new-zealand-health-system/my-dhb/waikato-dhb/population-waikato-dhb

Ministry of Health. (2021c). *Treaty of Waitangi principles*. Ministry of Health, New Zealand. Retrieved September 8 2021 from https://www.health.govt.nz/our-work/populations/maori-health/he-korowai-oranga/strengthening-he-korowai-oranga/treaty-waitangi-principles

Ministry of Health. (2022). *Te Whatu Ora - Health New Zealand*. Ministry of Health, New Zealand. Retrieved July 18 2022 from https://www.futureofhealth.govt.nz/health-nz/

Misselbrook, D. (2013). Foucault. *British journal of general practice*, *63*(611), 312-312. https://doi.org/10.3399/bjgp13X668249

Miyamichi, R., Mayumi, T., Asaoka, M., & Matsuda, N. (2012). Evaluating patient self-assessment of health as a predictor of hospital admission in emergency practice: a diagnostic validity study. *Emerg Med J*, *29*(7), 570-575. https://doi.org/10.1136/emj.2010.105247

Moloney, M., Hennessy, T., & Doody, O. (2021). Reasonable adjustments for people with intellectual disability in acute care: a scoping review of the evidence. *BMJ open*, *11*(2), e039647. https://doi.org/10.1136/bmjopen-2020-039647

Moloney, W., Boxall, P., Parsons, M., & Sheridan, N. (2017). Which factors influence new Zealand registered nurses to leave their profession? [Other Journal Article]. *New Zealand Journal of Employment Relations*, *43*(1), 1-13. https://search.informit.org/doi/pdf/10.3316/informit.310511224053365

Moloney, W., Gorman, D., Parsons, M., & Cheung, G. (2018). How to keep registered nurses working in New Zealand even as economic conditions improve. *Human Resources for Health*, *16*(1), 45. https://doi.org/10.1186/s12960-018-0312-x

Mora, P. A., DiBonaventura, M. D., Idler, E., Leventhal, E. A., & Leventhal, H. (2008). Psychological Factors Influencing Self-Assessments of Health: Toward an Understanding of the Mechanisms Underlying How People Rate Their Own Health. *Annals of behavioral medicine*, *36*(3), 292-303. https://doi.org/10.1007/s12160-008-9065-4

Morse, J. M. (2010). Simultaneous and Sequential Qualitative Mixed Method Designs. *Qualitative inquiry*, *16*(6), 483-491. https://doi.org/10.1177/1077800410364741

Mullen, M. G., Michaels, A. D., Mehaffey, J. H., Guidry, C. A., Turrentine, F. E., Hedrick, T. L., & Friel, C. M. (2017). Risk Associated With Complications and Mortality After Urgent Surgery vs Elective and Emergency Surgery: Implications for Defining "Quality" and Reporting Outcomes for Urgent Surgery. *JAMA Surgery*, *152*(8), 768-774. https://doi.org/10.1001/jamasurg.2017.0918

Murthy, H. S., & Wood, W. A. (2015). The Value of Patient Reported Outcomes and Other Patient-Generated Health Data in Clinical Hematology. *Curr Hematol Malig Rep*, *10*(3), 213-224. https://doi.org/10.1007/s11899-015-0261-6

Nepal, S., Keniston, A., Indovina, K. A., Frank, M. G., Stella, S. A., Quinzanos-Alonso, I., McBeth, L., Moore, S. L., & Burden, M. (2020). What Do Patients Want? A Qualitative Analysis of Patient, Provider, and Administrative Perceptions and Expectations About Patients' Hospital Stays. *Journal of patient experience*, *7*(6), 1760-1770. https://doi.org/10.1177/2374373520942403

New Zealand Nurses Organisation. (2022). *NZNO/DHB Pay equity*. New Zealand Nurses Organisation. Retrieved June 22 2022 from https://www.nzno.org.nz/dhbpayequity

Newshub. (2022). *General surgeons have 'grave concerns' about state of New Zealand's health workforce*. Newshub. Retrieved July 2 2022 from https://www.newshub.co.nz/home/new-zealand/2022/07/general-surgeons-have-grave-concerns-about-state-of-new-zealand-s-health-workforce.html

Nursing Council of New Zealand. (2011). *Guidelines for cultural safety, the Treaty of Waitangi and Maori health in nursing education and practice* Nursing Council of New Zealand Retrieved from

https://www.nursingcouncil.org.nz/Public/Nursing/Standards_and_guidelines/NCNZ/nursing-section/Standards_and_guidelines_for_nurses.aspx

O'Dwyer, L. M., & Bernauer, J. A. (2016). *Quantitative research for the qualitative researcher*. SAGE Publications.

Olejarczyk, J. P., & Young, M. (2021). *Patient Rights And Ethics*. StatPearls Publishing.

Oxelmark, L., Whitty, J. A., Ulin, K., Chaboyer, W., Oliveira Gonçalves, A. S., & Ringdal, M. (2020). Patients prefer clinical handover at the bedside; nurses do not: Evidence from a discrete choice experiment. *Int J Nurs Stud*, *105*(1), 103444. https://doi.org/10.1016/j.ijnurstu.2019.103444

Park, B., Barazanchi, A., Rahiri, J.-L., Xia, w., Taneja, A., & Hill, A. G. (2021). Patient Experiences of the Emergency Laparotomy Pathway: A Qualitative Study. *World journal of surgery*, *45*(5), 1362-1369. https://doi.org/10.1007/s00268-020-05936-x

Parsons, T. (1951). *The Social System*. Free Press.

Partridge, J., Sbai, M., & Dhesi, J. (2018). Proactive care of older people undergoing surgery. *Aging clinical and experimental research*, *30*(3), 253-257. https://doi.org/10.1007/s40520-017-0879-4

Partridge, J. S., Harari, D., Martin, F. C., Peacock, J. L., Bell, R., Mohammed, A., & Dhesi, J. K. (2017). Randomized clinical trial of comprehensive geriatric assessment and optimization in vascular surgery. *Br J Surg*, *104*(6), 679-687. https://doi.org/10.1002/bjs.10459

Patterson, J., Kashyap, S., & Dominique, E. (2021). *Acute Abdomen*. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK459328/

Perioperative Mortality Committee. (2019). *Report finds equity gap in NZ surgical systems for Maori*. Health Quality & Safety Commission. https://www.hqsc.govt.nz/assets/POMRC/Publications/POMRC8thReport2019_web.pdf

Perioperative Mortality Committee. (2021). *Equity in outcomes following major trauma among hospitalised patients*. Health Quality & Safety Commission. https://www.hqsc.govt.nz/resources/resource-library/equity-in-outcomes-following-major-trauma-among-hospitalised-patients-te-taurite-o-nga-hua-i-muri-mai-i-te-whetuki-nui-ki-waenga-i-nga-turoro-hohipera/

Petersen, J. J., Østergaard, B., Svavarsdóttir, E. K., Rosenstock, S. J., & Brødsgaard, A. (2021). A challenging journey: The experience of elderly patients and their close family members after major emergency abdominal surgery. *Scandinavian journal of caring sciences*, *35*(3), 901-910. https://doi.org/https://doi.org/10.1111/scs.12907

Petrie, K., Deady, M., Lupton, D., Crawford, J., Boydell, K. M., & Harvey, S. B. (2021). 'The hardest job I've ever done': a qualitative exploration of the

factors affecting junior doctors' mental health and well-being during medical training in Australia. *BMC health services research*, *21*(1), 1342. https://doi.org/10.1186/s12913-021-07381-5

Pinto, A., Faiz, O., Davis, R., Almoudaris, A., & Vincent, C. (2016). Surgical complications and their impact on patients' psychosocial well-being: a systematic review and meta-analysis. *BMJ open*, *6*(2), e007224-e007224. https://doi.org/10.1136/bmjopen-2014-007224

Polit, D. F., & Beck, C. T. (2021). *Nursing research: generating and assessing evidence for nursing practice* (11th ed.). Wolters Kluwer.

Poulton, T. E., Moonesinghe, R., Raine, R., & Martin, P. (2020). Socioeconomic deprivation and mortality after emergency laparotomy: an observational epidemiological study. *Br J Anaesth*, *124*(1), 73-83. https://doi.org/10.1016/j.bja.2019.08.022

Rademakers, J., Delnoij, D. M. J., Nijman, J., & de Boer, D. (2012). Educational inequalities in patient-centred care: Patients' preferences and experiences. *BMC health services research*, *12*(1), 261-261. https://doi.org/10.1186/1472-6963-12-261

Radio New Zealand. (2022, August 1 2022). *Health recruitment service aims to combat workforce shortages*. https://www.rnz.co.nz/news/political/471993/health-recruitment-service-aims-to-combat-workforce-shortages

Rahiri, J.-L., Alexander, Z., Harwood, M., Koea, J., & Hill, A. G. (2018). Systematic review of disparities in surgical care for Māori in New Zealand: Systematic review of disparities in surgical care. *ANZ journal of surgery*, *88*(7-8), 683-689. https://doi.org/10.1111/ans.14310

Ramsden, I. (2002). *Cultural safety and nursing education in Aotearoa and Te Waipounamu*. University of Wellington. Retrieved July 2 2022 from https://www.croakey.org/wp-content/uploads/2017/08/RAMSDEN-I-Cultural-Safety_Full.pdf

Redley, B., McTier, L., Botti, M., Hutchinson, A., Newnham, H., Campbell, D., & Bucknall, T. (2019). Patient participation in inpatient ward rounds on acute inpatient medical wards: a descriptive study. *BMJ quality & safety*, *28*(1), 15-23. https://doi.org/10.1136/bmjqs-2017-007292

Reynolds, P. M., Mostafa, A., Butler, M., & Middleton, R. G. (2020). Getting animated about trauma – Using video animation as part of informed consent. *Injury*, *51*(11), 2479-2482. https://doi.org/10.1016/j.injury.2020.07.037

Ringdal, M., Chaboyer, W., Ulin, K., Bucknall, T., & Oxelmark, L. (2017). Patient preferences for participation in patient care and safety activities in hospitals. *BMC nursing*, *16*(1), 69-69. https://doi.org/10.1186/s12912-017-0266-7

Ristić, A. J., Zaharijević, A., & Miličić, N. (2021). Foucault's Concept of Clinical Gaze Today. *Health Care Anal*, *29*(2), 99-112. https://doi.org/10.1007/s10728-020-00402-0

Rose, L., Scales, D. C., Atzema, C., Burns, K. E., Gray, S., Doing, C., Kiss, A., Rubenfeld, G., & Lee, J. S. (2016). Emergency Department Length of Stay for Critical Care Admissions. A Population-based Study. *Ann Am Thorac Soc*, *13*(8), 1324-1332. https://doi.org/10.1513/AnnalsATS.201511-773OC

Rosenberger, P. H., Jokl, P., & Ickovics, J. (2006). Psychosocial factors and surgical outcomes: an evidence-based literature review. *J Am Acad Orthop Surg*, *14*(7), 397-405. https://doi.org/10.5435/00124635-200607000-00002

Rotella, J. A., Yu, W., Ferguson, J., & Jones, D. (2014). Factors influencing escalation of care by junior medical officers. *Anaesth Intensive Care*, *42*(6), 723-729. https://doi.org/10.1177/0310057x1404200607

Rumball-Smith, J., Sarfati, D., Hider, P., & Blakely, T. (2013). Ethnic disparities in the quality of hospital care in New Zealand, as measured by 30-day rate of unplanned readmission/death. *International Journal for Quality in Health Care*, *25*(3), 248-254. https://doi.org/10.1093/intqhc/mzt012

Rutherford, P., Lee, B., & Greiner, A. (2004). *Transforming care at the bedside*. Institute for Healthcare Innovations.

Sankar, S. D., Dhanapal, B., Krishnaraj, B., Karra, S., Natesan, V., & Gomathi Shankar, V. (2018). Desire for information and preference for participation in treatment decisions in patients with cancer presenting to the Department of general surgery in a tertiary care hospital in India. *Journal of global oncology*, *2018*(4), 1-10. https://doi.org/10.1200/JGO.17.00144

Schneider, Z., & Fuller, J. (2018). *Research Approach and Design*. SAGE Publications Ltd. https://doi.org/10.4135/9781526448460.n3

Schneider, Z., Whitehead, D., & LoBiondo-Wood, G. (2016). *Nursing and midwifery research: methods and appraisal for evidence based practice* (5th ed.). Elsevier Australia.

Schug, S. A., Palmer, G. M., Scott, D. A., Halliwell, R., & Trinca, J. (2016). Acute pain management: scientific evidence, fourth edition, 2015. *Medical journal of Australia*, *204*(8), 315-317. https://doi.org/10.5694/mja16.00133

Schultz, H., Qvist, N., Mogensen, C. B., & Pedersen, B. D. (2014). Perspectives of patients with acute abdominal pain in an emergency department observation unit and a surgical assessment unit: a prospective comparative study. *Journal of clinical nursing*, *23*(21-22), 3218-3229. https://doi.org/10.1111/jocn.12570

Sheaff, M. (2005). *Sociology and Health Care: An Introduction for Nurses, Midwives and Allied Health Professionals*. McGraw-Hill Education.

Shorofi, S. A., Jannati, Y., Moghaddam, H. R., & Yazdani-Charati, J. (2016). Psychosocial needs of families of intensive care patients: Perceptions of nurses and families. *Nigerian medical journal : journal of the Nigeria Medical Association*, *57*(1), 10-18. https://doi.org/10.4103/0300-1652.180557

Siminoff, L. A. (2013). Incorporating patient and family preferences into evidence-based medicine. *BMC medical informatics and decision making*, *13*(3), S6-S6. https://doi.org/10.1186/1472-6947-13-S3-S6

Smith, K. V., & Goldman, N. (2011). Measuring Health Status: Self-, Interviewer, and Physician Reports of Overall Health. *Journal of aging and health*, *23*(2), 242-266. https://doi.org/10.1177/0898264310383421

Sonis, J. D., & White, B. A. (2020). Optimizing Patient Experience in the Emergency Department. *Emerg Med Clin North Am*, *38*(3), 705-713. https://doi.org/10.1016/j.emc.2020.04.008

Spinks, J., Chaboyer, W., Bucknall, T., Tobiano, G., & Whitty, J. A. (2015). Patient and nurse preferences for nurse handover—using preferences to inform policy: a discrete choice experiment protocol. *BMJ open*, *5*(11), e008941-e008941. https://doi.org/10.1136/bmjopen-2015-008941

Stanley, J., Semper, K., Millar, E., & Sarfati, D. (2018). Epidemiology of multimorbidity in New Zealand: a cross-sectional study using national-level hospital and pharmaceutical data. *BMJ open*, *8*(5), e021689. https://doi.org/10.1136/bmjopen-2018-021689

Statistics New Zealand. (2018). *Wellbeing statistics: 2018*. Retrieved September 22 2021 from https://www.stats.govt.nz/information-releases/wellbeing-statistics-2018

Statistics New Zealand. (2020). *National population projections: 2020(base)-2073*. Retrieved September 1 2021 from https://www.stats.govt.nz/information-releases/national-population-projections-2020base2073

Stokes, J. W., Wanderer, J. P., & McEvoy, M. D. (2016). Significant discrepancies exist between clinician assessment and patient self-assessment of functional capacity by validated scoring tools during preoperative evaluation. *Perioperative medicine (London)*, *5*(1), 18-18. https://doi.org/10.1186/s13741-016-0041-4

Strömgren, A. S., Groenvold, M., Pedersen, L., Olsen, A. K., Spile, M., Sjøgren, P., Strömgren, A. S., Groenvold, M., Pedersen, L., Olsen, A. K., Spile, M., & Sjøgren, P. (2001). Does the medical record cover the symptoms experienced by cancer patients receiving palliative care? A comparison of the record and patient self-rating. *Journal of Pain & Symptom Management*, *21*(3), 189-196. https://search.ebscohost.com/login.aspx?direct=true&db=jlh&AN=107046572&site=ehost-live

Swenson, S., Buell, S., Zetter, P., White, M., & Ruston, D. (2004). Patient-centered communication; do patients really prefer it? *Journal of General Internal Medicine*, *19*(1). https://doi.org/10.1111/j.1525-1497.2004.30384.x

Tegelberg, A., Muntlin, Å., Juhlin, C., & Jangland, E. (2020). Engagement under difficult conditions: Caring for patients with acute abdominal pain across the acute-care chain: A qualitative study. *International Emergency Nursing*, *52*(1), 100910. https://doi.org/10.1016/j.ienj.2020.100910

Thomas, D. R. (2006). A General Inductive Approach for Analyzing Qualitative Evaluation Data. *The American journal of evaluation*, *27*(2), 237-246. https://doi.org/10.1177/1098214005283748

Thyer, B. A. (2012). Interrupted Time Series Designs. https://doi.org/10.1093/acprof:oso/9780195387384.003.0004

Timmermans, S. (2020). The Engaged Patient: The Relevance of Patient–Physician Communication for Twenty-First-Century Health. *Journal of Health and Social Behavior*, *61*(3), 259-273. https://doi.org/10.1177/0022146520943514

Tobiano, G., Bucknall, T., Sladdin, I., Whitty, J. A., & Chaboyer, W. (2018). Patient participation in nursing bedside handover: A systematic mixed-methods review. *Int J Nurs Stud*, *77*(1), 243-258. https://doi.org/10.1016/j.ijnurstu.2017.10.014

Ulin, K., Olsson, L.-E., Wolf, A., & Ekman, I. (2016). Person-centred care – An approach that improves the discharge process. *Eur J Cardiovasc Nurs*, *15*(3), e19-e26. https://doi.org/10.1177/1474515115569945

Vilches-Moraga, A., & Fox, J. (2018). Geriatricians and the older emergency general surgical patient: proactive assessment and patient centred interventions. Salford-POP-GS. . *Aging clinical and experimental research*, *30*(3), 277–282. https://doi.org/https://doi.org/10.1007/s40520-017-0886-5

Villa, G., Lanini, I., Amass, T., Bocciero, V., Scirè Calabrisotto, C., Chelazzi, C., Romagnoli, S., De Gaudio, A. R., & Lauro Grotto, R. (2020). Effects of psychological interventions on anxiety and pain in patients undergoing major elective abdominal surgery: a systematic review. *Perioperative medicine (London)*, *9*(38). https://doi.org/https://doi.org/10.1186/s13741-020-00169-x

Walker, T. (2011). *Whānau – Māori and family*. Te Ara - the Encyclopedia of New Zealand. Retrieved August 25 2021 from http://www.TeAra.govt.nz/en/whanau-maori-and-family/print

Wasson, J., Stukel, T., Weiss, J., Hays, R., Jette, A., & Nelson, E. (1999). A randomized trial of the use of patient self-assessment data to improve community practices. *Effective Clinical Practice*, *2*(1), 1-10. https://pubmed.ncbi.nlm.nih.gov/10346547/

Whittemore, R., & Knafl, K. (2005). The integrative review: updated methodology. *Journal of advanced nursing*, *52*(5), 546-553. https://doi.org/10.1111/j.1365-2648.2005.03621.x

Whitty, J. A., Spinks, J., Bucknall, T., Tobiano, G., & Chaboyer, W. (2017). Patient and nurse preferences for implementation of bedside handover: Do they agree? Findings from a discrete choice experiment. *Health expectations : an international journal of public participation in health care and health policy*, *20*(4), 742-750. https://doi.org/10.1111/hex.12513

Wilkinson, C., Khanji, M., Cotter, P. E., Dunne, O., & O'Keeffe, S. T. (2008). Preferences of acutely ill patients for participation in medical decision-making. *Qual Saf Health Care*, *17*(2), 97-100. https://doi.org/10.1136/qshc.2006.021378

Wilson, D., & Barton, P. (2012). Indigenous hospital experiences: a New Zealand case study: Indigenous hospital experiences. *Journal of clinical nursing*, *21*(15-16), 2316-2326. https://doi.org/10.1111/j.1365-2702.2011.04042.x

Wohlgemut, J. M., Ramsay, G., Griffin, R. L., & Jansen, J. O. (2020). Impact of deprivation and comorbidity on outcomes in emergency general surgery: an epidemiological study. *Trauma Surgery & Acute Care Open*, *5*(1), e000500. https://doi.org/10.1136/tsaco-2020-000500

Woods, K. (2012). *Improving the System: Meeting the challenge – improving patient flow for electives*. Ministry of Health. https://www.health.govt.nz/publication/improving-system-meeting-challenge

World Health Organization. (1998). *Health promotion glossary*. https://www.who.int/publications/i/item/9789240038349

World Health Organization. (2018). *Social determinants of health: health equity*. https://www.who.int/health-topics/social-determinants-of-health#tab=tab_3