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The History of Nursing in the North Kennedy Region

1910–1925

Submitted by

Sandra Dash

In fulfilment of the requirements for the degree of

Master of Philosophy

College of Healthcare Science

James Cook University

Leila Bonning 1917 Ingham nurse

(Ancestry.com, personal communication, August 2023).

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Leila Bonning (pictured above) was a nurse at Ingham Hospital and one of the many nurses that cared for the local communities of the North Kennedy region. Being able to view her photo and photos of many other nurses inspired me to continue writing this thesis over the past four years. Their dedication and commitment to a fledgling profession in a patriarchal society located in a rural and remote area needs to be acknowledged and they need to be thanked for their tireless work which will not go unknown. Their families also need to be thanked for contributing photos and stories of their time as a nurse.

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Abstract

This research presents a narrative of nurses and nursing in North Queensland in the early twentieth century when healthcare of any kind was both rudimentary and very limited. The years 1910 to 1925 were examined because nursing as a profession evolved significantly in both Australia and Queensland during this time. The North Kennedy region was examined because I live and work here and, as a registered nurse, I was interested in the ways in which my own profession developed within this area during colonial times. Teaching undergraduate nursing students as an academic, I believe that our students will also benefit from developing an awareness of the historical development of the profession in this region.

The North Kennedy region in North Queensland covers an area of approximately 820,765 square kilometres, from the Great Dividing Range to the coastline, north to Cardwell and south to Mackay. Because this region encompasses a large area, this research focused on the communities of Townsville, Charters Towers, Ingham, Ayr and Home Hill. Concentrating upon a defined area helped to facilitate the construction of a focused history of the nurses who once worked there.

The research question that underpins this study is: 'What factors shaped the development of formalised nursing in the North Kennedy region between 1910 and 1925?'. In exploring the evolution of nursing, informal nursing work initially conducted by lay people within the community and the work of professionally trained nurses in community hospitals were both considered. The development of formal education for nurses and the establishment of nursing registration were also examined.

During this period in history, society in Australia was patriarchal with a medically dominated healthcare system and nurses under the control of a male-dominated medical profession.

Politics in the early period of Australia before Federation was also heavily invested in medicine. During this time, only the medical needs of the military and the convicts were tended to, requiring settlers to look after themselves. There was ambivalence towards providing support for hospital services until the early twentieth century when hospitals became known as centres for acute illness rather than chronic care. In an attempt to describe the power imbalance between medicine and nursing, this research explores how nursing evolved into a profession in its' own right and progressed within the North Kennedy region.

The intent of this research was to consider the hitherto unknown nurses of this region, with the aim of creating a more comprehensive history of nursing in the North Kennedy region of North Queensland. As a result of this research, I hoped to shed light upon the work of these early nurse pioneers and, by so doing, give their stories greater historical weight. Currently there is a paucity of knowledge about nursing practice during colonial times in regional, rural, and remote areas of Queensland. Most accounts only focus upon one element such as a particular hospital, or provide a whole of State perspective, which does not provide a focussed description of nursing history in the selected study area. Several factors have likely contributed to this lack of knowledge, including the omission of information about the role of nursing in early twentieth century hospital records and the lack of first-hand accounts from nurses, especially in remote areas.

I utilised Braun and Clark's (2021) analytic framework to determine themes from the data. Three themes were analysed using examples taken from primary sources. These themes are:

1. Contexts of care, exploring the variety of environments in which nursing took place.
2. Upskilling education and instilling professionalism, including the emergence of the Australasian Trained Nurses Association (ATNA) at the beginning of the twentieth

century. Also important is the way in which nurses were educated about professional behaviours, the wearing of uniforms and professional interactions with other staff.

3. Burgeoning aspects of safety and quality. At a time when occupational health and safety were not considered in healthcare, certain aspects of care were noted to be unsafe or as needing improvement and were adapted by hospital medical professionals to provide a safer and more hygienic workplace for both nurses and patients.

These themes have been examined and woven together to provide a thesis that identifies and describes some of the key factors that have contributed to the development of formalised nursing in a rural and remote outpost of Northern Queensland.

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Chapter 1: Introduction

This chapter describes the impetus for the study, provides some background about the early colonial development of the North Kennedy region and introduces several key factors that shaped the beginnings of nursing in the region between 1910 and 1925. As will be elucidated, this 15-year period is significant given several important events that occurred at local, state, national and international levels. The discussion will also describe the influence of Lucy Osburn, an early nurse leader in Australia, and her five contemporaries, who arrived in Sydney from London in 1868 after being trained at the Nightingale Home and Training School for Nurses. The research question that the study will answer will be stated, followed by a summary of the remaining chapters of this thesis.

1.1 Impetus for the Study

An interest in history has always played an important role in my personal life. This began with family history before expanding into Australian and European history and some elements of military history. When I first began working at James Cook University (JCU) in 2018 with my secondary supervisor Dr Narelle Biedermann, we discovered a shared interest in nursing history. It was during a conversation that Dr Biedermann suggested that I consider a historical study for my Master of Philosophy. After contemplating potential topics for this study, I decided to research the early twentieth century nursing history of the North Kennedy region.

The period between 1910 and 1925 was chosen as a focus for this study because nursing as a profession evolved significantly in both Australia and Queensland during this time. For example, state nursing registration began in Queensland in 1911 and served to differentiate between trained and untrained nurses. Men also began to make a noticeable appearance in nursing examinations, especially in mental health nursing (Queensland Government, 1912-

1925). Interestingly, ideas about nursing training taking place in universities or a dedicated college of nursing were also canvassed in the early 1900s, with the Australasian Trained Nurses Association (ATNA) questioning why nursing qualifications were not considered of enough worth to be a university degree (Lowe, 2020). The Queensland Nurses' Registration Board was established in 1912 and the first exams were held in 1913 for probationers who had trained at recognised training hospitals. This decision provided prospective nurses in the North Kennedy region with two choices of training hospitals: the Charters Towers and Townsville hospitals (Strachan, 1996).

Despite these reforms, there remains a paucity of knowledge about late nineteenth and early twentieth century nursing practice in regional, rural and remote areas of Queensland. Most accounts only focus upon one element (e.g., a particular hospital) or, conversely, provide a whole-of-state perspective (Madsen, 2005). Although such approaches are useful, they do not provide a focused description of nursing history in the region under consideration. Authors such as Strachan (1996) have made comparisons between Queensland and other states regarding nursing in small country hospitals and the change of pace[1] seen in the profession when the concept of trained nurses was accepted by the medical profession in the 1890s. However, the differences between the states would make any comprehensive discussion impossible, given that data such as nursing reports and personal communication from nurses of that time are unavailable. Moreover, generalisations about aspects of nursing at both interstate and intrastate levels can be problematic, given substantial differences in factors such as geography, socio-economic development, availability of and access to nursing staff and healthcare services and the differing disease profiles present in urban, regional and remote area populations (Wood et al., 2023).

[1] This change of pace relates to small country hospitals seeing nursing as training on the job rather than the lecture and examination combination that city hospitals and large country hospitals had commenced (Strachan, 1996).

Historical explorations of early nursing developments and practices can also be compromised by several substantial impediments. These include the omission of information about the nature of nursing in early twentieth century hospital records (Harris, 2014) and the lack of first-hand accounts, especially from nurses and other medical professionals in rural and remote areas. The latter is likely because women rarely wrote anything publicly during that time (Yuginovich, 2002). Despite these impediments, such explorations not only facilitate a more complete understanding of the profession, but they serve to critique and shape narratives regarding the current identity and profile of the profession among its members and the general public (Holme, 2015).

1.2 Purpose of the Study

To help address the aforementioned paucity of knowledge concerning nurses and nursing in the North Kennedy region and create a more comprehensive history of nursing in this region of North Queensland, this study constructs the stories of hitherto invisible nurses. By doing so, this study gives the stories of these nursing pioneers greater historical weight and adds important contextual understanding to healthcare provision throughout this era. There is also a personal purpose to this study, which is to increase my skills in research training. This will be beneficial when I commence a Doctor of Philosophy program after this thesis has been completed.

1.3 Research Question

The research question that guided this study was:

What factors shaped the development of formalised nursing in the North Kennedy region between 1910 and 1925?

1.4 Study Design

Given this study concerns a period of over a century ago, the most appropriate methodology for this study was historical research. Historical research, despite its incompletion and imperfection, provides valuable contextual information regarding the development of contemporary societies. In a profession such as nursing, historical research provides a source of cultural identity, helping reveal the many dimensions of nursing (Firouzkouhi & Zargham-Boroujeni, 2015). This historical research approach has provided insight into the early development and practice of nursing in the North Kennedy region, as well as into how these nurses contributed to healthcare provision within fledgling hospital settings.

1.5 Research Paradigm

The theoretical paradigm within which this study is located is constructivism. Constructivism was developed by Vygotsky, who held that individuals create knowledge and learning in their own environment (Liu & Matthews, 2005). Researchers using this paradigm construct their learning and understanding by seeking meaning from sources and discussions with people. Research methodologies that incorporate constructivism include narrative inquiry, grounded theory and historical research (Adom et al., 2016). A detailed overview of how constructivism has guided this project is provided in Chapter 2.

1.6 Situating the Study

To set the scene for this research study, pertinent contextual information needs to be introduced. This concerns white settlement in the North Kennedy region and the evolution of nursing work visible at the turn of the twentieth century in Australia.[2]

1.6.1 The development of Queensland as a state

Although James Cook discovered Australia in 1770, it was not until the arrival of British convicts in 1788 that Australia was seen as a British colony (Australian War Memorial, 2021). However, by the 1850s, the states and territories as we now know them were still yet to be formally separated into their designated areas. For example, New South Wales occupied a large part of the Australian continent, including a vast area of what would become Queensland in 1859 (Queensland Government, 2018). Dissatisfaction arose between what was then northern and southern New South Wales, with the main arguments concerning labour shares and the neglected interests of those in the growing northern town of Moreton Bay (Pugh, 1890).[3] The dissolution of the old New South Wales into the states of Queensland and New South Wales was not a prompt or straightforward matter. Separation from New South Wales had been considered from as early as 1851. In 1856, a petition was sent to the Queen by the New South Wales Legislative Assembly; however, the debate on dividing boundaries lengthened the process of separation.[4] When Earl Grey (Secretary of State for the Colonies) suggested separation in 1856, the New South Wales Government objected. The year 1859 saw the

[2] Although this study focusses on white settlement in the North Kennedy region, the Indigenous population were not excluded by choice. There was no information in any source regarding Indigenous women who became nurses and there is also the potential inappropriateness of a white researcher exploring Indigenous history without Indigenous research support.

[3] The desire to separate from New South Wales was informed by such reasons as the inadequate distribution of labour, neglect of the population's interests, increases in economy, productivity and population and the physical remoteness from the New South Wales Government (Pugh, 1890).

[4] The Queen was consulted about the division between Queensland and NSW as in 1856 Australia was still a British colony. Commonwealth Parliament did not occur until Federation in 1901 (Australian War Memorial, 2021; Parliament of Australia, 2024).

separation finally occur and the new colony of Queensland was proclaimed (Pugh, 1890; Queensland Government, 2018; Rush & Watkins, 2001). With reference to the development of nursing, what was to become Queensland notably, by 1849, already had a hospital in the convict settlement of Moreton Bay. The move into an independent state also provided an opportunity for Queensland to become the first state in Australia to formulate a nurses' registration board in 1912, marking an initial step towards professionalising and regulating nursing.

1.6.2 The North Kennedy district

The North Kennedy district was one of the 15 pastoral districts of Queensland that were gazetted to help deal with land management between 1842 and 1873. The North Kennedy district covers an area of 820,765 square kilometres within the northern part of Queensland, commencing from north of Cardwell, west to the Great Dividing Range and south of Mackay on the Connors Range.[5] Bowen was the first town in the Kennedy district, settled in 1861; however, the desire to explore potential goldfields inland and claim land for their own led men further north. To encourage exploration in the north, yearly licenses and long leases were given at a nominal rate to prospective settlers. This decision caused tension between those wishing to settle on land and those known as squatters (Farnfield, 1974). Squatters were pastoralists who had moved out of restricted areas of settlement in New South Wales and followed explorers to Queensland, where they occupied Crown land that was not legally theirs (Allingham, 1975).[6] The lure of gold also brought the majority of European men to the mining frontier towns of Charters Towers and Ravenswood, as well as other ethnic groups, including many Chinese immigrants (Colwell, 1974). The year 1868 saw a gold strike in Ravenswood, with the Charters Towers goldfields founded four years later (Christian, 2020; Kreuzer et al., 2007). As the

[5] In 1848, Edmund Kennedy, an English explorer and surveyor, first came through what would eventually become the North Kennedy region. Kennedy landed at Rockingham Bay, north of current day Cardwell, in an attempt to find an overland route north to the Gulf of Carpentaria (JOL Admin, 2016).

[6] The *Unoccupied Crown Lands Occupation Act of 1860* saw many squatters leave New South Wales and move to Queensland, including to the Kennedy region (Allingham, 1975).

goldfields were developed, the population of these areas increased with approximately 25,000 people residing in the Charters Towers region between 1872 and 1899 (Colwell, 1974).

Naturally, with this population growth, the numbers of injuries and illnesses experienced by miners and their families increased.[7] Life on the goldfields in Charters Towers was primitive by today's standards, with most families living in calico tents or rough tin huts and possessing only the bare necessities required to survive (see Figure 1.1).

Figure 1.1: Small Mining Camp at Charters Towers 1890 (State Library Queensland, 2023)

There was no secure water supply and the lack of clean water brought illness to miners and their families (Colwell, 1974). Poor hygiene, coupled with the tropical environment, led to annual epidemics of dengue fever, measles and typhoid (Colwell, 1974). Not only did the miners have to contend with communicable diseases, but there was also the risk of mining-related illnesses including phthisis (both tuberculosis and non-tuberculosis) and diffuse fibrosis. Miners were also susceptible to injuries resulting from the improper use of explosives, faulty equipment causing falls, other forms of blunt trauma and drownings (Laney & Weissman, 2014; Menghetti, 1988). The need to establish locally available healthcare became an issue of vital importance. Although the other towns of Townsville, Ingham and Ayr have not been specifically mentioned until now, this was not a purposeful omission. Charters Towers was a

[7] Injuries from mines include being crushed under rocks, drownings from mine floods and dynamite explosions from inappropriate use (Queensland Government, 2012)

more populated area than other towns at the beginning of the North Kennedy district with more incidences of injury and disease documented in cemetery records. Despite limited photographs of housing in either Townsville or Ingham around the same period as the mining camp (see Figure 1.1), what was found shows a higher standard of accommodation (see, e.g., Figures 1.2 and 1.3).

Figure 1.2: Townsville North Shore c. 1890 (State Library Queensland, 2023)

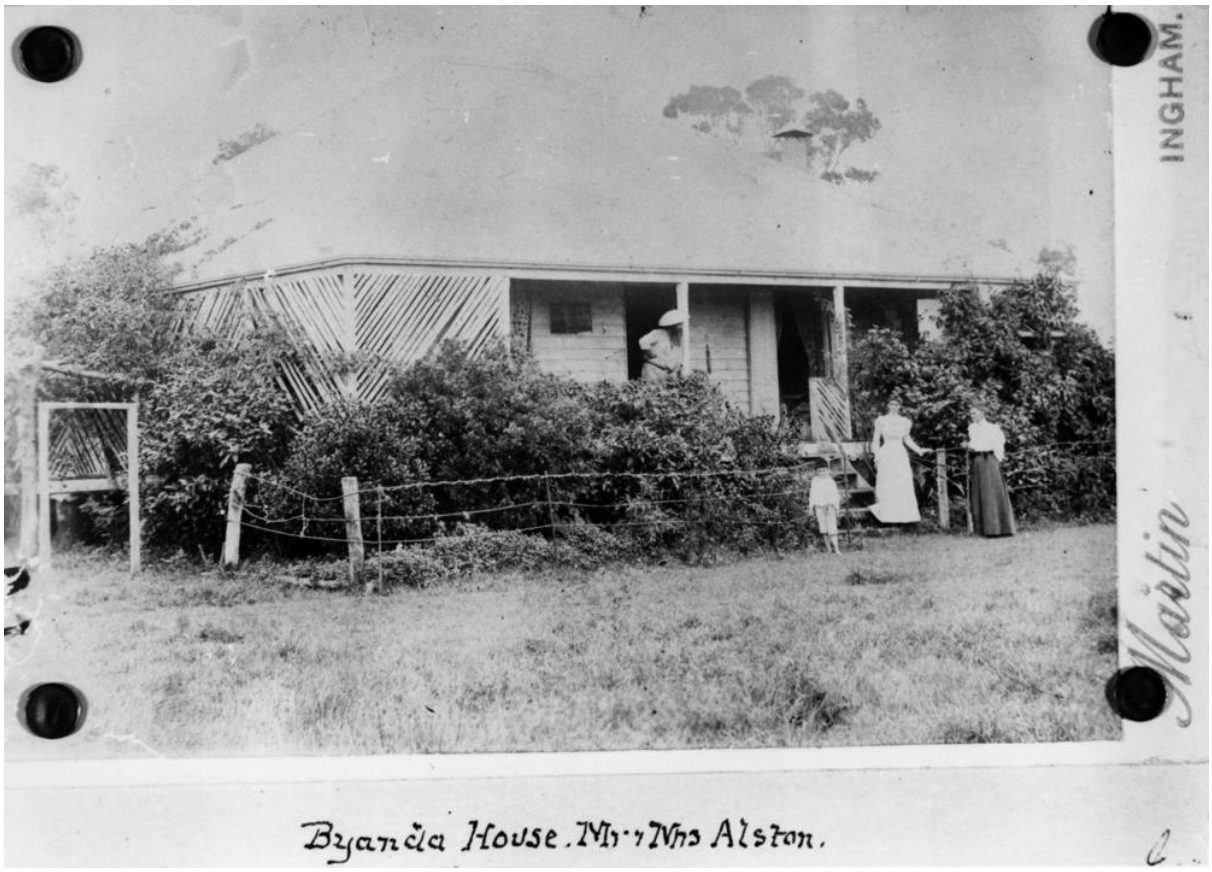


Figure 1.3: An Ingham Residence 1899 (State Library Queensland, 2023)

1.6.3 Colonial nursing in Australia

To fully understand the development of nursing in Queensland, one must first understand how nursing as a vocation began in Australia. When Australia was first settled, convicts were used in a pseudo-nursing capacity to care for fellow convicts; however, this work was often used as punishment for the crimes they had committed (Lowe, 2020). These convicts were more caregivers than nurses given that they were untrained and unpaid and had no formal experience. Caregiving tasks included providing for the basic hygiene and nutritional needs of the infirm, with such tasks conducted using a gender-to-gender model: male convicts cared for male patients and female convicts cared for female patients (Burrows, 2018).

The quality of care provided by these convict nurses and wardsmen was questionable, resulting in many complaints being made against them (Burrows, 2018). The disrepute experienced by these convict ‘nurses’ was likely multifactorial. Factors would include the lack of healthcare

infrastructure and the limited resources available for the provision of adequate care (Raeburn et al., 2020). It is also unknown what form of training, if any, convicts were given towards the provision of even basic care (Burrows, 2018).[8] Collectively, these factors likely contributed to the provision of suboptimal and ineffective care of convict patients (Godden, 2004).

Despite the questionable qualities of convict nurses, an ex-convict named Bathsheba Ghost was appointed matron of the Sydney Infirmary from 1852 to 1866. Although Ghost attempted to provide some form of training for those in caring roles, she was thwarted by numerous challenges (Godden, 2004). These challenges included the limited degree of comfort measures available for patients, the death of a patient being deemed unusual,[9] Ghost's prevailing illness and that training of nurses was outside her role description (Godden, 2004).[10] When Lucy Osburn (a Nightingale nurse) arrived in 1868, nurses at the Sydney Infirmary had a reputation for being dirty and untrustworthy, a reputation that had deteriorated further following the death of Matron Ghost in 1886 (Burrows, 2018; Godden, 2004).[11]

1.6.4 Lucy Osburn and Nightingale nursing

In 1867, after direction from the New South Wales Government, six Nightingale nurses were transported to Sydney from England in an effort to improve the standards of nursing in the colony at the time. The group was led by Lucy Osburn and commenced working at the Sydney Infirmary in March 1868 (Burrows, 2018). Osburn instigated major changes to nursing, including defining nursing as an exclusively female profession (New South Wales Government, 2021). On arrival at the Sydney Infirmary, Osburn removed any existing nurses she deemed

[8] Although convicts were chosen for positions as caregivers based on their previous experiences, it is not identified in literature whether caring was part of that experience (Burrows, 2018).
[9] The deceased patient was a seaman, whose employer paid subscriptions to the hospital for sick employees. When the employer came to visit the patient, he was found in a neglected state and, subsequently, died (Godden, 2004).
[10] Matrons at this period on time were housekeepers of the hospital and their duty was to oversee domestic management. Despite this, Ghost did attempt to train the nursing staff. Ghost's illness was an unspecified uterine disease (Godden, 2004).
[11] Queensland also had female convicts who cared for convict patients. The most famous of these was Sarah Payne (Burrows, 2018). Sarah was the first "nurse" named in Queensland (Pearn et al, 2015).

unfit for nursing work: on the basis, for instance, of exhibiting poor personal hygiene or having an unkempt appearance (Burrows, 2018). The nurses who remained employed at Sydney Infirmary were given deportment lessons and new uniforms were ordered (Burrows, 2018). Six probationary nurses were recruited and trained in a newly established Nightingale-esque training school. This training school also served to supply nurses to other Australian hospitals (Burrows, 2018). In 1877, the first Nightingale trained nurse, Jane Hellicar, took an appointment as Lady Superintendent at the Hospital for Sick Children in Brisbane. This appointment was unprecedented in the history of Queensland nursing, insofar as Hellicar was educated and from an upper-class family (Pearn et al., 2015). It is important to note here that the discourses within early twentieth century healthcare journals promulgated Nightingale-based training as 'saving' nursing in Australia (Langtree, 2020). These early journals promoted the belief that nurses prior to Lucy Osburn's arrival were in a similar class to the fictional character of Sarah Gamp (Godden, 2004). Gamp (see Figure 1.4) was a character in Charles Dickens' serialised novel, *The Life and Adventures of Martin Chuzzlewit*, published 1843–44, who was characterised as an obese, alcoholic nurse and midwife who lacked professional ethics. This caricature led society at this time to believe that nursing needed reforming (Helmstadter, 2013; Summers, 1989).

Figure 1.4: Sairey (Sarah) Gamp (Encyclopedia Britannica, 2023)

Although early literature may have described nurses in such a manner, Madsen (2003) found that the main difference between trained and untrained nurses of the period was that untrained nurses were willing to take on domestic duties. Such duties were not considered part of a nursing role by those trained under the Nightingale system.

1.6.5 Men in nursing

Another reform initiated by Osburn was the exclusion of men from the nursing field, except for care provided in so-called 'lock and stricture wards', the precursor to mental asylums (Barber, 1996). Prior to mental asylums being established, mentally ill colonial subjects were placed in gaol (Vrklevski et al., 2017). This difference between fulfilling general caregiving roles and providing care in mental asylums helps to explain why the men in early caring roles are not well described. Men who worked in mental asylums received little training and were, therefore, depicted as less qualified than female nurses. The move to mental health also created a difference in gender stereotypes between male and female nurses (Ford, 2019). Some authors (see, e.g., Arif & Khokhar, 2017; Kearns & Mahon, 2021) have indicated that the presence of men in nursing ended with the Nightingale model of nursing training mandating that nursing was a female vocation. Evans (2004), conversely, suggested that men were removed from

nursing because the idea of male nurses was incompatible with family ideology of the time. Nursing was also perceived as something that came naturally to females (Evans, 2004).

Despite these nineteenth century societal norms, men did play an important caring role in early Australia and were employed in hospitals, despite being untrained (Barber, 1996; Madsen, 2003). Nonetheless, early nursing work provided by men remains under-researched in Australia. One reason for this may be the various terms used to describe male caregiving at that time, including wardsmen, attendants and orderlies. This ambiguity may explain why there is little mention of male nurses within nineteenth century healthcare sources (Barber, 1996). Existing research on this topic also suggests there may have been mixed opinions about the quality of male caregiving. Barber's (1996) work on the loss of men in nursing, for instance, reported a South Australian doctor's account of the usefulness of male nurses.[12] This surgeon indicated that male caregivers could complete tasks as capably as female nurses and could also take on work that should not be completed by females. Unfortunately, there was no indication within this article as to what 'tasks' the surgeon was referring. Similarly, in an 1873 summary of the Sydney Infirmary, several doctors indicated that they preferred trained wardsmen over female nurses (Barber, 1996). Again, no indication was given to their reasoning. In contrast, some Victorian doctors believed it was barbaric to have men as sick attendants because women were superior to men in performing such tasks (Strachan, 1996). Nonetheless, it is clear that male nurses had a place in early Australian healthcare.

1.6.6 Early forms of nursing in the North Kennedy region (1860 to 1900)

Informal nursing work was performed by women who accompanied their pioneering husbands during the white settlement of the North Kennedy region. These women lived in relative isolation and endured difficult times on their own when their husbands were away. At that time,

[12] The name of the surgeon was not stated in the source.

women were outnumbered by men four to one in Queensland (Yuginovich, 2000) and one-third of the state did not have access to a doctor or nurse (Pearn, 2015). Informal nursing work undertaken by such women involved administering medical remedies and burying the dead, including their own children, without the support available in more established communities (Cahir, 1975; Finch, 1998; Pearn, 2015). As more families arrived in the north, they brought their personal supplies of medications, with receipt books not only containing recipes for food but also for treatments of illnesses and injury.[13] Despite their efforts, death was a frequent visitor to pioneering families given healthcare needs beyond the women's knowledge and capabilities (Vidonja Balanzategui, 2011). By 1910, more medically informed books, such as Dr John Flynn's *The Bushman's Companion* (1910), became widely available and were used by these women to support the delivery of basic healthcare in rural and remote areas.[14]

Families also incorporated traditional Indigenous knowledge into their healthcare practices. Whereas the wives of pioneers valued Indigenous birthing practices, early Australian nursing did not formally acknowledge Indigenous healthcare despite these practices being used for thousands of years before European settlement (Best, 2015). As a result, Aboriginal voices in post-colonial nursing history remain either absent or are not well researched (Best & Gorman, 2016).[15] Despite the North Kennedy region having a significant population of Indigenous peoples at this time, there were no records found pertaining to nursing training and Indigenous ways of knowing that can be added to the region's history. As with male nurses, descriptions of the role of Indigenous women in early nursing need to be captured. It is important to

[13] Examples of medications for illnesses include laudanum for coughs, glycerine for coughs and piles, opium for pain and ipecac to induce vomiting(E Boyd, personal electronic communication, 2021). Recipe books were used to document medications because the healthcare of the family fell to the mother. Writing treatments down allowed knowledge to pass through generations (McNaught, 2004).

[14] This book was only one of his achievements towards healthcare improvement in rural and remote areas.

[15] The first known formally trained Indigenous nurses was May Yarrowick who trained in the Crown Street Hospital Sydney before registering in 1907 (Best & Bunda, 2020).

acknowledge the care that Indigenous women may have provided to the rural and remote communities as they once were, in a time when there was limited medical help available.

1.6.7 Development of Queensland hospitals

From the commencement of the state, the development of hospitals in Queensland relied heavily on the community through their voluntary subscriptions (Gregory, 2010). Although the Queensland Government provided financial support for hospital construction and maintenance in the late nineteenth and early twentieth centuries, hospital management was left to committees selected by subscribers (Patrick, 1987). Subscribers were local community organisations that supported their hospitals through donations, with wealthier members of the community providing support via annual subscriptions (Gregory, 2010; *The Evening Telegraph*, 1914). The state government also provided some subsidies along with patient fees; however, there was minimal legislation in the parliament at that time concerning hospitals for the physically ill (Patrick, 1987). Nonetheless, by 1866, the Legislative Assembly of Queensland had investigated the workings of the colony's hospitals as far north as Warwick (157kms from Brisbane). It is unknown whether the recommendations arising from this inquiry, which listened to opinions from surgeons from Brisbane Hospital regarding nurses and nursing education, were ever enacted in the North Kennedy region. Although the Legislative Committee provided recommendations for the Brisbane Hospital, Patrick (1987) stated that it was another 20 years before Queensland hospitals adopted any of these recommendations. It also took many years for the Queensland Labor Party to implement policies to nationalise hospitals.[16] The story of the hospitals in the North Kennedy region will be more fully described within Chapter 4.

[16] Although the nationalising of hospitals meant providing public hospitals where the hospitals could still be financially funded by contributions and have a hospital board, government finances at the time could not afford this investment (Patrick, 1987).

1.6.8 Nursing training in Queensland hospitals

Although nurse training in Sydney began in 1868, training in Queensland, as reported in the Brisbane Hospital Committee's meeting, did not commence until 1886 (Patrick, 1987). Nurse training was initially set for three years; the Australasian Trained Nurses Association (ATNA), however, recommended that the number of occupied beds be the training indicator (Strachan, 1996). Training, therefore, ranged from three years for hospitals with more than 40 beds, four years for hospitals with 20 to 40 beds and five years for hospitals with 10 to 20 beds (Strachan, 1996). Charters Towers and Townsville hospitals were three-year training schools. They followed an apprentice-style training with nurses learning their skills on the job. Each hospital would then conduct annual examinations with those successful moving through the ranks of student nurse (Strachan, 1996). When ATNA took over control of examinations from the hospitals, those that were successful were then eligible for membership of ATNA.

1.6.9 Australasian Trained Nurses Association

Susan McGahey, a matron from Sydney, had instigated the formation of ATNA in 1899 after travelling to London for a conference (Patrick, 1987). ATNA's aims were to delineate between trained and untrained nurses and to improve the education of nurses (Strachan, 1996). In 1900, a register of all Australian nurses was published. Although this listed the names and qualifications of trained nurses, the register was not considered legal because nurses' qualifications were not formally recognised unless the hospital had been approved by ATNA. There was a distinct time lag between the development of ATNA in New South Wales and its establishment in Queensland. A Queensland office of ATNA was not officially established until 1904, five years after Sydney (Strachan, 1996). Prior to its establishment, Queensland hospitals continued to train nurses through the system that they had been using, which was largely provided by medical professionals and matrons. The effects on the workforce availability of nurses in Queensland in the five years that Queensland was without ATNA have not been

discussed within reviewed literature. For example, it is unknown if the lack of ATNA's presence in Queensland impeded employment opportunities within the state. To ensure appropriate standards of education for women to become nurses, a 'Circular to Training Schools' by the *Australian Nursing Journal* was delivered in 1906. This specified that the minimum standards of education for trainee nurses would be sixth grade, which then dropped to fifth grade (no date was given for the drop in grade).[17] The development and influence of ATNA will be described in more detail in Chapter 5.

1.6.10 Nurses' registration in Queensland.

Nurses' registration commenced in Queensland in 1911 despite the process not being initiated by the nurses themselves (Strachan, 1996). The idea of state registration was only a future plan in Queensland and only after New South Wales had registered their nurses. Therefore, it was a surprise to Queensland nurses when the Health Act Amendment Act of 1911 included amendments for the registration of nurses. There were, however, no nurse registration board members until 1913 (Patrick, 1987). Although it was not compulsory for nurses to register, employment preference was given to those that did (Patrick, 1987). In 1924, examinations for all general nurses were re-evaluated with the decision move from one final examination to three individual examinations, lessening the number of subjects that nurses would need to sit at one time (Patrick, 1987).

1.6.11 World War One

Between 1914 and 1918, the world suffered through the tragedy that was World War One (WWI). In Australia alone, 2,861 nurses served in the Australian Army Nursing Service

[17] In Queensland, at the beginning of the twentieth century, schooling was only compulsory until age 11, when girls would then commence domestic duties either at home or in some form of paid work (Strachan, 1996). This standard of primary school completion as a requirement for entry into nursing studies remained until 1968 (Strachan, 1996).

(AANS) both overseas and on the home front. Approximately 12 of those nurses were from the North Kennedy region (Queensland Government, 2021).[18] Unfortunately, as with the stories of nurses in the North Kennedy region, accounts of nurses from WWI were rarely recorded. Within the individual chapters of this thesis, where possible and relevant, the stories of the nurses who served in WWI from the North Kennedy region have been captured. This includes such aspects as their previous experience, their war stories, their return home to Australia and their transition back to civilian life.

1.7 Thesis Organisation

This thesis is organised so that the history of nursing in the North Kennedy region between 1910 and 1925 unfolds from chapter to chapter. The content of each chapter of this thesis is as follows.

Chapter 2 defines the methodology used to guide this study. It outlines the reasoning that underpinned selection of a qualitative design as well as the philosophical perspective engaged in the study. The stages of historical research, following Shafer's 1974 framework, are also described in detail, from understanding the sources to dissemination of the final work. The types of sources used, and the relevance of their inclusion are also documented.

In Chapter 3, the methods employed to conduct this study are discussed. These methods include the study design used in this research, the importance of ethics and the type of ethics approval gained. The chapter outlines how the sources used within the study were selected and where they were located, further describing the processes used to collect data. Application of the framework formulated by Wood (2011) is discussed, the use of which helped to ensure that important elements of provenance and veracity were considered. The final section of this

[18] The AANS was established in 1902 as a reserve force using volunteer civilian nurses. In WWI the nurses were recruited from both nursing services and civilian nurses with the nurses being paid. Nurses served in hospitals in Australia and overseas (Heywood, 2018).

chapter outlines the methods used for data analysis. In this study, Braun and Clarke's (2022) framework for thematic analysis was used to determine themes in the corpus.

The first of the themed chapters, Chapter 4, focuses on the contexts of care. This chapter examines the types of institutions and environments that nurses worked in within the North Kennedy region. This chapter also highlights the effects of WWI on some of the nurses that enlisted and also on the region itself.

Chapter 5 presents an analysis of the formalising of nursing education and professionalism in the North Kennedy region. This chapter reviews the training and education required to become a nurse, providing a description of the curriculum. The second part of the chapter deals with professional relationships, the evolving professional identity of the nurse and a study of the uniforms worn.

The third and final themed chapter, Chapter 6, explores burgeoning approaches to safety and quality. This chapter examines those elements of either the healthcare environment or equipment that were identified as requiring improvements to prevent harm or injury to healthcare professionals working in the hospitals at the time.

Chapter 7, the discussion, contextualises the findings from this study with how they relate to issues of the time, both politically and socially. The social effects of the training of nurses within the North Kennedy region is reviewed.

Chapter 8 comprises the conclusion to the overall thesis. The conclusion revisits the aim of the research study and identifies the strengths and limitations of the study. This chapter also documents recommendations for further study regarding elements noted within the research.

1.8 Chapter Summary

Chapter 1 has outlined a number of salient aspects concerning the development of the North Kennedy region after separation from New South Wales. It has described key events in the evolution of nursing work from convict nursing through to the introduction of nursing registration in Queensland, the formalisation of nursing training and increased qualifications. Other factors, such as the contribution of Indigenous health practices and the roles of men in early healthcare, have been briefly described and the paucity of knowledge surrounding early Australian nursing practice in the North Kennedy region highlighted. The following chapter outlines the methodology used within this study.

Chapter 2: Methodology

2.1 Introduction

A research project's methodology refers to the framework used to address the phenomenon of interest and is linked to the methods used to gather and analyse the data (Denzin & Lincoln, 2018; Opoku et al., 2016). When a methodology is chosen for a research project, one should consider the aims of the research to ensure they align appropriately with the methodology (Opoku et al., 2016).

This chapter discusses several elements. It described why a qualitative design was selected for this study and outline the philosophical perspective, or lens, employed during the study. An overview of historical methodology and its processes are also presented. Finally, following Wood's (2011) framework, the format for analysing sources for internal and external criticism is explained.

2.2 Research Paradigm

Qualitative and quantitative research are the two broad paradigms into which research can be divided (Borgstede & Scholz, 2021). A paradigm is a reflection of how a researcher sees and interprets the world in which they operate (Brown & Duenas, 2019). The choice of paradigm affects both the researcher's choice of methodology and the methods used to conduct the research (Brown & Duenas, 2019; Kivunja & Kuyini, 2017). Quantitative research employs an empirical approach to interpreting data, including experimentation and the incorporation of statistical analysis (Ahmad et al., 2019; Nieswiadomy & Bailey, 2018). In contrast, qualitative research is a naturalistic approach that studies individuals' perceptions of their environment and utilises words to describe these perceptions by answering questions of 'why' or 'how' (Busetto et al., 2020; Nieswiadomy & Bailey, 2018). Qualitative research does not possess one distinct

methodology; rather, it draws on multiple perspectives, or 'lenses', and utilises a variety of methods to gather and analyse the data (Denzin & Lincoln, 2018). The process of qualitative research is descriptive, allowing for the identification of recommendations that may shape or inform current practice and provide new perceptions of the phenomenon being studied.

Rooted in anthropology and sociology, the traditional age of qualitative research occurred during the first half of the twentieth century (Mohajan, 2018). The next 60 years saw methods develop over several decades in qualitative research. Grounded theory and data analysis using coding were the first two elements to develop between 1950 and 1970 (Chun Tie et al., 2019; Mohajan, 2018). During the postmodern era (1990–1995), new ethnographies were developed. By the 2000s, qualitative research approaches were established within multiple disciplines, including nursing and midwifery (Mohajan, 2018). Some of the common approaches to qualitative research include phenomenology, grounded theory and ethnography (Korstjens & Moser, 2017).

As mentioned, the qualitative paradigm was used in this study. Qualitative research was selected because its naturalistic, interpretive approach to data analysis facilitated a deeper understanding of the study period. The way in which qualitative research explains human nature cannot be quantified appropriately (Tenny et al., 2022). Without using qualitative research, I would not have been able to provide a rich description of the history of nursing in the North Kennedy region from 1910 to 1925.

2.3 Axiology, Ontology and Epistemology

Axiology, ontology and epistemology are other important elements that must be considered when formulating a study's design. These elements reflect the assumptions and beliefs that each paradigm holds and are upheld and applied within the research project by the researcher (Kivunja & Kuyini, 2017).

2.3.1 Axiology

Axiology relates to the consideration of ethical issues within the research endeavour. It guides researchers to question their own values and their potential effects on, and implications for, the research being conducted (Kivunja & Kuyini, 2017). Values are the beliefs, approved by society, that are the guiding principles in a person's life (Gammage et al., 2021; Kresberg & Keller, 2018).

My personal values include truth, integrity, respect and privacy and were instilled in me, as for most people, by my family during childhood. However, I never really understood these values growing up, and nor did I understand the effects they can have on a person when utilised appropriately. As an adult, I began to understand the importance of these values and the importance of treating people as I would like to be treated. I have incorporated these values into my chosen profession of nursing and being a nurse researcher. In this study, these values are especially important as a mechanism to honour the memory of those who produced the data used in this study in the first place. The nurses, whose stories I am recounting, are not alive to give me permission to use their material and, although their families have allowed access, public viewing may not have been the original intention when materials were first produced. I refrained from intruding on the privacy of these nurses' families when undertaking data collection for the study. For example, if a family member did not respond to my initial contact when trying to locate ancestral artefacts, I refrained from attempting to recontact them. I have also been respectful when family members asked me to keep any shared artefacts private. Finally, I have avoided naming individual nurses when recounting their stories unless express permission was granted.

2.3.2 Ontology

Ontology is concerned with the nature of reality, being and existence and helps guide researchers in determining the orientation of the research question (Berryman, 2019). When considering ontology, the researcher examines themselves, reviewing their own belief systems and asking, 'what is reality?' (Kivunja & Kuyini, 2017; McGregor, 2018). Asking this question assists the researcher to associate with being either a relativist or a realist (Brown & Duenas, 2019). A relativist believes that the truth is not the same to each individual and will vary depending on each individual's circumstances (Collins, n.d.-b). Realist ontology, conversely, proposes that reality can be known, or discovered, albeit incompletely and with some uncertainty (Collins, n.d.-a). I view myself as a relativist, meaning that my ontological perspective of reality is that it is individually perceived and constructed. How I perceive and interpret the world will differ to how a colleague sees it, with perception and interpretation informed by such factors as interpretations of individual experiences, personal values and upbringing. Therefore, when gathering data for the study, I had to understand that my ontology would be constructed differently to that of the nurses in the chosen study period, because their experiences of nursing are not my experience. My version of the reality of that period is drawn from sources that I have read and interpreted through my own worldview, which is informed through my own life experiences. The nurses' view of that period, conversely, developed from actually being there at that time. I recognise and acknowledge that these differences exist and understand that they unavoidably shape the story being told.

2.3.3 Epistemology

Epistemology describes the process of coming to know something and seeking to discover the nature of knowledge and its acquisition (Berryman, 2019). Although all researchers have an epistemology, it will differ depending on the source of knowledge. Knowledge can be local, intuitive, authoritative and empirical (Kivunja & Kuyini, 2017). When contemplating

epistemology, researchers need to consider how do we know what we know and ask: 'what is the truth?' (Crotty, 1998). My own knowledge came from school and university, exploring something that interests me and talking to people and learning from them. Regarding truth, as I have matured, I realise that there is no single truth. Two people in one room can tell two different versions of the same event, yet both claim they are telling the truth. When reviewing sources that I may have received from family members of nurses, I remembered that one nurse's truth may not be that of another. When Nurse Fielding cared for patients suffering from meningitis in the Cape Pallarenda Quarantine Station in 1920, she felt it was a fun time because she was the youngest of the nurses; however, the sister in charge may have seen the months spent there as something different (Patrice Savina, electronic personal communication, 2022).

2.4 Constructivism

A review of the philosophies that reflected my own relativist ontological beliefs led me to study constructivism, particularly social constructivism, to determine its appropriateness for my research. Constructivism came to prominence in the mid-twentieth century, underpinned by the belief that people constructed their own knowledge by interacting with their environment and reflecting on that interaction (Akpan et al., 2020). Prior to the development of constructivism, philosophical inquiry had been dominated by positivism, which emerged philosophically in the late eighteenth to early nineteenth centuries (Riley et al., 2021).

Lincoln and Guba are well known for their work concerning naturalistic inquiry and constructivism (McInnes et al., 2017). The ontological assumption of constructivism is relativism, whereby experience is organised into an explainable form and remains independent from any single specific reality (Kivunja & Kuyini, 2017). Constructivism is underpinned by the view that there are multiple realities that are the product of the human intellect and can be changed over time (Hall et al., 2013; Kivunja & Kuyini, 2017; Mertens, 2015). A

constructivist's position regarding epistemology is one of subjectivity, which asserts that knowledge is formed individually (Brown & Duenas, 2019). From a methodological perspective, the researcher uses a hermeneutic approach to gather knowledge. Hermeneutics is the theory and practice of interpretation and views knowledge as constructed, confronted and contrasted (Chang, 2022; Paterson & Higgs, 2005). A central component of hermeneutics is the hermeneutic circle, meaning—in attempts to understand a phenomenon—the interpretive movement between the phenomenon of the research and its parts (Paterson & Higgs, 2005). When a researcher is analysing texts, they are required to analyse each strand of the text and not just rely on their current interpretation (Chang, 2022). There also needs to be consideration of the contexts of the time of the text's publication (e.g., social and political issues), requiring researchers to not just rely on studying the text alone. Although it is commonly applied in phenomenology, this type of interpretation is integral to all forms of qualitative data analysis (Chang, 2022). The axiological element of constructivism follows a balanced approach, meaning that there is an assumption that the values of the researcher will be reflected in the outcomes of the research. This includes ensuring that any ethical issues involving culture and morals are guided by those same values (Kivunja & Kuyini, 2017).

Constructivism, specifically social constructivism, was selected to inform this study because of the social nature of the project and the multiple conversations and interactions that were had with family members of nurses and historical associations. Social constructivists build a social landscape in accordance with their beliefs and experiences from interacting with society (Boyland, 2019). My social interactions with nurses' families, historical associations and historical museums guided me (and transformed my own knowledge) as I constructed a history of nursing in the North Kennedy region between 1910 and 1925.

2.5 Methodology

The methodology of a research project can be viewed as the philosophical approach and theoretical 'lens' used to answer the research question, with the choice of methodology determining the methods used for data collection (Brown & Duenas, 2019; Crotty, 1998; Richardson-Tench et al., 2018). For this study, historiography was selected as the most appropriate methodology to address the research question. Put simply, historiography is the study of past writings (Chatterjee, 2020). Historiography analyses descriptions of the past and depicts how historical writing has evolved and developed over time. Historiography is also a form of transparency, as details are provided defining where sources are found and how they are processed (Chatterjee, 2020). Transparency is important in qualitative research to improve rigour and prevent or minimise concerns regarding the credibility of the study. Research studies demonstrate transparency by allowing readers to view components such as data collection and analytic methods (Moravcsik, 2019). Without transparency, studies cannot be replicated or assessed accurately (Moravcsik, 2019).

Before any discussion about historical research methodology can be undertaken, it is important to provide a definition of history. Such definitions vary among historians and appear to depend on the class of history to which people find themselves drawn. For example, Donnelly and Norton (2021) have stated that history is 'A way of speaking and writing about what happened before' (p. 6). In contrast, earlier writers such as Christy (1975) in her seminal work have indicated that exploring history is about searching for the truth about the past. Alternatively, Dunne et al. (2016) proposed that historical research explores factors of the past that contribute to change.

The birth of modern historical research began in the mid-nineteenth century when both academe and science became systematised into organised disciplines (Croke, 2016; L'Estrange, 2014).

The German historian, Leopold von Ranke, who believed that primary sources were an important part of history, emphasised that all evidence should be made available to show what happened in an event (Donnelly & Norton, 2021; Onder, 2022). Both von Ranke and the historians of the time held that primary sources were more important to use than secondary accounts developed by previous historians. This is still the belief of historical researchers today (Donnelly & Norton, 2021).

Another important development in historical research concerned the need to shift the focus of historical writing from being narrow, with limited focus, to a broader understanding of the world and its people. This latter form of historical writing became known as 'history from below' because it focused on people rather than the political history that had been popular (Donnelly & Norton, 2021). The other historical change that historians had to consider was the reinterpretation of documents or the need to use alternative sources to understand society given that people did not often leave writings of their own (Donnelly & Norton, 2021). The histories that were written from this time (late nineteenth century) were now more about the social and economic aspects of a community and considered that community as a whole rather than in segregated parts (Donnelly & Norton, 2021; Nawiyanto et al., 2022). There were three approaches that used 'history from below': the Annales School, Marxism and post-colonial history (Donnelly & Norton, 2021).

More recently, the era of digitisation has transformed historical research (Milligan, 2022). There are both positive and negative aspects to digitised history. On the positive side, digitisation has made the field of history and historical research more accessible, through the growth of the internet and mobile connectivity (Donnelly & Norton, 2021). Many archives are now online, historical newspapers and journals are now digitised and there is often no longer the need to bear the financial strain of travel to various historical sites for archive access

(Donnelly & Norton, 2021). On the negative side, although a multitude of documents are now digitised, it must be remembered that not everything is digitised. The lack of digitisation for some sources may be because of the cost involved in preserving data and because more popular collections tend to be digitised before others (Milligan, 2022). This alone can prevent communities from accessing their own histories (Zaagsma, 2022). Researchers also now require digital literacy skills to navigate computer systems (Milligan, 2022). Zaagsma (2022) has argued that there remains much work to be done in encouraging digital literacy. Engagement with experts in digital histories (e.g., librarians and digital archivists) is also important.

2.6 Stages of Historical Research

Conducting historical research can be broken into a four-stage process (Shafer, 1974). Although Shafer's framework dates from the 1970s, his framework provided me with a guide to historical research that was easily understood and manageable. These four stages are outlined in Table 2.1.

Table 2.1: Historical Research Stages

Shafer's (1974) stages to historical research	Description of the stage	Corresponding methods and approaches
1. Understanding sources	• Differentiating between primary and secondary sources.	• Primary sources included diaries and receipt books to understand the context of pre-formalised nursing.
2. Searching and collating sources	• Bibliographic searches for sources and preliminary analysis of data found.	• Historical websites such as Trove, the Australian War Memorial and State Archives of Queensland.
3. Source criticism and analysis	• External and internal criticism of sources regarding authenticity, reliability and usefulness. • Interpreting findings.	• P. J. Wood's (2011) framework is used to evaluate provenance, purpose, context, veracity and usefulness of each document. • Thematic analysis used Braun and Clarke's 2022 framework.
4. Dissemination	• Writing the narrative of nursing in the context of the study towns.	• Development of the historical narrative.

2.6.1 Understanding different sources

Brundage (2017) has indicated that for a historian to process the past they require source materials, known as primary sources, or secondary sources written after the event. Primary sources are those items that provide first-hand information about a particular place or time and come from the viewpoint of the person at that time. Primary sources include private material such as letters and diaries or public material such as government documents and media items (Brundage, 2017; Langtree et al., 2019). In this study, photographs and newspaper articles produced during this era were used as primary sources to corroborate (or contradict) other sources and provide additional context.

Personal diaries were utilised because they help construct not only an individual's life but also that of their family and friends. Seeing past events through personal experiences also makes them more tangible (Watson, 2016). In addition, diaries provide an abundant source of information about the past that secondary sources cannot deliver (Tosh & Lang, 2006). However, although diaries afford a perspective of life in a different period, they cannot perfectly capture the 'truth' about events. This is because the language used within diaries can be personal, partial, selective and purposeful (Thomson, 2011). Diaries can take many forms and it is important to consider how the author uses the diary. This means examining the form and style of the text, whether all the available space was used, if only a few words were used or whether a detailed account was given of an event (Thomson, 2011). Whereas historians value the content of diaries that are found, researchers also need to acknowledge that the author may have perceived their diary and its accounts as private and, therefore, may not have considered its use for public viewing (Watson, 2016). It is important to consider why the diary was written. Was it for the author themselves, for family and friends or for future generations to read? (Watson, 2016). In this study, I used diaries from early plantation owners around the North Kennedy region. These early diaries, written before the chosen time, provided insight into the

way that care for the sick and injured was provided before hospital-based care as well as the issues that early families had to deal with in what was then a remote area of the state.

Another form of primary source material that I utilised was receipt books. One such item that I accessed was a hardcover book entitled 'receipt book'[19] that caused me initial confusion. The contents of the book detailed both recipes for food cooking and medications and treatments for ailments in a similar style to the artefacts described by McNaught (2011) who found that women often wrote their recipes in a hardcover book. Although my source was from the wife of a plantation owner in a town of the region before the twentieth century, it provides an insight into healthcare in an area where trained professionals were in short supply. Plantation owners also looked after the healthcare of their workers in plantation hospitals, meaning that the treatments documented could also have been utilised for workers. Responsibility for the care of families was part of the mother's role and knowledge was handed down from generation to generation (McNaught, 2011). As this woman passed away during childbirth, it is significant that the source remained in the family and remains viewable today. Receipt or recipe books can provide more information than just cooking methods and ingredients, enabling historians to comment on more than the food that people ate in past times (Wessell, 2013). The same can be said for images of the past.

Although images have been used for many years by researchers to gain a deeper understanding of the history, politics and culture of previous periods, they have not always been used as a predominant source for research (Jordanova, 2011). Researchers need to understand how to analyse what they are seeing to provide an historical interpretation. Photographs used in historical research have an advantage in that they provide a glimpse into a past life, allowing the viewer to imagine being there themselves (Lévesque et al., 2014). They also provide a

[19] Receipt comes from the Latin *recipere* meaning to 'to receive'. Women were often the writers of these books (Rees, 2017).

connection to history and alter our perceptions of both the world and ourselves (Davis, 2021). Nevertheless, researchers need to remain aware that photographic interpretation is an individual, subjective experience and will likely be different from what the photographer intended, if indeed their intentions are known (Davis, 2021). It is also important to know how and for what purpose the photograph was taken, who developed it and what control the photographer had over their work (Jordanova, 2011). The photographs that I identified for this study were of the staged variety. These included photographs of nurses standing next to patients and nurses grouped formally with other medical staff. There were no natural photographs of the nurses at work. Although staged photography provides details of the uniforms of the nurses and the setting of the hospital, it does not provide insight into how the nurses worked, the type of work that the nurses undertook or the names of the nurses themselves. Staged photography was typical in the early years of taking photographs when subjects had to remain still because of the slow process of taking photographs (Kiernan, 2015; Perry, 2021).

Government documents, such as Health Act Amendment Act 1911 and nurses' examination records, were also used as primary sources in this thesis. The former was utilised to understand parliamentary decisions of the time and their effects, if any, on the nursing profession. The latter provided insight into the shift, at that time, to promoting trained nurses. Examination records also showed the persistence of nurses in re-sitting exams should they fail.

Newspapers were a significant information source and provided insight into hospital committees, given that their meetings were printed in the paper for society to read. As Vella (2020) has noted, newspapers can reveal important information about historical events that contemporary readers are able to access. Although newspapers are a relevant source of information for historians, issues of availability can make retrieving information from them challenging (Tanacković et al., 2014). Furthermore, although media such as newspapers can

provide information on previous times, they also shape a person's perception of reality. The public rely on media sources for news; therefore, their perception of an event can be based on what they read (van der Meer et al., 2018). Given their ability to influence public opinion, the use of newspapers in historical research needs to be analysed critically. Given that historians are reviewing the accounts of reporters, these accounts need to be reviewed for bias and errors (Brundage, 2017). Copies of newspapers, such as *The Northern Miner* and the *Townsville Bulletin*, published between 1910 and 1925, were located through public websites, such as Trove. These sources provided detailed accounts of hospital committee meetings and the movements of people in the towns of the North Kennedy region at the time. Although some of the committee meeting records pre-dated my study period, they provided useful insights into the attitudes of the committees and medical officers towards nurses and nursing work. Table 2.2 provides details of the range of primary sources analysed in this study.

Table 2.2: Primary Sources and Examples from the Study

Primary source	Example from the study
Diary	• Diary of Finlay Skinner
Receipt book	• Eliza Agnes Boyd's Receipt (Recipe) Book
Nurses examinations	• General Nursing Examination 20 September 1921 • Surgical Nursing Examination 9 October 1925
Prison Records	• Medical Officer's journal re Prison Staff—HM Penal Establishment, Stewart's C 1894–1929
Committee meeting records	• Townsville Orphanage Committee meeting records
Photographs	• Townsville Hospital Nurses 1916 • Townsville Hospital Nurses 1915
Newspapers	• *The Northern Miner* • *Townsville Daily Bulletin*

Secondary sources, including textbooks or relevant nonfiction books, are those items developed after the event and by an author not related to the period under consideration (Scheuler, 2014). Secondary sources play an important role in triangulating information gained from primary sources to ensure accuracy in the data gathered (Serafico-Reyes, 2019) and can be used to

research specific topics. These sources are written to tell a story but can have different linguistic styles and are aimed at different readers. These different linguistic styles may relate to several elements. First, language can be affected by social media, cultural changes and how a person views the world (Scheffer et al., 2021). The historical period at the time of writing a secondary source can also influence the writing style, along with the values taught in school or accepted in society at that time (Rousmaniere, 2004). For example, *The Northern Miner* of 1910 to 1925 was very social, describing events of the community in great detail, as well as detailing who was on holidays and who was visiting the town. Conversely, the *Townsville Bulletin* depicted worldwide views with limited discussion of community issues or events. Any secondary sources used in this research needed to be analysed to determine the quality of the item, the perspective from which it was written and the types of sources that were used (Rousmaniere, 2004). Quality in this context would be the difference between a scholarly paper in terms of language and that of a newspaper article (Rousmaniere, 2004). When using books as secondary sources, I considered whether they are based on primary or other secondary sources. I found that the broader the topic, the more secondary sources were used to write the book. Secondary source material was read to gain information for the study (see, e.g., Table 2.3); however, where possible, this information was cross referenced with primary sources to ensure that the events described took place as reported. This triangulation also ensured that my interpretation of the primary sources was correct.

Table 2.3: Secondary Sources with Examples from the Study

Secondary source	Example from study
Theses	• *Nursing services in the Rockhampton district, 1911–1957* (Madsen, 2005) • *Life after war: The ongoing contributions of Queensland's first world nurses after the war* (Doherty, 2022)
Websites	• Ancestry.com for connection with nurses' families
Nonfiction	• *Labour of Love: The history of the Nurses' Association in Queensland, 1860–1950* (Strachan, 1996) • *History of the Townsville General Hospital 1866–2001* (Jaumees, 2001)

2.6.2 Searching and collating sources

The second stage, searching and collating sources, occurs early in the research process (Shafer, 1974). This stage involves bibliographic searches, description, control (attention to detail) and preliminary analysis (Shafer, 1974). The researcher needs to decide what material to record, as well as the extent and process of recording. Although there were two formats that can be used in this stage—identified, for instance, as the bibliographic method or research note taking—with the advent of the digital age, collating and analysing has changed considerably (Langtree et al., 2019; Shafer, 1974). Bibliographic methods include the use of working cards to assess each source found. These include the name of the author, the title of the source and any notes on the usefulness of the source. Brundage (2017) utilised the note card system in his research, although he found that more notes would be written than used in the final draft of the work. Research notes may include a variety of forms. These could involve notes of substantive data, notes referring to other research notes and notes suggesting further research (Shafer, 1974). The type of material used for research notes and whether notes are kept loose-leafed or in a book is at the discretion of the researcher (Shafer, 1974). Importantly, the keeping of bibliographic records and research notes in the twenty-first century would involve the use of contemporary options such as electronic notes. Brundage (2017), for instance, has stated that unless a good index system for note taking or an appropriate software system is used then both processes have their frustrations. The format I used to write notes was to document relevant findings by hand in notebooks, with the full reference underneath. These notes were then transferred into Microsoft Word documents and placed within files on the computer and then into folders under headings such as ‘nursing history’ or ‘Charters Towers’.

2.6.3 Source criticism and analysis

In Stage Three, the researcher undertakes source criticism and analysis using external and internal forms of criticism. Source criticism and analysis are an important stage in

authentication because they help the researcher determine how useful a piece of evidence will be (Shafer, 1974). External criticism authenticates evidence through identifying how authentic a source is in relation to authorship, the date that the source was written and the appearance of the source (Heller, 2023). The elements that external criticism focus upon include ruling out possible plagiarism or forgery and ensuring the legibility of sources.

Internal criticism evaluates how accurate statements found in historical documents are. It is important to engage in internal criticism because eyewitness accounts, for example, cannot necessarily be relied upon to be truthful (Serafico-Reyes, 2019). Consideration needs to be given to the meaning of words, as well as to the presence of archaic language that may be at risk of misinterpretation (Shafer, 1974). The intention of the reporting and any lag between the event and when the document was written are also considered under internal criticism (Shafer, 1974). Although there are frameworks, such as RADAR,[20] that can help analyse sources, I found Wood's (2011) framework easy to understand and systematic in its approach to determining the need for internal and external criticism. Wood (2011) explained the analytic process in a way that was simple and logical. Wood's (2011) framework has been used by Clendon and McBride-Henry (2014) and Langtree et al. (2019). This framework is discussed in more detail in Chapter 3.

2.6.4 Dissemination

Dissemination of the information gathered from this research study involved my development of an historical narrative. Historical narratives explain the past through an interpretation of events in an effort to help readers understand a particular phenomenon (Gill et al., 2018; Tamura, 2011). These narratives can be presented in many forms, including letters,

[20] RADAR is an approach to evaluating sources. The acronym stands for Relevance, Authority, Date, Appearance and Reason. This format helps researchers navigate the multitude of information that is found through the various sources available (Mandalios, 2013).

autobiographies and newspaper articles (Donnelly & Norton, 2021). The nineteenth century saw the beginning of historical inquiry along with historical narratives and also produced the realisation that history was something that could be examined. However, given that the historian decides what events to consider and what to remove, not everything can be told in an historical narrative (Carroll, 1990). In this study, I used a narrative form to construct a story of nursing in the North Kennedy region between 1910 and 1925. This narrative is outlined in Chapters 4 to 7. In Chapter 8, I provide a comparative discussion of these four chapters, identifying similarities and differences between the towns and their respective nursing histories.

2.7 Chapter Summary

This chapter has discussed the elements involved in undertaking this historical research study and outlined the reasoning behind the choice of philosophical perspective and paradigm. Research paradigms were outlined to foreground the concepts involved in research, such as ontology and axiology, and to illustrate how my own views linked to the construction of this study. The philosophical perspective chosen for this study was constructivism. This philosophy was detailed along with the four stages of historical research, as developed by Shafer (1974), used in this study. Prior to outlining the types of sources drawn on in this study, I analysed the different types of sources identified as primary and secondary, noting any potential limitations in their use. Finally, the dissemination strategy chosen for this study was detailed, including its incorporation into the thesis. The following chapter describes the methods used to locate and analyse the items that constituted the data sources for this study.

Chapter 3: Methods

3.1 Introduction

Chapter Three describes the study design, methods and ethical process of this research project. The process I undertook for data collection, including locating and evaluating the sources incorporated in my study, is presented. Following this discussion, I explain the methods used for data analysis, followed by an outline of how I incorporated reflexivity into the study.

3.2 Study Design

A study's design informs others about how the research was conducted, providing insight into data collection, recording procedures and data analysis (Creswell & Creswell, 2018). Qualitative designs are flexible and adjust according to the content that is being investigated through the study and can utilise data collection strategies such as interviews (Tenny et al., 2022). Qualitative research acknowledges and describes the relationship between the researcher and the subject being studied (Busetto et al., 2020). This relationship is reflexive and can involve both how the researcher and subject made contact and maintained contact and the background and experience of the researcher given that the researcher cannot be isolated from the research process (Busetto et al., 2020).

The data collection process followed had four phases. The first two involved data collection from both physical and digital sources and the last two phases were concerned with analysis and dissemination. Table 3.1 outlines the phases and the methods adopted during each phase.

Table 3.1: Phases of Data Collection

Phase	Collection environment
Phase 1: Data collection—locating sources in digital archives	• Ancestry.com for family locations • Trove for digitised newspapers and hospital committee meetings reports • Australian War Memorial • National Archives of Australia • Source selection using inclusion and exclusion criteria
Phase 2: Data collection—locating sources in physical archives	• Townsville Library, local history section • Charters Towers Library • Townsville Museum • Family History Association of North Queensland • Queensland State Archives, Brisbane • National Archives of Australia, Canberra • Queensland Nursing and Midwifery Union, Brisbane • Selection using inclusion and exclusion criteria
Phase 3: Analysis	• Internal and external criticism • Close reading • Memoing • Coding • Thematic analysis using Braun and Clarke's (2022) framework
Phase 4: Dissemination	• Narrative presented in Chapter 8
Data management tools	• EndNote version 20 • Microsoft Excel spreadsheets • Microsoft Word documents
Ethics approval	• Exemption granted (see Appendix A)

3.3 Data Collection Methods

3.3.1 Selection criteria

The development of selection criteria to determine who or what can be included in, or excluded from, the data to be analysed is a standard practice for research studies (Garg, 2016; Patino & Ferreira, 2018). My selection criteria were developed to support my aim of answering the research question, which was 'What factors shaped the development of formalised nursing in the North Kennedy region between 1910 and 1925?'. My inclusion criteria prioritised primary sources because they would provide first-hand accounts of nurses' work and beliefs at the time.

Secondary sources, such as books written by historians on the chosen towns or information on disease processes would then be used. My exclusion criteria referred to sources that did not relate to the research question and would, therefore, be irrelevant to the research project. Such sources included those that referred to information post-1925. Table 3.2 outlines the inclusion and exclusion criteria used for the sources within this study.

Table 3.2: Inclusion and Exclusion Criteria for Sources

Inclusion criteria	Exclusion criteria
Written sources about nursing and healthcare dated between 1910 and 1925: • Primary sources such as diaries and letters from nurses working in the allocated region. • Primary sources such as hospital committee meeting records of the allocated region that detail nursing conditions. • Primary sources such as photographs, newspapers, Medical Officer journals from the prison, military records, ATNA records, theses, textbooks, maps, architectural drawings. • Relevant Health Acts and government decisions giving evidence of decisions that may have affected nursing (e.g., changes to working hours and the formal registration of nurses).	Primary and secondary sources about nursing and healthcare dated post-1925
Specific information (secondary sources) related to the North Kennedy regional towns of Charters Towers, Townsville, Ingham, Ayr and Home Hill: • Population data, employment rates, population movements between towns. • Economic information about the chosen towns. • Effects of disease and injury on individual towns and how these effects influenced the skill levels of nurses. • Post-WWI nursing care.	Midwifery or midwives[21]
Nursing work, including orphanage nurses, private nurses, asylum nurses, quarantine station nurses and prison nurses.	
Sources about healthcare in the North Kennedy region pre-1910: • Information regarding nursing prior to the selected period provides important context to the nature of nursing and the changes that occurred during the selected period. The sources used for this include many of the primary and secondary sources that have been identified in this table.	

The 15-year period chosen for the study encompassed several important national and global events. These include WWI, the formal registration of nurses and formalised nursing education.

[21] Although midwifery was a registered profession in 1912 and there were private midwives within the North Kennedy region in private laying in homes, my focus in this study is upon the roles of nurses, given the many developments that occurred within the profession at that time.

During this period, nurses worked in a variety of clinical settings, including public government hospitals, prisons, orphanages, private hospitals, homes and mental institutions. Sources that provided insight into the practices of nurses in any of these settings have been included.

3.3.2 Data collection

The methods of data collection and analysis in qualitative research are linked together, with the researcher choosing methods in accordance with the theoretical framework and the type of research question(s) being asked. In qualitative research, the most common data collection methods include document analysis, individual interviews, focus groups and observations (Busetto et al., 2020). Given that the period I studied was over a century ago, I undertook archival research and historical document analysis using both physical and digital archives. Archival research is an approach to understanding the physical data sources that can be found within archival services, whether these are physical or digital archives. There are a multitude of methods that can be used to interpret this data (Mills & Mills, 2017). Physical archives are buildings where records from previous times are kept in controlled environments (Walsham, 2016). However, access can be limited by organisational policy or institutional developments (Mills & Mills, 2017).[22] Prior to attending a physical archive building, I accessed the archive's website to ensure that correct documentation had been completed prior to my arrival. Some of these institutions, such as the State Archives in Brisbane, required notification several weeks in advance of my visit to ensure that the documents I requested to view were retrieved from their shelves. On my arrival. I would be escorted to a desk where I would be able to sit and view materials that were waiting in boxes for me. Generally, only paper and pencils were allowed into the viewing area to avoid any marking of the archived material.

[22] The State Library in Brisbane was unavailable in 2022 because of weather damage and the National Library in Canberra was unavailable in 2023 because of construction.

Both the State Archives and the Australian War Memorial had time limits for their archives. This meant that I had to view materials as thoroughly as possible to ensure that I gathered the information needed to help address my research question. The ability to take photographs preserved images for when I needed to review documents. Given primary sources are often physical artefacts and restricted to the viewing of a select few, digitisation has made content more available (Kubelka, 2017). When searching for digitised sources, I would first search using keywords such as 'nursing examinations'. Such searches would lead to various websites that had sources related to those words. The task was then to review those websites to determine the appropriateness of each potential source. Some sources were more appropriate to be used as a digital source. Having newspapers in a digital format allowed for exact sections to be viewed according to the keyword, instead of needing to read the entire paper. Being digitised also allowed for enlargement of the newspaper to enhance reading. With digitisation there was also no requirement to visit an institution for sources if access was readily available online. Therefore, travel was generally less required. Nonetheless, digitisation can cause a loss of engagement with librarians as resource experts and the decreased need for archival pilgrimages diminishes what was once considered a rite of passage for the novice historian (Brennan, 2018). This study benefited greatly from access to primary sources and librarian advice from capital city and interstate sources that were not available in North Queensland.

Although there may be challenges, online digitised databases like Trove® and Core® provide researchers with access to newspapers, government reports, photographs and memoirs that may have been otherwise unobtainable. Indeed, there were some sources, such as the committee meeting records from the Townsville State Orphanage, that were viewable only in digital format. It was during the times of researching within these databases that I was able to find reports or references in newspaper articles that I might not have known about or considered using. I was also able to access newspapers that may not have been readily available in hard

copy or microfiche format in local resource areas. It is important to highlight that, at this time, not all newspapers are digitised, terminology may be different to the search terms that a researcher may be using and there is no information about the production of the newspaper or how popular it was with readers (Bingham, 2010). Regardless of the source used, it is important to analyse the documents in a way that will ensure that they are appropriate to the research question and the period being studied.

3.4 Historical Document Analysis

Historical document analysis involves the examination of text types (e.g., letters, diaries and government reports) that are as close to the chosen period as possible (Busetto et al., 2020; Donnelly & Norton, 2021). The sources that were analysed in this study included primary sources such as diaries, letters or photographs of nurses at the time and secondary sources such as textbooks and theses that describe similar time periods and topics. Table 3.3 outlines the data collection process for the primary sources used in this study.

Table 3.3: Data Collection Process with Primary Sources

Primary source type	Purpose of source	Search approach	Search terms
Photographs	View nurses and their environments as they once were	Trove® search, State Library archives, local library archives, Google images search	Townsville nurses, Townsville General Hospital, Ingham Hospital, Ingham nurses, Charters Towers Hospital, Charters Towers nurses, Ayr Hospital, Ayr nurses, Home Hill Hospital, Home Hill nurses
Hospital committee records	View documentation of nurses and their roles in the hospitals	Trove search, JCU Library special collections, local library archives	Townsville Hospital Committee meetings, Charters Towers Hospital Committee meetings, Ingham Hospital Committee meetings, Ayr Hospital Committee meetings, Home Hill Hospital Committee meetings
Diaries	Understand nursing and life as it was within the chosen period	JCU Social Sciences department, ABC local radio, Ancestry.com	Names of local nurses placed in Ancestry search engine

While undertaking archival research, I made both handwritten and typed fieldnotes to keep track of my sources. Handwritten fieldnotes were kept in notebooks and then transcribed into a Word document for each of the selected towns within the North Kennedy region. EndNote® version 20 was used to maintain an accurate corpus of primary and secondary sources. Recording the bibliographical details of sources helps to preserve as much information as possible for each document being used (Lahti et al., 2019). Regarding my acquisition of sources, Table 3.4 outlines where sources were found.

Table 3.4: Digital Archives Accessed

Archive or database	Purpose
Trove®	Locating hospital committee meeting records, Stewart Creek Penal Settlement establishment records
State Library Queensland	Sourcing photographs of hospitals within the North Kennedy region and the Stewart Creek Penal Settlement
Ancestry family history	Identifying nurses who worked within the North Kennedy region, allowing me to contact their families to request assistance in locating sources

Table 3.5 outlines the field trips that I undertook to gain access to sources that were archived in various institutions and not available online. Staff at the Cape Pallarenda Quarantine Station provided me with a guided tour of the site and access to some of original equipment medical staff would have used on patients.

Table 3.5: Field Trips and Physical Archival Research

Field trip	Date	Purpose
Townsville City Library	10/1/22	Access to the Mathews historical files[23] and historical photographs
Pallarenda Quarantine Station	12/1/22	Access to the old quarantine station, the buildings and documented information regarding the time of the site as a quarantine station and hospital
Queensland Nurses and Midwifery Union office, Brisbane	30/5/22	Access to ATNA archival records
State Archives, Brisbane	31/5/22	Access to nurses' examinations 1910–1925, Stewart Creek Penal Establishment Medical Officers Journals, registers of general and mental nurses, Townsville plague hospital drawings, Townsville Reception House drawing
Princess Alexandra Hospital Museum	1/6/22	View photographs and archival displays
State Library, Brisbane	2/6/22	View photographs of regional hospitals and historical book collection
Royal Brisbane and Women's Hospital Nursing Museum	3/6/22	View historical displays of early nursing in Queensland

3.5 Quality in Research Sources

When a historical researcher commences their study, it is important to consider the quality of their primary and secondary sources (Wood, 2011). Therefore, researchers must understand how to evaluate their material and the importance of such evaluation (Wood, 2011). For example, when examining the accuracy of potential primary sources for inclusion into the corpus, the historical researcher must also consider the political, sociocultural and professional context of the study period. I employed Wood's (2011) framework for appraising historical sources to assist with this process; this is a well-known framework cited in five studies since 2013. Table 3.6 summarises the elements found within Wood's (2011) framework.

[23] The Mathews files were files from Jon Mathews, a Townsville citizen. He had documented information from Townsville papers over many years including information about local healthcare.

Table 3.6: Wood's (2011) Framework for Appraising Historical Sources

Element	Consideration points
Provenance	How did the document come into existence? Why was it created and how was it preserved?
Purpose	Who is the intended audience? How is the message delivered?
Context	Incorporates the period in which the document was written. Not using current values and judgements when analysing the document. Understanding the social climate of the research period.
Veracity	Truthfulness and reliability of both the document and the writer.
Usefulness	Is the document useful for the current research?

Provenance considers how the source came into existence, the reason for its creation and the preservation methods used to keep the source intact (Wood, 2011). The reasons for the creation of the sources I used were varied and depended on the type of source. For example, the diaries I had access to were written for private use and it is unlikely they were intended to be viewed by people outside the family. In contrast, although hospital committee meeting records were initially documented for the committee members themselves, they were then submitted to the local newspapers for the community to read.[24] Fortunately, with digitisation, sources are 'kept' for longer periods of time compared to hard copy sources. In this study, differences in preservation techniques amongst institutions were very evident, ranging from sources being kept in specialised archival sites and individual institutions in temperature-controlled rooms to those kept in cardboard boxes. Without provenance there may not be sources in the future to analyse.

Purpose may require the researcher to analyse other sources as part of a triangulation process, to ensure that the information documented in the sources used occurred as depicted (Wood, 2011). Purpose also considers the intended audience for the source and the format of the document. For example, testimonials of staff leaving hospitals were included in the 'messages' section of newspapers in the North Kennedy region given that the broader society was the

[24] Because hospitals in the beginning of the twentieth century were funded by the community, it would have been important for local people to know what was happening in 'their' hospital.

intended audience. Another example of triangulation in this study was to ensure accuracy of information provided. For example, I used secondary sources to determine the accuracy of treatments and remedies described in the receipt book that was included as a primary source in this study.[25]

Context involves assessing the source in relation to the time that it was written. This assessment includes the language and terms that may have been used within the source and, therefore, entails reading the source without the judgement and values of the current period. Some of the sources that I reviewed used such terms as 'Kanakas' and aborigines. Although these are derogatory names in current times, I had to remember that these names were indicative of the time and its lack of understanding of other cultures. This understanding also had to be a part of my mindset when I was learning about nursing roles and skillsets given that some of the treatments were somewhat difficult to understand. While reading sources, I found that nurses, for instance, did not wear protective equipment when caring for tuberculosis patients and often succumbed to the disease themselves. Today's values and judgements as a nurse would see me think that such practices are dangerous and that the nurses should have known better. However, during the time of the study, infections and disease transmission were not completely understood and there were no antibiotics or other preventative medication. Therefore, it is not that the nurses should have known better, but that medical education and practice accorded with knowledge of the time.

Veracity deals with both the truthfulness of the source and the author of that source, with bias being another dimension of veracity (Wood, 2011). To determine the truthfulness of the author was to research their background to identify whether they originated from the North Kennedy region and could, therefore, provide a truthful depiction. Other sources had both physical and

[25] As discussed in Chapter 2, a receipt book was a book of the house containing both cooking instructions and also remedy ingredients which could be passed down through the generations.

digital versions, making authenticity relatively simple. To determine the authenticity of other sources, I researched names mentioned in the sources or events that were spoken about. In terms of bias, there are two forms: recall bias and selection bias. Recall bias is the inability to remember elements of the past; it is also known as information bias, where information is missing (Florczak, 2022; Ramirez-Santana, 2018). Selection bias occurs when there is either an over- or under-representation of a particular group or cohort of people (Zimran, 2020). Because selection bias can commence in the design stage of the study, it is important to have clearly defined selection criteria to minimise any such risk (Ramirez-Santana, 2018). The nurses of the North Kennedy region were very much under-represented in nursing history sources of Queensland. The bias in this research, therefore, concerned knowing that I was researching only a select group of nurses. There was also an element of information bias when analysing sources. Some of the secondary sources considered utilised interviews with nurses from the selected period (Jaumees, 2001). This could mean that descriptions of life as a nurse were actually those of a nurse who worked in Townsville Hospital only. Given that each town would have had different experiences with healthcare and nursing roles, the beliefs of one group of nurses do not cover those from other hospitals.

Usefulness considers how pertinent a document is to my research, a judgement that is dependent on all the steps involved in the framework (Wood, 2011). Having such a large variety of available information, it is important to consider what primary sources tell us about individuals rather than then how much information they hold. Therefore, critical questions of the sources need to be asked (Donnelly & Norton, 2021). Most of the sources used in this project were useful as they not only provided evidence of nursing within my chosen period, but illustrated aspects of healthcare during the development of each town. This information concerning healthcare in each town helped explain why nursing was undertaken in a particular way in those towns and how they may have differed from each other. Wood's (2011) five steps were

followed for every source analysed. More specifically, a table was created to determine the relevance of each source for the study in accordance with Wood's (2011) framework. Table 3.7 provides an example of how I used Wood's (2011) framework when analysing a primary source.

Table 3.7: Using Wood's (2011) Framework to Analyse an Orphanage Committee Meeting Record

Element	Application
Provenance	This record was made for the purpose of the Townsville Orphanage staff to document their meetings. The current records are a digitised item from the original records and are located within the Townsville Family History Centre as a microfiche file.
Purpose	This record documents the monthly meetings of the orphanage.
Context	Reading the document as it is written, understanding that the care that was given was typical of that time and the reasons for children's admissions was often an economic decision of the family. It was not usual at that time for women to have employment as they were under the care of their husbands. However, if that husband was to die, as many did in the local mining industry, placement in an orphanage was one of the few options to have a child cared for in an environment that could provide more than a destitute home. Many of the admission papers showed children from homes when one of the parents had died and the other parent could not provide care.
Veracity	This record was prepared by a committee member that was at the meeting and is in the original handwriting.
Usefulness	This record is useful to this study. It provides an indication of the role of the nurses who worked at the orphanage and the conditions they worked in.

3.6 Data Analysis

Data analysis in qualitative research enables a dataset to be understood or interpreted (Lester et al., 2020). Coding or categorising the data helps in this process. Although there are various methods of data analysis available to the researcher—such as framework analysis, content analysis and discourse analysis (Lester et al., 2020)—I chose thematic analysis to organise the themes identified within the corpus.

Thematic analysis is a method, rather than an approach, for analysing qualitative data. It involves identifying and organising themes found within the data (Braun & Clarke, 2022). There are two basic approaches to thematic analysis: inductive and deductive. Inductive

approaches allow themes to arise from the data, whereas deductive approaches involve the researcher coming to the data with preconceived themes drawn from existing knowledge or theory (Joffe, 2012). In this research, an inductive approach was used. This is because the aim of the research was to gain insight into the factors that shaped nursing in the North Kennedy region (Braun & Clarke, 2022). Thematic analysis was conducted using Braun and Clarke's (2022) six step framework. These steps are detailed in turn.

The first step comprises familiarisation with the data. This step involved reading the sources numerous times, making notes of elements that I considered important to the research, such as details of the work that nurses completed during their day, and critically thinking about what the data meant. Step Two sees the researcher begin to generate initial codes. In my study, this process involved documenting statements from the data and writing words associated with each town and then assigning codes to them. There was no limit to the number of codes named (Braun & Clarke, 2022). In the third step, the researcher begins to search for themes. During this step, I reviewed the codes that had been generated and determined whether there were any similarities between them. For example, in the North Kennedy region, all the towns generated similar codes, such as education and healthcare. In contrast, other codes—such as lack of employment post-traineeship—were only applicable only to some towns.

Step Four is a review of potential themes. This step marked a form of quality checking, ensuring that the themes that emerged were related to and situated within the data. Because this study is a single researcher study, I engaged one of my supervisors in a discussion concerning the themes that I initially found because I felt there was some overlap between titles (Braun & Clarke, 2022). The initial themes that I identified for my chapters were: education, professionalism, healthcare, war and diseases. In Step Five, themes are named. When naming themes, I needed to be clear about what is unique to each identified theme, rather than just

paraphrasing or restating salient source content. This would support the creation of a cohesive narrative. Some themes had to be renamed to provide for a more descriptive title. For example, instead of 'education', the title was changed to 'upskilling education'. In 1910, at the start of the study, there would have been more nurses being 'upskilled' in their practices rather than being 'educated'. In addition, although several descriptions from the data aligned with work health and safety and improvements in hospitals, because 'work health and safety' was not a common term at the time, I had to think of a more appropriate title. 'Healthcare' was also a title that required changing because it did not fully describe what I was trying to portray. Although there were several institutions that provided healthcare in the North Kennedy region, such as hospitals, others, such as the orphanage and the reception centre, provided rudimentary care. Hence, the theme of 'contexts of care' was decided upon because it covers the variety of institutions, both healthcare and non-healthcare related. In the last step, I produced a report, in this case an historical narrative. This phase of thematic analysis was an ongoing process as writing was commenced, altered and finalised.

3.7 Establishing Rigour

As well as using Wood's framework for evaluating sources, it was important to ensure that rigour is maintained. As the researcher, I am the main collector of data and there is potential for my own bias and errors to occur (Johnson et al., 2020). Therefore, applying rigour and systematic processes is essential (Johnson et al., 2020). Lincoln and Guba (2001) are well known for their work on naturalistic inquiry and describe the importance of trustworthiness in a study. Trustworthiness determines whether readers can be persuaded that research studies and the data included are important and reliable. To determine trustworthiness, Lincoln and Guba, in 1985, identified four areas that needed to be reviewed. These are credibility, transferability, dependability and confirmability (Langtree et al., 2019).

Credibility is similar to internal validity, whereby the truth and value of the research findings are established with reference to how compatible they are with reality. To help determine this, the research methodology needs to be justified (Korstjens & Moser, 2017; Stahl & King, 2020; Stenfors et al., 2020). Some of the ways in which credibility can be established include triangulation and peer debriefing (Forero et al., 2018). In my study, triangulation was conducted through the comparison of several sources to determine the validity of information drawn from the data. Source comparison was undertaken to establish whether I had captured key meanings within the primary sources (Moon et al., 2016). Peer debriefing occurred regularly with my supervisors, allowing me to ask questions and find answers to difficulties that I had with the study. As experts on the research process, my supervisors were able to provide their own perspective regarding my research topic (Hamilton, 2020).

Transferability determines whether research findings can be transferred to another setting. Having a rich description of the research helps influence decisions regarding transferability (Korstjens & Moser, 2017). Within my research, for example, I describe the context of nurses' experiences so that these experiences become meaningful to the reader. Because this research is concentrated on one area in Queensland, findings will not be transferrable to other areas in Australia or Queensland insofar as each town has its own qualities. However, similar concepts from Madsen's (2005) discussion of nursing history in another rural location were noted.

The third area is *dependability*, also known as reliability. Dependability concerns whether the study can be replicated by another researcher using the same methods and similar circumstances (Peels & Bouter, 2018). Determining dependability requires a clear demonstration of the methodology and methods used within the research. For this study, these have been described in this and the previous chapter. Whereas this study could be replicated in another rural or

remote areas, the findings would likely be different depending on the healthcare services in that particular area and the historical information available.

Finally, *confirmability* concerns whether information drawn from the data can be traced back to original sources should the study be audited or replicated (Moon et al., 2016). Confirmability can be established through reflexivity and triangulation (Forero et al., 2018). Triangulation has been discussed above with reference to credibility. Reflexivity is a continual process through which researchers evaluate how their behaviours may influence their study. Reflection also helps to validate the research process and make the research transparent regarding the reasoning of the project (Mortari, 2015). My use of reflexivity involved keeping a journal. The elements within a reflexive journal include, but are not limited to, personal and methodological issues (Olmos-Vega et al., 2022). My reflexive journal initially contained more documentation about my own thoughts and feelings concerning the research study. However, once data collection began, there was more reflection about the process of the data collection and the results that I was obtaining. Sometimes my reflections were in retrospect, while some were written before the event if I wished to reflect on my feelings both before and after a particular part of research. My approach was to write in my reflective journal at a regular time to monitor my own thoughts and observe for signs of bias.

Qualitative research acknowledges and describes the nature of the researcher in relation to the research process (Creswell & Creswell, 2018). As noted, this relationship is reflexive, and can involve both how the researcher and subject made and maintained contact and the experience of the researcher in their profession, given that this may influence such processes as the conduct of interviews (Busetto et al., 2020).

3.8 Dissemination

Dissemination in research involves presenting the study in such a way that society and other academics will become aware of its existence. Marin-Gonzalez et al. (2017) have suggested that successful dissemination will enable the outputs of research to become visible, potentially affect politics and economics and increase society's confidence in research. Ross-Hellauer et al. (2020) have proposed ten rules to make dissemination more effective. Table 3.8 describes how I have used the Ross-Hellauer et al. (2020) framework to promote dissemination of my study's findings.

Table 3.8: Ten Rules for Dissemination

Rule	Application
Rule 1: Get the basics right—map audience, create a dissemination plan, define objectives	Although the most prominent audience would be local hospitals, I am also considering local historical associations, local museums and military establishments. There are also plans to disseminate my findings to JCU through the library and research online.
Rule 2: Keep the profile right—identify relevant social media accounts and academic social networks	Because I initially utilised LinkedIn and Facebook for gaining information for my thesis with some positive response, I will use these for dissemination and will also add my profile to JCU research online. It has also been beneficial to become a member of several associations such as the Australia College of Nursing History Faculty, the Australian Historical Association and the Australian and New Zealand Society of the History of Medicine. These memberships have allowed me to expand my contacts.
Rule 3: Encourage participation—collaboration with research audience	Some findings have been showcased at a conference of the Australian and New Zealand Society of the History of Medicine in July 2023. Other findings will be showcased at research weeks at local hospitals, local historical societies and museums. A local newspaper has written an article about my research.
Rule 4: Open science for impact—open access publications and collaborative networks	There is intention to publish findings in articles within both history and nursing journals. Research week at the local hospital and presentations at conferences on medical and nursing history will also provide opportunities to collaborate with like-minded associates.
Rule 5: Remix traditional outputs—blog posts or press releases	A local newspaper published a story about my research in 2023. I will use JCU media to promote my work, along with writing articles as requested for the Australian College of Nursing as well as approaching the Australian Historical Association.
Rule 6: Personal meetings with consultants	I have had personal meetings with members of historical societies and libraries.
Rule 7: Think visual—art or multimedia representation of data	Given the number of photographs available, a picture book has been considered along with a book on my thesis or part thereof. Photographic displays at JCU and at local historical societies have been planned.
Rule 8: Respect diversity—welcoming environment for participants	Although there are no living participants within this study, participants at conferences or other educational forums where the findings are disseminated are respected, welcomed and appreciated for their feedback.
Rule 9: Find the right tools—networking platforms, collaboration and publishing	Networking platforms already used include the Australian College of Nursing, with opportunities being taken up to sit on a conference committee for 2024 and write an article for their historical group. Other platforms include promoting my research with the Australian Historical Association and presenting again at the Australian and New Zealand Society for the History of Medicine.
Rule 10: Evaluate—do the dissemination activities have the right impact, are there any citations and what feedback has been given?	Feedback has been very positive with some good interest in the research study from local historical societies and libraries and nursing organisations. With no publications to date, there are no citations.

Source: Ross-Hellauer et al. (2020).

3.9 Ethics

In Australia, the National Health and Medical Research Council (2021) provides guidelines and advice to Australian researchers concerning international standards regarding ethical conduct and integrity. Ethical considerations are important in qualitative research given the personal nature of information provided when conducting qualitative research. Particular ethical considerations that need consideration in qualitative research projects include beneficence, confidentiality and autonomy (Kang & Hwang, 2021). Researchers need to constantly reflect on their research process, monitor for possible ethical conflicts (e.g., breaches in confidentiality) and determine the appropriate solution should any conflicts arise (Kang & Hwang, 2021; Taquette & da Matta Souza, 2022). The nature of this project and period studied negated some of these ethical considerations.[26] Given there were no living participants in the study, a low-risk waiver was submitted to the JCU Human Research Ethics Committee. Approval was granted in October 2021 (see Appendix A).

Although I had received an ethics waiver, I recognised and adhered to ethical considerations while undertaking the study. For example, when family members were contacted for assistance in locating possible sources of personal historical documents, I was conscious of the need to be respectful of their autonomy and privacy during my interactions with them. To maintain integrity with the research project, contact with families was made through formal letters. These letters introduced me and outlined the research project and sought permission to utilise any relevant artefacts they may have. These letters also asked families whether they identified with the nurse I named and whether they were aware of any surviving artefacts. Appendix B provides a sample letter. Families declining to provide use of their artefacts were thanked for their time and not contacted again. Confidentiality was maintained for those families who provided their

[26] Some ethical considerations were negated because there were no living participants in the study, meaning that there was no risk of causing harm to participants through the reliving of memories.

ancestor's personal materials but did not want their ancestor's name to be included in the thesis. Any information gained through data collection was also assessed to ensure no harm came to those involved in the stories from information previously not known. All artefacts and data collected through this process were stored on a computer that was password protected. Copies of the data, such as photographs, were stored in several different files to prevent loss.

3.10 Chapter Summary

This chapter has described the methods I used to search for, collate and analyse data relevant to this study. Specifically, this chapter has outlined my study design, ethics, selection criteria and data collection. I have also described how I have applied Wood's (2011) framework, which was used to analyse my sources, along with the trustworthiness process described by Lincoln and Guba (1985). In the remaining chapters of this thesis, I present the findings of my exploration of nursing and nurses in the North Kennedy region between 1910 and 1925.

Chapter 4: Contexts of Care

4.1 Introduction

This is the first of the three chapters that discuss the three key themes identified from the data analysis: contexts of care, formalising education and professionalism in the North Kennedy region and burgeoning approaches to safety and quality in hospital settings. In this chapter, a variety of contexts of care are described, highlighting the different environments in which nurses worked during this period. This chapter will also highlight military nursing and the skills and knowledge that some of the nurses who enlisted in WWI learned and were able to bring back to the North Kennedy region.

The next chapter, Chapter 5, details the process of formalising education and professionalism in the North Kennedy region, including how nursing education was established within the region. Nursing curricula are discussed, along with how nurses' professional identity evolved rapidly between 1910 and 1925. Following this, Chapter 6 discusses issues related to safety and quality in healthcare and nursing practice. Data analysis showed that a number of key elements in hospitals within the North Kennedy region underwent improvement during this period, facilitating the provision of what would be described in today's terms as very rudimentary safe and quality care for patients, as well as safety for nurses. Sub-themes considered within this chapter include medication dispensing, hospital architecture, infection prevention and control, as well as the removal of body waste.

Healthcare was an important, growing need for towns within the North Kennedy region as they expanded and became more populous in the early twentieth century. Different contexts of care began to emerge, drawing attention to the different kinds of nursing care and medical support required by the people using diverse facilities. A review of census lists from 1910 to 1925 for

the towns of Home Hill and Ayr, Townsville, Charters Towers and Ingham shows that nurses were employed in prison settings, reception houses,[27] schools, an orphanage and private hospitals, as well as on properties of the district and in private homes (Australian Electoral Commission, 1903–1980). In addition to these contexts, some of the nurses from this region enlisted in AANS when WWI broke out (Virtual War Memorial Australia, 2023).

Hospitals were initially not considered by community members to be safe places to which to be admitted (Gregory, 2010). Rather than be admitted to the hospital, members of the public who were ill were cared for at home (Lowe, 2020). This is corroborated by burial registers of the Belgian Gardens Cemetery in Townsville, which show that approximately 50% of the deaths between 1910 and 1925 occurred at individual, personal addresses (Townsville Cemetery Trust, 1902–1939). Although several factors may have contributed to this phenomenon, the cost of accessing care, including end of life care, would have prevented some people from being admitted to a hospital.[28] Nonetheless, the advent of formalised nurse training in 1899, the formation of ATNA and the introduction of new sanitation practices during the same period were among a number of important changes that began to transform society's negative perceptions regarding the safety of hospital settings (Gregory, 2010; Lowe, 2020).

4.2 Public Hospital Nursing

Private nursing—that is, nursing patients either in their own homes or in those owned by doctors—was not unusual in the North Kennedy region (Australian Electoral Commission, 1903–1980), and will be discussed later in the chapter (see section 4.3). However, as healthcare

[27] An explanation of a reception house can be found later in this chapter (see section 4.5).
[28] From the inception of Queensland as a state until 1923, Queensland hospitals were reliant on the support of the community to function. The communities in the North Kennedy region would pay a subscription – or ticket system as this was also known – to be able to be admitted to the hospital. It was part of the nurse's role at Charters Towers Hospital to ask patients on admission how they would be paying for their stay. In the beginning of the 1920s, however, subscriptions from the community began to decrease and, in 1923, the Hospitals Acts Amendment Act 1923 was passed, which moved the funding for (and management of) the hospital system into the hands of the government (Gregory, 2010).

moved from the home to the hospital in the early 1900s and nursing evolved into a trained profession, public hospitals became the most common places of employment for nurses.

As the most populous towns in the region, Charters Towers and Townsville were the first to have healthcare facilities of varying sizes, loosely described as hospitals. These were followed by Ingham and then the Lower Burdekin (Ayr) (Jaumees, 2001; 'The Charters Towers Hospital', 1891).[29] During the first part of the twentieth century, hospitals were differentiated by two titles: 'district' and 'base'. Townsville Hospital (see Figure 4.1) had been designated a base hospital before the study period, whereas Charters Towers was designated a district hospital in 1912.[30]

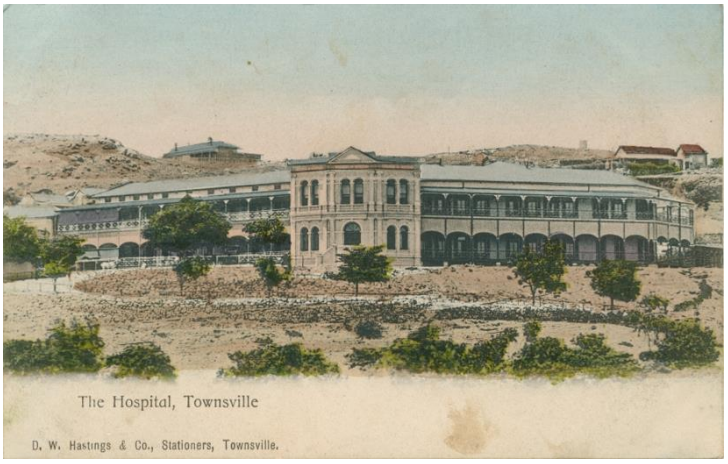


Figure 4.1: The Hospital, Townsville, c. 1910 (Queenslandplaces.com.au, 2023)

Neither Ingham Hospital nor the Lower Burdekin Hospital were identified as district or base hospitals.[31] Although sources showed that all hospitals in the region took admissions from their own permanent populations, Charters Towers and Townsville admitted patients from other

[29] The Lower Burdekin was also known as Ayr Hospital and incorporated Home Hill.
[30] To confer base hospital status on an institution, admissions to that hospital had to be drawn from a wide area ('A Base Hospital', 1913). Although its admissions came from within the Charters Towers district, Charters Towers Hospital also admitted patients from outside that district ('Meeting', 1912). This is because they were the largest hospital inland from Townsville and offered more services. A district hospital serves a population of more than 4,000 people. By 1911, Charters Towers had 8000 residents (Charters Towers Regional Council, 2024; Queensland Government, 2019).
[31] Drawing from districts with smaller populations, these two hospitals were smaller in sized and, therefore, therefore would not have fit the criteria for selection.

districts or off ships coming into port (in the case of Townsville). This would have increased admissions to the hospital, explaining why Charters Towers requested base hospital status.

By 1910, there were only three actively operating public hospitals in the North Kennedy region: Townsville Hospital, Charters Towers Hospital and Ingham Hospital. Townsville Hospital had been situated on its Stanton Hill site since 1881 and was the second hospital built in Townsville. The first small hospital was located in South Townsville and operated from 1868 to 1881 (Jaumees, 2001).[32] Charters Towers had three hospitals by 1910. The first of these was built in Charters Towers in 1873 and could accommodate 12 patients. By 1882, the second hospital, a wooden hospital housing 20 beds, stood where the future new brick hospital would be situated. Two years later, in 1884, the present two-storey brick hospital was opened. A fever ward was built nearby in 1888. Ingham, conversely, did not have a hospital until 1885. This, when established, was a wooden building consisting of four rooms ('The Herbert River', 1935). Ayr and Home Hill had to wait until 1917 for the Lower Burdekin Hospital to be officially opened in Ayr, with another hospital being opened in Home Hill following the Spanish influenza (henceforth Spanish flu) epidemic in 1918 ('Home Hill Hospital',1922).

As the larger hospitals in both size and infrastructure, Charters Towers Hospital and Townsville Hospital had multiple wards. Table 4.1 describes the types of wards in the Townsville Hospital. Charters Towers Hospital had a similar method of numbering their wards; however, no title descriptions for who or what was nursed with these wards could be found.

[32] As the population of Townsville grew, there were more people on the north side of Ross Creek than surrounding the then-current position of the hospital in South Townsville (Jaumees, 2001).

Table 4.1: Wards of Townsville Hospital c late 1920s (Jaumees, 2001).

Ward title	Type of ward
Ward One	Clean surgical
Ward Two	Common day room
Ward Three	Surgical orthopaedics, trauma and accidents
Ward Five	Chronically ill and incurables
Philp Ward	Children's ward
Ward Ten	Male medical tuberculosis
Untitled	Isolation ward (top floor)
Untitled	Female surgical (top floor)

Although not listed in the ward delineation, Townsville Hospital also had a separate infectious unit, an emergency room, a sterilising room and two operating theatres, along with private wards (see Figure 4.2). These private wards were used by sick staff and privately paying patients (Jaumees, 2001).

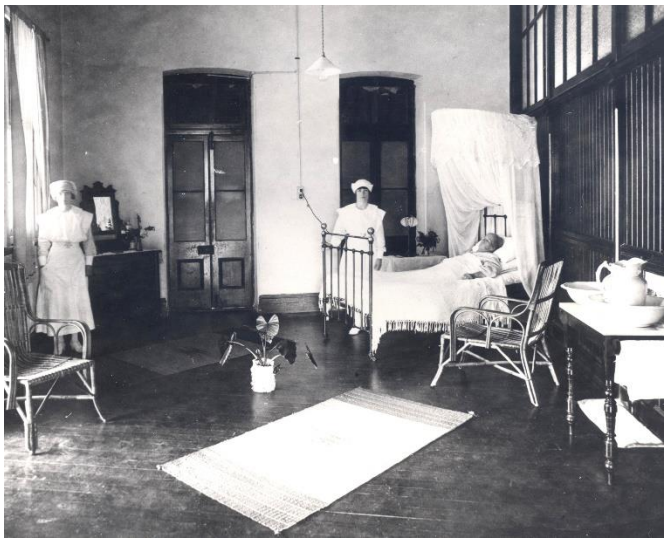


Figure 4.2: A Private Ward at the Townsville Hospital 1917 (Townsville City Libraries, 2022)

Trainee nurses would rotate through all the wards during their training period. Although Charters Towers and Townsville hospitals were the larger hospitals in the region, this did not mean that they possessed more equipment or better facilities. Neither hospital, for instance, had running water (hot water) by the 1920s. Dr O'Neill at Charters Towers asked the hospital

committee members why hot water was not connected to the wards (‘Charters Towers District Hospital’, 1920). In January 1921, warm water for nurses’ baths was suggested in the hospital committee meeting (‘Charters Towers District Hospital’, 1921). Ten months later in November, there was again another discussion about hot water baths (‘Charters Towers District Hospital’, 1921). Review of newspapers between 1923 and 1925 found no further discussion on hot water.

4.2.1 Staffing levels

Staffing numbers for hospitals within the North Kennedy region were identified after reviewing Australian census data between 1903 and 1980. Although the numbers of nurses are accurate for the census, particular years were missing and not all nurses may have been captured (Australian Electoral Commission, 1903–1980). Table 4.2 depicts nursing numbers for 1913 and 1925 within some of the hospitals in the North Kennedy region.

Table 4.2: Staffing Numbers for North Kennedy Hospitals

Location	Nursing census 1913	Nursing census 1925
Charters Towers Hospital	17	20
Townsville Hospital	18	35
Ingham Hospital	1	13
Lower Burdekin Hospital (Ayr) 1925	N/A	2

By 1925, the mines at Charters Towers had ceased operation, causing a decline in its population with families moving away to find other working mines or relocating for other work opportunities. However, the population decrease did not affect the nursing staff numbers at Charters Towers Hospital (Australian Electoral Commission, 1903–1980). The increase of staff at Townsville and Ingham Hospitals could be attributed to the movement of families from Charters Towers from 1917 onwards when the mines began to cease operation. The Lower Burdekin (Ayr) Hospital was not built until 1917 and nurses employed by the hospital appeared in the 1925 census data for the first time. The number of staff for the Lower Burdekin Hospital

is based on electoral roll records and as electoral rolls were not collected annually, the number has the potential to be incorrect. The size of the hospital was not directly discussed in the hospital committee records and therefore a clear indication of the actual size was never obtained.

4.2.2 Roles and responsibilities

Evidence, sources and artefacts about the role of the nurse in North Kennedy hospitals were difficult to locate. Jaumees (2001) provided the most useful source material for Townsville, although this was relatively general. There were only a few descriptions about nurses and their roles in other locations, with the only available data found on local council websites and via occasional mentions in historical newspapers.

In keeping with the known nursing work of the time, Townsville nurses not only had to care for patients but also to assume responsibility for maintaining a clean environment. This was achieved through mopping floors, handwashing soiled linen, sterilising equipment and general day-to-day ward cleaning (Jaumees, 2001). Nurses at Charters Towers Hospital had to assume similar tasks as their counterparts at Townsville Hospital, but also had to determine the financial status of the patient on admission to ascertain whether they were paying or non-paying (‘C.T. District Hospital’, 1925). Permanent head day nurses had the responsibility of looking after the linen presses on the wards and working in conjunction with the sewing guild of the hospital when extra linen was required (‘District Hospital’, 1923).

Charters Towers and Townsville Hospital employed nurses who assumed specific roles, including dispensary nurses.[33] Townsville did not have a pharmacist until the 1940s (Jaumees, 2001). The dispensary nurse in Townsville was Sister Lynch who trained other sisters at the

[33] There was no specific role description of the dispensary nurse noted in the literature.

hospital in the dispensary role. The role of the dispensary nurse was slightly different at Charters Towers Hospital. Here the dispensary nurse would dispense medication under the supervision of the resident medical officer. Although, in 1921, the hospital committee members of Charters Towers felt that this process contravened the Pharmacy Act 1897 No 7('Charters Towers District Hospital', 1921), it would be another three years before a doctor took over the role alone.

Another specific nursing role in the Townsville Hospital was in the operating theatre. Nurses working in operating theatres at this time would have learned their practice through experience and guidance from surgeons. It was not until 1912 that theatre sisters and their roles began to emerge in Australia (Hamlin, 2020).[34] The sister in charge of the theatres at Townsville Hospital would often start work at 4 am and not leave until 8 pm, ensuring that the cat gut was prepared for surgery the following day (A. Murray, personal communication, 2022). After WWI, Matron Annie Scott (an AANS veteran), from Townsville Hospital, was often seen in theatre taking over the anaesthetic role once the doctor delivered the initial anaesthetic dose (Jaumees, 2001).[35]

Although nurses may have had similar roles in each of the hospitals, shift times differed slightly even as shift lengths remained the same. Whereas Charters Towers nurses reportedly worked from 7 am to 7 pm, Townsville nurses worked from 6 am until 6 pm ('Nurses' Hours', 1918). There was no documentation found concerning the length of shifts for nurses at either the Lower Burdekin (Ayr) Hospital or Ingham Hospital.

[34] The Royal Melbourne Hospital had the first dedicated theatre nurses (no date given); however, it was not until the 1950s that theatre courses became available (Hamlin, 2020).
[35] Drops of ether or chloroform were placed on a rag and placed over a patient's nose and mouth so that they inhaled the solution (Science Museum, 2018).

Figure 4.3: Charters Towers District Hospital 1904 (Getarchive.net, 2023)

The types of admissions that were known to have been treated at Townsville Hospital included, but were not limited to, illnesses, car accidents and work injuries ('Townsville Police Court', 1912; 'Townsville Bulletin published daily' a, 1913; 'Townsville Bulletin published daily' b, 1913). Cemetery registers, such as that of the Townsville cemetery (Belgian Gardens), also showed patients being treated in the hospital but passing away from brain tumours, Bright's disease, typhoid, diphtheria, cardiac disease and diabetes (Townsville Cemetery Trust, 1902–1939).[36] Jaumees (2001) noted treatment of pneumonia with linseed poultices, which had to be applied to the patient several times during the day. However, there is no indication as to whether the nurses made these themselves or whether they were already made.[37] During 1911, Charters Towers Hospital was reported as caring for several heart failure cases, as well as a poisoning ('Social and Personal', 1911). Throughout 1914, Ingham Hospital was reported to have admitted cases of heart disease and nurses also dealt with accidents such as finger amputations, falls from horses and fractured clavicles ('Ingham Notes', 1914). Sources and evidence from

[36] Brights disease was first described in 1836 and is now known as acute glomerular nephritis (Fries, 2005).
[37] A poultice is a soft medicated mass that is spread on a cloth or bandage and then placed on the skin. Linseed is well known to have soothing effects on contact and was known to be used in Melbourne hospitals. Linseed poultices were applied and changed every four hours as part of treatment for the Spanish flu (Australian Nursing and Midwifery Federation, 2020).

the Lower Burdekin Hospital (Ayr Hospital) rarely mentioned the types of admissions, although a doctor's report from 1919 noted that surgical operations did take place there ('Lower Purdekin (sic) Notes', 1919). In 1925, an accident resulting in a fractured skull was admitted, along with tetanus cases and car accidents ('Lower Burdekin', 1925).

These types of admissions indicate the varieties of diseases, conditions and injuries that the population presented to the hospitals with and for which, ostensibly, nurses would have cared. These experiences would no doubt have enhanced nurses' clinical skills and increased their capability in managing clinical encounters. Charters Towers and Townsville, having the bigger hospitals, would have had a larger variety of admissions, not only given their population size but also as a result of the presence of dangerous industries, such as mining and farming, in the area. Nurses were required to manage patients with chronic diseases and those who were convalescing. For example, a patient with heart disease remained in Ingham Hospital for over 12 months around 1914 ('Ingham Notes', 1914). Admissions of this duration could be perceived as the beginning of the advent of nursing home-style care. Aged care facilities or nursing homes were not considered at the time of federation in 1901, with many residents of Australia not reaching old age. Those that did were cared for at home by their extended families (Barton, 2021).

4.2.3 Remuneration

Not only did the hospitals differ in admission types, but they also differed in the rates of pay for nurses. Table 4.3 provides an overview of salaries for matrons.

Table 4.3: Salaries of Matrons 1910–1921

Year	Ayr	Ingham	Charters Towers	Townsville
1913		100 pounds	unknown	
1915			unknown	120 pounds
1916		133 pounds	unknown	
1921	180 pounds		unknown	

Source: (‘Herbert River Notes, 1913; ‘Townsville Hospital Committee. Monthly Meeting’, 1915; ‘Herbert River Notes’, 1916,).

Salaries for matrons in the North Kennedy region were compared with New South Wales to determine whether there were any significant differences. In Inverell, New South Wales, in 1920, a matron earned 156 pounds per annum, which had been approved by ATNA (‘Nurses’ Wages’, 1920). This was less than a matron in Ayr would earn one year later. The salary for a matron in 1921 falls within the salary range identified by Strachan (1996), (160-370 pounds), but would also vary depending on the number of beds within the hospital.

Figure 4.4: Ingham Hospital c. 1887 (State Library Queensland, 2022)

Probationers would have their salaries increased with each year level. This was also noted for registered nurses or sisters (‘Townsville Hospital’, 1915), although the amounts of these increments could not be ascertained. In 1912, Townsville nurses earned 12 shillings per week and, by 1925, probationers were earning 52 pounds per annum (Jaumees, 2001; ‘Townsville

Hospital Board', 1925).[38] Table 4.4 indicates the salaries for probationary nurses at Ingham Hospital in 1913.

Table 4.4: Salaries of Probationary Nurses in Ingham Hospital 1913

Nurse level	Wage per week
First-year probationer 1913	10 shillings
Second-year probationer 1913	12 shillings
Third-year probationer 1913	15 shillings[39]

Source: ('Herbert River Notes' ,1913).

In 1925, when the Ingham Hospital Committee was dissolved and became part of the Townsville Hospital Board, probationers' wages were increased from 34 pounds per annum to those of Townsville Hospital probationers, which was 52 pounds per annum ('Townsville Hospital Board', 1925). There was no information found regarding which level of probationer was earning this amount. Table 4.5 indicates the salaries for probationary and registered nurses before and during 1919.

Table 4.5: Salaries of Probationary and Registered Nurses at Charters Towers Hospital Pre-1919 and 1919

Nurse level	Wage per week pre-1919	Wage per week post-1919
First-year probationer	10 shillings	1 pound
Second-year probationer	12 shillings	1 pound, 2 shillings, 9 pence
Third-year probationer	15 shillings	1 pound, 5 shillings
Registered nurse	1 pound	1 pound, 10 shillings[40]

Source: ('Charters Towers District Hospital', 1919).

As part of ATNA's contribution to the transformation of nursing into a professional, educated career, hospitals became recognised training schools for nurses. Charters Towers was the first hospital in the region to become recognised as a training school for nurses before 1904,

[38] The sum of 52 pounds in 1925 would have been equivalent to $4784.35 in 2022 (RBA, 2023).
[39] The sum of 15 Shillings in 1913 would have been equivalent to $102.92 in 2022 (RBA, 2024).
[40] The sum of 1 pound, 10 shillings in 1919 would have been equivalent to $133.46 in 2022 (RBA, 2024).

alongside Ravenswood Hospital ('Australasian Trained Nurses Association', 1904). Townsville Hospital was not formally recognised until a year later in 1905, despite having been a four-year training school since 1897. Before 1905, probationers from Townsville still had to travel to Charters Towers to complete their examinations (Jaumees, 2001). After issues with the previous matron[41] were resolved, Ingham Hospital applied to be registered as a training institution in 1913 ('Herbert River Notes', 1913). Given that Ayr Hospital (see Figure 4.5) was not built until later in the decade, it was not recognised as a general and obstetric training school until 1923 ('Lower Burdekin Notes', 1923).

Figure 4.5: Ayr Hospital 1920 (Burdekin Shire Council Library, 2022)

4.3 Private Hospital Nursing

There were several private hospitals in the towns of the North Kennedy region, although limited detail was available concerning many of them. Some private hospitals were 'lying-in' homes contained within a nurse's (or another person's) private home.[42] Others were a combination of surgical and lying-in hospitals managed by a matron, with nursing staff providing direct patient care and visiting doctors. Electoral records between 1910 and 1925 reveal that Townsville had the highest number of private hospitals, including Dr Ahearn's, Nestle Private Hospital, The

[41] Matron Timewell (matron in 1911) did not have a certificate from ATNA. She did not pass her examination despite her name being on the registration list ('Hospital Humors', 1911).
[42] The lying-in environment could either be a midwife's own residence or a private maternity hospital. These institutions allowed women to stay for a period to regain their strength after giving birth (Australian Midwifery History, 2021).

Rocks Private Hospital and Lister Private Hospital (Australian Electoral Commission, 1903–1980). Charters Towers had one private hospital, known as Mt Alma, which provided a combination of medical, surgical and obstetric care. Maitland Hospital was identified as a private hospital in the Ingham electoral records in 1925 (Australian Electoral Commission, 1903–1980). In the 1921 electoral roll of Ingham, Isabella Stuart Henderson identified herself as a nurse working in a private hospital, although she did not specify in which private hospital she worked (Australian Electoral Commission, 1903–1980). Finally, Dr Craig's private hospital was listed in the Ayr 1910 to 1925 census records (Australian Electoral Commission, 1903–1980). These private hospitals had to be registered each year with the local council and paid annual fees (Australian Government, 1911). It is likely that other private hospitals existed in the North Kennedy region during this period. For example, sugar plantations were known to have hospitals for their workers. Such 'hospitals' were visited by medical professionals at times.

Mt Alma Hospital in Charters Towers was owned by Dr Huxtable from 1909 until he enlisted in WWI in 1917. He sold the hospital to Elizabeth Harrison, a registered nurse working at Mt Alma at that time. Although it was not usual for nurses to own and run private hospitals, or cottage hospitals as they were also known, Elizabeth had a different life to others. She had initially trained as a nurse at Townsville Hospital before marrying, settling and raising children in Proserpine with her husband, who was a farmer (Ellen Jordan, personal electronic communication, 2023). Unfortunately, her husband passed away, leaving her a widow with three children. Instead of remarrying for financial security for herself and her children, as many women did, Elizabeth returned with her children to her family in Ravenswood, a small town around 80 kilometres east of Charters Towers (Ellen Jordan, personal electronic communication, 2023). After leaving her children in Ravenswood with various relatives, Elizabeth moved to Brisbane to study midwifery. On her return to Charters Towers, Elizabeth became matron of Mt Alma in 1917 and, subsequently, used money from her husband's estate

to purchase the hospital. Elizabeth and one child shared a bedroom at the back of the house and her two sons lived under the house. The remaining rooms were bedrooms for patients. Elizabeth sold Mt Alma in 1922 and moved further north before returning to Charters Towers several years later (Ellen Jordan, personal electronic communication, 2023).

4.4 Military Nursing

Although the number varies according to source, more than 2000 Australian women served as nurses or voluntary aid detachments in overseas and home-front theatres of war (Harris, 2021; New South Wales Government, 2022). Of that number, approximately 300 came from Queensland. Although these women were registered nurses with skills in their own right and were given honorary officer rankings, they did not have authority and were not given rank badges until 1916 (Frances, 2014). While they provided fundamental nursing care and support to their patients, these nurses also expanded their clinical skills. These newly acquired skills included the administration of anaesthetics and blood transfusions and traumatic wound management (e.g., injuries resulting from grenades and long-range artillery fire).[43]

4.4.1 The nurses

Nurses from Charters Towers and Townsville enlisted in AANS and served during the war. However, enlisting as a nurse in WWI was more than a matter of signing enlistment papers. In May 1915, when Matron McGrath and Nurse Geary of Townsville Hospital wished to follow fellow nurses to war, they had to ask permission from the committee members of the Townsville Hospital. Both were granted a leave of absence, with Matron McGrath receiving five weeks of wages and Nurse Geary receiving four weeks of wages (‘Townsville Hospital Committee’,

[43] However the Australian military nurses were denied further training for anaesthetics by the Australian Director General of Medical Service, Major General Howse (Harris, 2021).

1915). This leave of absence may explain why some nurses remained on the census list for hospitals while they were serving overseas.

Although not all of the nurses from the North Kennedy region had their military careers documented, some information was found. Beatrice Keppel, 29, a nurse from the Charters Towers Hospital, enlisted in 1917 and was identified as a theatre sister in the No 2 Australian Army Hospital in England. It is not known whether she was trained to administer anaesthetics prior to the war or received training once attached to the army hospital. Beatrice also served in an Australian hospital in England (e.g., 2nd and 3rd Australian Auxiliary hospitals) that cared for 'shell shock' victims (Scarfe, 2016). Julia Hart, 29, from Charters Towers, was one of the first nurses from the area to enlist in 1914, serving at the 6th General Hospital in France, No 38 Stationary Hospital and the 1st Australian General Hospital. During the course of her service, she served in France, England, Egypt and Italy, receiving three medals for her services in war and a mentioned-in-dispatch for distinguished and gallant services. Other details of her service were not found (Australian Government, 2023).[44] Lillian Craib, another nurse from Charters Towers, undertook active service in India, serving at the Deccan British War Hospital, which cared for prisoners of war and soldiers within its 1000-bed capacity. This hospital was staffed by only Australian nurses and English doctors (Sohoni, 2018).

Rosa O'Kane (see Figure 4.6), also from Charters Towers, was the region's only known nurse casualty from the war. Enlisting in 1918, Rosa had been a nurse for many years, training at the Townsville Hospital and then moving to Winton in central west Queensland to take up the position of matron (Virtual War Memorial Australia, 2023). Assigned to a troop ship designed to bring sick and wounded soldiers back from the war, Rosa's ship had only reached Cape Town before the armistice was signed in November 1918 and the war ended. On their way home, calls

[44] The three medals include the Victory medal, the Star and the British War medal 1914/1915.

were sent for nursing support at Woodman Point Quarantine Station in Western Australia for a ship bearing soldiers with Spanish flu. Rosa, along with 19 other nurses, volunteered to care for the soldiers. Unfortunately, Rosa and two other nurses paid the ultimate sacrifice when they contracted and then succumbed to the disease themselves. Rosa died on 21 December 1918 and was buried at the quarantine station in Western Australia (Virtual War Memorial Australia, 2023).

Figure 4.6: Rosa O'Kane (Virtual War Memorial Australia, 2023)

Although she trained at Mackay Hospital, Edith Avenell (known as Queenie) was from a Townsville family. She served with the AANS in France and England between 1915 and 1917 and is well known for the book written about her by her family using letters she wrote during her time at war. Affectionately known as Queenie, the book is titled *Queenie*, *Letters from an Australian Army Nurse*, *1915–1917*. When I reviewed this book at the Australian War Memorial, it was Edith's description of the effects of war on her that stood out the most:

> It is very depressing in France. We all get down to zero, I suppose it is living the whole time with war surrounding. Really, Mother, I don't know what will become of it all; I want to get back to Australia the moment it is all over. (Richardson & Skinner, 2017, p. 78)

The devastation and destruction of war, along with knowing some of her patients from her childhood in Townsville, took its toll on Edith:

> The grim parade of broken, sick and dying men sent Queenie into a downward spiral of depression and anxiety, culminating in a nervous breakdown in September 1916 … She was suffering from neurasthenia—colloquially known as 'shell shock', today called post-traumatic stress disorder. (Richardson & Skinner, 2017, p. 83)

Edith did return home, but to Brisbane, after the war, marrying an army medical officer and mothering two children before suffering a paralytic stroke and passing away in 1936, aged 46 (Virtual Australian War Memorial, 2024).

4.4.2 Returning home

Although the armistice was signed on 11 November 1918, WWI did not cease completely. With the armistice being a ceasefire only, it was not until 1920 that British and colonial troops were completely demobilised (Finn, 2018). Troops in Africa and Russia were also not immediately aware of the armistice being signed (Finn, 2018). Another of the major obstacles that impeded nurses' return to Australia was the Spanish flu pandemic, with nurses such as Julia Hart being quarantined on their ships for seven days (Doherty, 2022). Australian nurses were scattered in their return to Australia and the discharge from military service and return of North Kennedy nurses ranged between 1915 and 1920.

Returned nurses needed to make decisions as to how they wanted to live, particularly because they had been changed through enlistment, military service and their service during the pandemic (Doherty, 2022). They possessed new skills, had gained new experiences and had nursed patients from different cultures and with uncommon diseases and wounds (Harris, 2011). Returning to civilian nursing with its low pay and hard work after years of strenuous military service was not always tempting and some nurses chose marriage as the better option. Given their nursing training and enlistment, many of the returned nurses married later in life

than other women of their generation. Their decision to pursue marriage suggests these nurses were seeking a change from the difficult years of active service where they witnessed death, disability and illness. They may have considered married life as their next contribution to society. In many cases, they married returned servicemen (Doherty, 2022). The number of returned nurses who went on to have children differed as well and they typically had fewer children than other women. Of the 151 Queensland nurses who did marry, 61 had no children (Doherty, 2022). Of the North Kennedy nurses, at least seven married veterans after the war and six of those families had children.

For those returned nurses who remained single, paid work was essential (Doherty, 2022). Post-war nursing roles, such as caring for former military patients, allowed returning nurses to maintain military connections. The federal government's repatriation department took over a military hospital in each state, which was often staffed by returned nurses. Table 4.6 depicts where some of the returned North Kennedy region nurses worked after WWI.

Table 4.6: North Kennedy Region Nurses and Their Post-War Working Environments

Nurse	Working environment post-WWI
Alice Dodd	Kyoomba Sanatorium—Military (Queensland)
Julia Hart	Kyoomba Sanatorium—Military (Queensland) and Prince of Wales (Sydney)
Beatrice Keppel	Women's Hospital (Melbourne), Stanthorpe Military Hospital (Queensland)
Annie Scott	Kyoomba Sanatorium—Military (Queensland), Rosemount Rehabilitation Hospital (Queensland), Townsville Hospital (Queensland)
Mabel Wiseman	Enoggera Hospital (Queensland), St Anne's Hospital and Baralaba (Queensland), Lady Bowen Hospital (Queensland)

Source: Doherty (2022), Scarfe (2016).

After WWI, nurses were more mobile in their career choices, taking advantage, it seems, of the skills learned from their service. Only one nurse, Annie Scott, returned to Townsville after working in other parts of Queensland. Harris (2008) described how many returned nurses chose to maintain their military connections by either working in military hospitals or repatriation centres or remaining within the military in some capacity. Indeed, all but one of the nurses listed

in Table 4.6 chose to work in military or repatriation hospitals for at least some of their post-war nursing careers.

However, the health implications of active service, both immediate and delayed, diminished the quality of life for some nurses in the subsequent decades. They were not the healthy individuals who enlisted at the beginning of the war (Doherty, 2022). This decline in health would have affected the nurses' abilities to work and, in some cases, including for some of those in the North Kennedy region, shortened their lives.

4.5 Reception House Nursing

Mental illness was not a recognised illness before the 1900s. People were sent to gaol if insanity was diagnosed and madness was thought of as caused by demon possession or bad blood (Malcom & Blumer, 2016; Vrklevski et al., 2017). By 1864, the Woogaroo Asylum at Goodna was established, with prison wardens serving as the first patient attendants. As well as asylums, the Lunatic Act of 1869 made provisions for patients with mental health problems in the form of reception houses. By 1869, reception houses were established in Rockhampton and Townsville (Queensland Government, n.d.). Reception houses were facilities of care where a judge could send a person for 30 days instead of having them committed to an asylum (Butterworth, 2016).

Townsville's reception house (1871–1938) cared not only for residents from the area but also for those from as far away as Cairns. Dr Ellerton was appointed Medical Superintendent at Goodna and Inspector of Hospitals for the Insane in Queensland in 1910 (Finnane, 2008). Upon his appointment, Dr Ellerton instituted changes to bring asylums up to the then-current view of appropriate care for patients, including the physical environment in which they lived. Dr Ellerton was also committed to the training of nurses in mental illness and implemented a course of training at Goodna for attendants (Finnane, 2008).

Although there is limited information regarding the Townsville Reception House, there were several staff that worked in the reception centre and also gained certification in mental health. Annie and John Bliss, identified as nurses at the reception centre, were found to have either worked at Goodna Asylum or had to travel there to be trained (Queensland Government, 1915–1925). What training or curriculum the staff at the reception house received is unknown. However, review of the archived examinations at the Queensland State Archives shows that only two of the eight questions in the mental nurse exams of 1921 pertained to mental illness.

Not all members of the Townsville community were happy about the care provided in the reception centre. In a discussion piece in the *Truth* newspaper in 1913, allegations were made that patients were sent to the reception house in neglected states or because of perceived altered behaviour during admission to the Townsville General Hospital and that they, consequently, died in the reception centre. Admission to the reception centre because of so-called altered behaviour could cast doubt on the ability of nurses at the Townsville General Hospital to deal with patients. Cancer patients were also sent to the Reception House with no equipment to help them (*Truth*, 1913).

It took until 1919 before working conditions altered for asylum nurses. At that time, asylum nurses were working a twelve-hour day with three days off each week. Deeming this unsatisfactory—and considering both patients and worker satisfaction—Dr Ellerton suggested three eight-hour shifts. Dr Ellerton believed that shifts in this format would allow for continuity of work, provide individual attention for high-care patients and allow nurses to gain greater knowledge of their patients (‘Asylum Employees’, 1919). By the end of the same year, wages and hours were taken to the Arbitration Court for employees of reception centres in Townsville and Rockhampton. Initially, the working hours were 56 hours per week, which was reduced to 48 hours. Table 4.7 shows the fixed pay rates for Townsville Reception House staff. Reception

house staff wages at Rockhampton were lower than at Townsville ('Reception House Employees', 1919). Although male and female attendants had cared for mental patients for several years, there were recurring questions concerning the suitability of female nurses caring for male mental patients. Whereas the Hospital Employees' and Kindred Institutions' Union of Queensland believed that mental work was suitable only for males, Judge MacNaughton ordered that institution policy be followed, namely that no female nurse under 21 should work in the hospital ward of an asylum ('Asylum Employees', 1919).

Table 4.7: Pay Rates of Townsville Reception House Staff in 1919 per year

Level of nursing	Female nurses	Male nurses
Probationer	166 pounds	174 pounds
Permanent staff 1–4 years	128 pounds	190 pounds
Permanent staff 5–9 years	140 pounds	196 pounds
Permanent staff over 10 years	152 pounds	208 pounds
Permanent staff over 15 years	162 pounds	228 pounds
Supervisor and Matron	345 pounds plus quarters	

The Townsville Reception Centre closed in 1938, when it was re-configured as a ward in the Townsville Hospital. However, it was noted that 21 years earlier, in 1917, when the then Home Secretary asked the hospital committee meeting what provision was being made for patients admitted to the reception house given its possible closure, the hospital was unable to make any provisions ('Townsville Hospital', 1917). This lack of provision for mental care also shows a potential lack of understanding of mental illness in healthcare environments of the time.

4.6 Orphanage Nursing

The State Orphanage, Townsville (see Figure 4.7), was first established in August 1878 and operated from 1879 to 1911 under the control of the Queensland Government (Australian Government, 2021). In 1911, the Orphanages Act of 1879 (Act no.16/1879) was passed; this was renamed the State Children Act 1911 (Act no.2 Geo.V.No.11) and remaining so named

until 1966 (Australian Government, 2021). The title of 'Orphanage' was, however, a misnomer given that not all the children being cared for were orphans. Under the Orphanages Act of 1879 (Act no.16.1879), orphanages were charged with caring for, teaching and training children whose circumstances included the death of one or both parents, desertion by parents or neglect. Specifically, the Act permitted destitute or deserted children under the age of 12 to be sent to an orphanage and to remain there until they reached 12 years of age, unless they were boarded out with a respectable person, hired out or apprenticed. Parents or relatives were expected to contribute to their support (Australian Government, 2021).[45]

Figure 4.7: State Orphanage, Townsville, 1913 (City Libraries Townsville, 2022)

Annie Ball was appointed matron of the orphanage in February 1899. Jean McIntyre was matron from March 1925 to October 1928 and sub-matron between 1921 and 1925, initially on probation. Although the age of nurses in public hospitals in this period was set at a minimum of 21 years, this limitation did not appear to have existed in the orphanage sector. For instance, gaining a suitable woman for the position of sub-matron proved difficult in 1918. The matron and a member of the Orphanage Committee put forward a motion to have Nurse Fisher, an 18-year-old nurse working in the orphanage at the time, promoted to the position of sub-matron. The motion argued that she had more than enough ability to fulfil the role based on her current

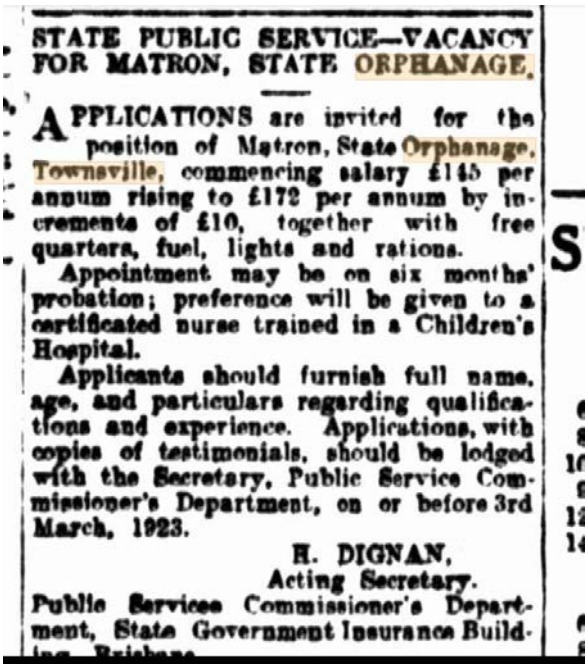
[45] The matron was responsible for running the orphanage and the staff included a housemaid, cook, caretaker and a sub-matron. This housekeeper role was typical for matrons in the early part of the colony until Nightingale's reforms revisioned the role as one of control of the nurses and internal management of the hospital (Burrows, 2018).

experience as a nurse (State Children Department, 1917–1918). Although this may have provided a unique opportunity for Nurse Fisher, or indeed was suggested out of necessity or desperation on the part of the matron, concerns could be raised about the adequacy of her skills. Without knowing exactly when she began her nursing training—or if indeed she was a qualified nurse—it is unlikely that she had been nursing for very long, and it may have been one of her first positions as a nurse. This may suggest that untrained women could receive nursing roles in the Townsville State Orphanage and be trained 'on the job'. The nature of work in the orphanage would undoubtedly not be comparable to work undertaken by nurses in other more acute, clinical environments, such as the hospital. Having no formalised training as a nurse would have limited Nurse Fisher's ability to apply for other positions as a nurse unless she began a probationer program within an ATNA-approved hospital. Unfortunately, evidence regarding the nursing staff of the orphanage is sparse.

Despite the women working at the State Orphanage, Townsville, having the title 'nurse' in the 1910–1925 census, this may have been in name only. Only one nurse who appeared on the census as working at the State Orphanage, Townsville, sat for nursing examinations between 1915 and 1925 (Queensland Government, 1915–1925). Mabel Alice Watkins was found within the examination records as having completed an examination in Brisbane, where she worked at the Children's Hospital. Further searches through other sources do not give an exact link to the same nurse in the orphanage, therefore it can not be positively identified that they are the same person.

Evidence illustrated a disparity between the skills expected for the nursing role at the State Orphanage, Townsville, and the actual skills of nursing staff who were employed. One example stems from an advertisement for the matron of the facility in 1923 (see Figure 4.8). The advertisement states that preference will be given to applicants who have been trained and

certified as a children's nurse ('State Public Service', 1923). Note, however, that this wording could indicate that although training and certification are preferred, they are not necessary.



STATE PUBLIC SERVICE—VACANCY FOR MATRON, STATE ORPHANAGE.

APPLICATIONS are invited for the position of Matron, State Orphanage, Townsville, commencing salary £145 per annum rising to £172 per annum by increments of £10, together with free quarters, fuel, lights and rations.

Appointment may be on six months' probation; preference will be given to a certificated nurse trained in a Children's Hospital.

Applicants should furnish full name, age, and particulars regarding qualifications and experience. Applications, with copies of testimonials, should be lodged with the Secretary, Public Service Commissioner's Department, on or before 3rd March, 1923.

H. DIGNAN,
Acting Secretary.

Public Services Commissioner's Department, State Government Insurance Building, Brisbane.

Figure 4.8: Vacancy Advertisement (*Morning Bulletin*, 1923)

Within the orphanage itself, there were identified roles as boys' nurses and babies' nurses. In the meeting notes from an Orphanage Committee meeting in 1917, it was noted that the poor health of the infants called for special nursing care although the details of such care were not stated (State Children Department, 1917–1918). It is interesting to note that Elizabeth Daniel, in the Townsville electoral roll of 1921, referred to herself as an assistant nurse at the Townsville State Orphanage (Australian Electoral Commission, 1903–1980). As this is the first mention of this occupation in the census records in the region, it is not possible to ascertain if Daniel held an untrained nurse position, a probationer position or indeed used the title herself for the purpose of the census. Regardless, it can be assumed that nurses at the orphanage carried out, at the very least, practical, general roles of supervising and caring for the children in their care.

The Townsville State Orphanage Committee meeting records provide some indication of the illnesses experienced by children in the orphanage. These illnesses included influenza, congenital syphilis, whooping cough, fractures, skin conditions (undefined), measles and epilepsy (State Children Department, 1917–1918). Doctors' visits occurred once a week. Although most illnesses appeared to be managed by staff at the orphanage, some children were admitted to the Townsville Hospital and, in some cases, passed away there as a result of their illnesses or injuries (Townsville Cemetery Trust, 1902–1939). Despite employing women as unlicensed nurses to care for and support the children, the orphanage did not employ formally trained nurses. Therefore, consideration of orphanage staff provides little insight into the research question.

4.7 Cape Pallarenda Quarantine Station

The safe care and management of infectious diseases in the community was another important area for nurses practising in the North Kennedy region between 1910 and 1925. A quarantine station was originally established at Magnetic Island, just off the coast of Townsville, in 1884. By 1913, construction of a new quarantine station had begun on the mainland at Cape Pallarenda (Queensland Government, 2023). This quarantine station (see Figure 4.9) became one of the many sites used for isolation purposes during the Spanish flu pandemic of 1918–1919. In 1920, the quarantine station was reopened when an outbreak of meningitis was found on an Asian sailing ship. Townsville staff were taken there by horse and cart. The nursing staff involved in caring for the meningitis outbreak included Sisters Wiseman, Galbraith and Allpass, as well as Nurse Fielding (Jaumees, 2001). Patients and staff were isolated at the quarantine station for two months, with staff caring for up to 60 patients at a time (Jaumees, 2001). Nurse Fielding remembers looking after the patients, who were all men (P. Savina, personal communication, 2022). Being the youngest, she was well-received by the patients and was able to help Dr Farrell gain information to facilitate their recovery in what could be perceived as a

version of patient rapport at a time when caring for the members of other cultures was not a common prospect (P. Savina, personal communication, 2022). Although the details of day-to-day care are unknown, the autopsies of 13 men who died of meningitis were performed at the quarantine station. Nurse Fielding was in attendance on the day that Dr Farrell saved the nurses' lives.[46]

Figure 4.9: Part of the Cape Pallarenda Quarantine Station (personal collection of Sandra Dash, 2022)

4.8 Nursing Care of Other Cultures

As a remote region, the North Kennedy region had a population that was vastly different to that of metropolitan areas in Australia at the time. The itinerant groups of miners from various cultures and the local Indigenous populations that lived in or surrounded the towns of the North Kennedy region would not have been seen in southern towns and cities. Charters Towers, in particular, had a population of both groups, with Townsville, Ayr and Home Hill having predominately Indigenous populations in their communities. Ingham, conversely, had Indigenous populations as well as South Sea Islander populations in the plantations and a high

[46] The cook from the ship observed one of the autopsies from the roof and came charging into the room with a machete. Dr Farrell stood between the cook and the nurses to save their lives. No one was hurt that day (P. Savina, personal communication, 2022).

number of Italians and Japanese, as well as smaller numbers from other European nationalities, worked on the plantations (Hinchinbrook Council, 2021). Although nursing probationers developed the knowledge to care for their patients, there was nothing within the curriculum of the ATNA that focused on cultural care.

Within the Charters Towers Hospital, complaints had been raised about Aboriginal patients walking freely among the verandahs and wards of the hospital ('Charters Towers Hospital', 1919).[47] Mr McCallum, a committee member of Charters Towers Hospital, suggested that tents be erected within the hospital grounds to house Aboriginal patients. Although there was no information noted about nurses and their role in caring for Aboriginal patients, Dr Edmeades, medical officer of Charters Towers Hospital in 1919, 'felt that some aspersion had been cast upon the nurses and he would state that aboriginals were not easy to handle' ('Charters Towers Hospital', 1919, p. 2). Although, according to Dr Edmeades, the Aboriginal population was only predominant in Charters Towers during show time, he believed that tent wards would assist—despite the care of these patients having been managed without such wards until this time ('Charters Towers Hospital', 1919).

There was no mention of nurses and their role in caring for Aboriginal patients in Townsville Hospital records, although hospital committee members, Mr Woodrow in 1922 and Mr Byrne in 1924, had issues with the admission and placement of Aboriginal patients. Mr Woodrow and the hospital committee of the time were agreeable with local Aboriginal admissions but were against admissions from other districts ("Townsville Hospital Committee', 1922).

[47] The page of the newspaper citing this story was torn and the details of the complaint maker were missing.

4.9 Chapter Summary

The towns of the North Kennedy region provided a multitude of contexts in which nurses could learn a broad range of clinical skills between 1910 to 1925. This chapter has identified and discussed a number of these institutions and contexts as forerunners to the delivery of formalised healthcare in the burgeoning towns of the North Kennedy region. Despite evidence, sources and artefacts providing plentiful descriptions of nurses and nursing work for some of these contexts, other contexts and roles are undocumented and remain largely unknown. Hospital sources from the region did provide a glimpse into the life of a nurse between 1910 and 1925, illustrating how nursing was moving from an untrained to a trained profession—also providing insight into the challenges of living and working in what was a remote area of Queensland. The next chapter discusses the professional evolution of nursing in the North Kennedy region.

Chapter 5: Formalising Education and Nursing Professionalism in the North Kennedy Region

5.1 Introduction

In the previous chapter, several of the key institutions and contexts within which nurses worked during the study period were described. Student nurses worked within the apprenticeship model that was adopted by the nursing profession at the time, with this model continuing until nurse education moved into the tertiary sector in the 1970s. This model enabled novice nurses to acquire a range of skills that would prepare them to care for a variety of patient presentations and conditions. Knowledge areas and clinical skills undertaken by nurses included—but were not limited to—nutrition, patient hygiene, cleaning and sanitation, mobility assistance, wound dressing, pressure area care and medication administration (Australasian Trained Nurses Association [ATNA], 1906).

This chapter explores the training and education that student nurses undertook to become competent in providing patient care. Although nurses in the North Kennedy region were educated within the hospital environment before the study period, my analysis found no uniformity across the teaching hospitals concerning course content. Whereas nurses prior to 1910 were educated through the hospital system, there was no registration process after examinations. This meant a lack of distinction between trained and untrained nurses, something ATNA was keen to amend given their goal of registering nurses. Various pieces of Australian legislation passed between 1910 and 1925 would formalise the nursing profession, along with state registration in 1912 and the development of formal education. Importantly, nursing education was not only for probationary nurses, with registered nurses and matrons also working to extend their knowledge and skills to accommodate new clinical areas within their

hospitals. Matron Henry of Charters Towers Hospital, for example, spent several months in the south of Queensland gaining an obstetric certificate for when Charters Towers Hospital opened its maternity unit in the 1920s. Staff who were exposed to military service also gained unique knowledge and skills from their experiences in the various theatres of war.

My analysis has indicated that nurses were educated in clinical skills and taught about the importance of professionalism and professional relationships in nursing. Although this education was heavily influenced by the establishment of ATNA in 1899, this chapter also highlights other factors that contributed to the formalising of nursing education and professional identity during this period, including the introduction of badges and uniforms, comportment and the formation of nursing unions.

To provide a broad context for this discussion, the evolution of nursing education in Australia will be briefly discussed, together with a description of the processes of becoming a nurse. Exemplars from the North Kennedy region are used to showcase some of the distinct changes that occurred in nursing education during this period. Given that most nurses in the North Kennedy region were employed within the hospital setting, my analysis focusses on nursing education provided in hospital settings.[48]

The second half of this chapter will discuss professionalism, considering, in particular, the evolving professional identity of the probationary nurse, nurse uniforms (also making comparisons between hospitals) and the nurse–doctor relationship. Exemplars from the North Kennedy region are produced to deepen the discussion further.

[48] There was little information available regarding the provision of educational support or training opportunities for nurses in non-hospital settings.

5.2 Nursing Education Prior to 1910

Formal nursing education commenced in Australia soon after the 1868 arrival in Sydney of Lucy Osburn and her five compatriots, who were tasked with establishing a school that would train nurses in the so-called 'Nightingale method' (Godden, 2001). However, although the arrival of Osburn and her colleagues may have addressed the need for trained nurses in Sydney, it did little to address this need in more remote areas. For example, the then Burdekin and Flinders District Hospital in Townsville had already been receiving patients for two years at the time of Osburn's arrival (Jaumees, 2001).[49] Despite the early establishment of the Burdekin and Flinders District Hospital, there is no mention of nurses in any form in the local Townsville newspapers published during this period. The educational background of some doctors was also being scrutinised, with one doctor's European qualifications not recognised in Queensland (Jaumees, 2001).[50] Although Townsville and Charters Towers had been training hospitals since the late 1800s, ATNA did not recognise Charters Towers Hospital until 1904 and Townsville Hospital until 1905. Ingham Hospital was recognised as a training hospital by 1914 whereas Ayr Hospital was gazetted as a training school for nurses in 1923, with a four-year training period ('Lower Burdekin Notes', 1923). Training lengths for probationary nurses depended on the number of hospital beds. Ten to 20 beds meant five years, 20 to 40 beds meant four years and more than 40 beds meant three years ('The call for nurses', 1917). Townsville initially had a four-year training period (Jaumees, 2001).

In 1904, although a new committee demonstrated interest in forming a Queensland branch of ATNA, there were no representatives from rural or remote hospitals. Medical professionals who

[49] Of the three towns that had hospitals in the nineteenth century, Townsville's first hospital was built in 1866, Charters Towers followed with their first hospital in 1872 and Ingham had their first hospital in 1885. Ayr did not have a hospital until around 1917.

[50] Dr Ascher was already practising in Townsville prior to working at the hospital in 1868. His qualifications were, however, from Prussia (part of modern-day Germany) and the then Queensland Medical Board had not responded to his application for registration (Jaumees, 2001).

demonstrated an interest in such a committee included Dr Ernest Jackson (the inaugural president), 13 medical practitioners (unnamed), Nurse Marks who was the matron of Brisbane General Hospital, and Mr Payne, the Secretary of Brisbane Hospital (Strachan, 1996). What effects the lack of rural and remote board representation had on hospitals and nursing practice in rural and remote areas, including the North Kennedy region, were not identified in this study. One might, however, interpret this lack of rural inclusion as demonstrating a degree of disregard for such hospitals and their contribution to healthcare at a time when there were limited services available in remote and rural towns.

5.3 Becoming a Nurse

Although it was perceived by many in society that nurses were to be of a certain class and gender, educated and cultured, there was difficulty in recruiting such ladies given the physical labour involved in nursing (Strachan, 1996). The Nightingale system was two-tiered, with women from working classes training as probationary nurses and middle-class women as sister probationers who would become full sisters and leaders (Burrows, 2018). Madsen's (2007) study identified late-nineteenth-century views that women did not come into their own until after 21 years of age. That is, society in the nineteenth century believed that a woman's heart should be valued over her mind (the mind being masculine), implying that women were emotionally and physically frail (Cruea, 2005). Consequently, applicants were preferred to be between 25 and 35 years old on the basis that, being more mature, they would be better able to handle the more emotionally taxing elements of nursing, such as death, dying and illness (Madsen, 2007). In the North Kennedy region, the ages of nurses entering training were between 23 and 27 years of age (Ancestry.com, personal electronic communication, August 2023). The only exception for age was noted in the orphanage in Townsville, as discussed in the previous chapter, where an 18-year-old female was reportedly employed as a nurse (State Children's Department, 1917).

The societal backgrounds of nurses within the North Kennedy region were also diverse. Some nurses, such as Gertrude de Vis and Rosa O'Kane, who both practised in Charters Towers, were from prominent families, whereas others, such as the Geary sisters, were from less prominent families (Ancestry.com, personal electronic communication, 2023). For example, the de Vis family had high standing in Charters Towers from when Dr Charles de Vis immigrated to Charters Towers from England, becoming the resident surgeon of Charters Towers Hospital (Stride, 2022). Dr de Vis's son grew up to be a dentist in Bundaberg and Gertrude's brothers joined the defence force and went to WWI with her. Rosa O'Kane's grandfather, Thadeus, was a journalist who owned and edited *The Northern Miner* newspaper in Charters Towers. He had previously been a journalist in Rockhampton where he had also owned a private school. There was no significant history found on the Geary family, indicating they were less prominent in society. Familial sisters who followed each other into the profession were also noted in the region. Examples included the Geary sisters (Blanche and Stella) who were from Townsville and the Graham Lloyd sisters (Ethel and Gertrude Violet) from Charters Towers (Ancestry.com, personal electronic communication, 2023).

Although no sources outlined the training process of nurses in the North Kennedy region, it is likely that North Kennedy probationer nurses undertook a two-month trial period at the commencement of their training. This two-month trial period was a common practice in Australian hospitals at the time and comprised simple nursing tasks (Burrows, 2018). If these women were accepted into a probationary position, they would then work through each year of the probationary period according to the bed numbers of their hospital (Burrows, 2018).

There were set criteria that women had to follow when applying for admission into a nurse training school, including those in the North Kennedy region. Before 1 June 1906, prospective applicants were required to submit three personal references and a medical certificate that stated

the applicant was in good health, to the matron of the relevant hospital (ATNA, 1906). However, this process changed after 1 June 1906. Matrons were required to send any applicants' referrals to the Education Committee of ATNA for Queensland. The Education Committee was responsible for determining the suitability of applicants for selection to nurse training schools. Upon successful selection, the applicant then needed to supply a certificate that indicated they had passed the sixth year of primary school, the minimum education standard of the period (ATNA, 1906). Although 1906 precedes the study period, it was deemed important to identify the change brought in at this time, because this change shifted control of potential probationers from matrons to a government department that may not have understood the intricacies of employment in rural and remote areas.

Hospital size also affected student nurse recruitment, with a lack of appropriate accommodation in some smaller hospitals further hampering recruitment. For example, the Charters Towers Hospital Committee reported not being able to employ more nurses on 9 February 1921 because of a lack of accommodation and the need to separate the sisters from the nurses ('Charters Towers District Hospital' 1921). Similar issues were not, however, reported in any of the other hospital committee meeting minutes within the North Kennedy region during this period.

5.4 Nurse Education Curriculum

A three-year nursing curriculum was designed by ATNA, not long after the organisation's formation in 1899 (Strachan, 1996). This curriculum outlined the subjects that would be taught to probationers and the sequence in which they would be taught. By 1906, all training schools in Queensland received a circular produced by ATNA. This circular recommended textbooks, detailed changes to the curriculum, such as which lectures were considered redundant, and

specified probationers' attendance at state examinations (ATNA, 1906).[51] Table 5.1 outlines the subjects studied in each year of probationary nursing.

Table 5.1: Nursing Studies Curriculum Introduced by ATNA in 1906

Probationary year	Subjects
First year	• 12 anatomy and physiology lectures • 12 general nursing lectures (e.g., bed-making, the taking of vital signs [specifically temperature, pulse and respiration] and nursing roles and responsibilities)[52]
Second year	• 12 medical nursing lectures (e.g., Bright's disease, phthisis and pneumonia)[53] • 12 surgical nursing lectures (e.g., limb splinting, pre-operative care and wound management)
Third year	• 6 lectures on invalid cookery • Urine testing • Hygiene cares

Although this curriculum would have been provided across all nurse training schools in Australia at the time, my analysis indicates the medical nursing lectures provided in the second-year curriculum would have been particularly useful to probationers training in North Kennedy during this period. These lectures focused on diseases that were prevalent in the region at the time, as evidenced by the region's various burial registers. For example, Charters Towers was especially plagued by deaths attributed to Bright's disease and phthisis (A. Guild, personal electronic communication, May 2022). Therefore, the information shared in these lectures would have provided nurses with some ideas re managing these diseases.

Probationers within the North Kennedy region would have benefited from the topics discussed in the surgical nursing lectures. This series of lectures included a practical component whereby

[51] The housekeeping subject was, for instance, removed from the examination for 1906, although training hospitals were still encouraged to teach the content. Hygiene lectures were added (six in total). Two suggested textbooks were Glaister's (1897) *Manual of Hygiene for Students and Nurses* and Cuff's (1896) *A Course of Lectures on Medicine to Nurses*.

[52] The taking of blood pressure was not a nursing skill until after WWI. Other vital signs, such as taking the temperature and pulse, were medical officers' roles but were passed to nurses when the procedures became less interesting to doctors (Thomas, 1996).

[53] Bright's disease is now known as acute glomerular nephritis (Fries, 2005) and phthisis is known as tuberculosis (Moonan, 2018).

probationers learned the principles of splinting, wound management and pre-operative preparation (ATNA, 1906). Nurses in the North Kennedy region would need to have a broad knowledge range in this area given the variety of occupations within the region. For example, Charters Towers had many mines, which were the cause of numerous injuries. Similarly, farm-related accidents were common. Ingham and Ayr had sugar cane mills and plantations, which resulted in farming-related accidents. Although Townsville had surrounding rural properties where accidents could happen, admissions at the Townsville Hospital were less often related to industry and farming accidents. Instead, my analysis found common reasons for admission to the Townsville Hospital were illnesses, such as cancer, and the occasional motor vehicle accident (Townsville Cemetery Trust, 1902-1939).

Invalid cooking was a compulsory component of the third-year curriculum. In Charters Towers, nurses attended the local technical college for invalid cookery courses where they learned various methods of cooking foods and preparing invalid drinks. The *Northern Miner* would often comment on the nurses and their invalid cookery exams: 'The result of the nurses special examination in invalid cookery has come to hand. Each pupil passed—one with honors and two with credit' (ATNA, 1906; 'Technical College', 1915, p. 4). The six hygiene lectures educated probationers on more than just physical hygiene care. This series of lectures also included topics such as 'air, food, elements of sanitary engineering, infectious disease, disinfection, personal hygiene, and the law relating to the notification of infectious diseases' (ATNA, 1906, p. 8).

Although housekeeping was removed from the state exams in 1906, topic content was still taught to probationers. Housekeeping covered such topics as looking after an institution, including all staff and patients, supervising servants and understanding the value of hospital equipment and account keeping (ATNA, 1906). Hospital linen was kept in cupboards known as linen presses; it counted as stock and remained the responsibility of nurses. For instance, the

1923 Charters Towers Hospital Committee meeting records reported the nurse in charge of each ward was responsible for the contents of their linen presses and the permanent day shift head nurse was in overall control of the linen ('District Hospital', 1923). The day shift head nurse was required to work in conjunction with the hospital's sewing guild, which sewed linen for the facility. The sewing guild was a committee of women from Charters Towers society ('District Hospital', 1923).

The 1906 training circular from ATNA showed that textbooks were considered an important source of both theoretical and practical information. One of the suggested textbooks was Glaister's *Manual of Hygiene for Nurses and Students.* This text was written in 1897 by Dr John Glaister and discussed concepts including hygiene care, promoting adequate ventilation, basic infection prevention and control measures (e.g., ward disinfection and cleaning) and the nursing management of infectious diseases (e.g., tuberculosis and pneumonia).[54] Such topics would have been useful to nurses and probationers within the North Kennedy region. Nevertheless, although such textbooks were suggested by ATNA, I was unable to locate any sources that indicated if the recommended texts were used by nurses in the North Kennedy region during their training.

The 1906 ATNA training circular indicates probationer nurses received some degree of resuscitation education, including introducing artificial airways, such as tracheostomies and their management. Despite this inclusion, I was unable to locate any evidence about the extent of this training and whether it enhanced nurses' abilities to care for their patients in a safe fashion (ATNA, 1906). Although the 1921 mental nurse examination included a question asking for a description of artificial respiration methods, there was nothing similar noted in the

[54] John Glaister was a Scottish forensic scientist and professor of forensic medicine at Glasgow University. Although nothing can be found as to why his textbook was chosen for Australian nursing studies, there has been suggestion that Nightingale's book, *Notes on Nursing* (1860), was a public health manual rather than a nursing manual (Bates, 2020).

medical–surgical examinations that I reviewed. The question, as stated in the examination was, 'Discuss the various methods of artificial respiration' (S. Dash, private collection, 2022). There would have also been the need to work with the equipment that the nurses had available to them. Anecdotally, at Ingham Hospital in July 1914, there was no telephone or doctor on the premises on the Saturday that a boy arrived after being bitten by a snake. Matron Orme took charge of his treatment, leading to the boy being discharged home that afternoon ('Herbert River Notes', 1914).

Probationary nurses were taught professional aspects of nursing, including expected conduct and acceptable behavioural standards (ATNA, 1906). This professional element of nursing was taught within general nursing lectures. Topics included the 'qualifications of a nurse, [the] distinction between the Doctor's work and that of the Nurse and hospital etiquette' (ATNA, 1906, p. 7). There was no discussion of uniforms in the training circular of 1906 (ATNA, 1906).

5.5 Examinations

ATNA introduced Australia-wide nursing examinations for all students who wished to become registered nurses in 1905. The introduction of these exams resulted in the then-current hospital certification becoming redundant. Three types of nursing examinations could be sat: general, midwifery and mental nursing.[55] There were, however, no dedicated midwifery units in either Townsville or Charters Towers until around 1924 (Jaumees, 2001). The private homes that would have been used for birthing would have relied on women who would have received no formal training in childbirth, providing an environment that could lead to mother or child mortality from poor hygiene standards and poor birthing techniques.

[55] Mental nursing was the exact title of the examination and nurses in asylums were called mental nurses. There was no indication at the reception centre in Townsville, however, that education was provided for staff. The lack of nursing education may have meant patients received suboptimal care.

The general nursing exam contained five questions whereby examinees had to describe, give examples of, discuss, write a short essay or define particular elements that they would encounter in their role as a nurse (S. Dash, private collection, 2022). Of the approximately 2,824 men and women that sat nursing examinations between 1915 and 1925, 77 were from Townsville, 36 from Charters Towers, one from Ayr and one from Ingham (Queensland Government, 1912-1925).

After June 1906, probationary nurses had to pass the three-hour ATNA exam to register with ATNA. The examination fee was one guinea (1 pound, 1 shilling) and student nurses could re-sit examinations at their own expense should they fail (Queensland Government, 2022).[56] Surgeons appointed by ATNA determined the content of the exams and the answers that should be provided at a state level, with matrons participating in the oral and practical exams at a local level (Strachan, 1996; Wood, 2009).

Charters Towers was the first hospital in the North Kennedy region to be awarded status as an examination centre around 1904. Nursing students from surrounding areas, including Townsville, were required to travel to Charters Towers to sit their examinations (Jaumees, 2001). Doctors Huxtable and Kelly and Matron Wetherill carried out the practical examination reviews at Charters Towers Hospital (1913 to 1915). The trio were appointed representatives to the Queensland Nurses' Registration Board between 1913 and 1915 ('The Northern Miner', 1913). When Dr Huxtable enlisted in WWI, Dr Kelly, alongside Dr Forrest and Matron Wetherill, continued reviewing examinations in 1914 and 1915 until Dr Kelly himself enlisted (*The Evening Telegraph*, 1915).

Townsville Hospital rarely acknowledged nursing examinations in their hospital committee meetings. However, the 1916 hospital committee meeting records indicated that practical

[56] One guinea would have been worth $177.11 in 2022 (RBA, 2023).

examinations were held in September of that year with Drs Parkinson and Breinl and Matron Hussey overseeing the assessment. The written examination was invigilated that year by Mr H. E. Cooney (CPS)[57] ('No title' 1916).

5.6 Professionalism

Although professionalism was studied within the nursing curriculum in Australia, the concept itself was still evolving. Nurses were learning how to be a regulated profession and identify themselves as nurses within the healthcare system. Minor themes that emerged from considerations of professionalism included: evolving professional identity, uniforms and the nurse–doctor relationship.

5.6.1 Evolving professional identity

Literature from ATNA and various secondary sources show that the term 'nurse' was in common use during the study period. However, my analysis has indicated that there were inconsistencies in the nomenclature used to denote nursing work during this period. For example, the census records for the Kennedy district that were retrieved for the study period indicated that four Charters Towers women had identified themselves as 'ladies nurse' (Australian Electoral Commission, 1902–1980).[58] It is unclear whether these four ladies' nurses were professionally trained as midwives or registered nurses. The term disappeared from the census list of Charters Towers in 1919 (Australian Electoral Commission, 1902–1980).[59] Ellen Leahy, another nurse from Charters Towers, classified herself as a 'trained nurse' in the 1925 census and was noted to have worked at the district hospital in Charters Towers in 1922

[57] CPS was an abbreviation for College of Physicians and Surgeons and was an examining body based on the Royal College of Surgeons of England (CPS Mumbai, 2023). There was no indication from further research whether Mr Cooney was a doctor himself.
[58] The only mention of 'ladies nurse' in literature was described in Barclays' (2007) article when describing Australia's pre-1904 midwifery programs that graduated 'Ladies Monthly Nurses' not midwives.
[59] Although midwives were not included in this research, I felt it was important to identify the difference in titles given there was animosity between nurses and midwives during the study period – an animosity that perhaps indicates one reason why the term 'ladies nurse' was used.

(Australian Electoral Commission, 1902–1980). In Ayr, Margaret Farrell listed herself as a professional nurse in the census between 1916 and 1925 (Australian Electoral Commission, 1902–1980). Conversely, nurses who worked in North Kennedy hospital environments were labelled as nurses within the census listings (Australian Electoral Commission, 1902–1980). What is, therefore, clear is that there were inconsistencies in the titles used for nurses in the North Kennedy region between 1910 to 1925. Interestingly, the years that the women mentioned above worked fell after initial attempts in 1910 to distinguish between trained and untrained nurse.[60] Of course, the titles could have been those chosen by the women themselves.

5.6.2 Uniforms

Although nursing uniforms were used to symbolise professionalism and power, my analysis found very little information about the introduction of and stipulations surrounding the wearing of nursing uniforms in the North Kennedy region. The only primary source available was a recollection from Nellie Lambton (as cited in Jaumees, 2001), who worked as a nurse at Townsville Hospital between 1916 and 1917. Nellie described the uniforms as 'ankle length mauve dresses with long sleeves made of very heavy cotton material, the uniform was completed by stiffly starched collars, cuffs and starched apron which covered most of the dress' (as cited in Jaumees, 2001, p. 27). Despite this lack of written information, several photographs depicting nurses at the Townsville, Charters Towers and Ingham hospitals (see Figures 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7) enabled an analysis of the different uniforms worn during this period (see Table 5.2). Each nurse's pose and appearance and the collective uniformity found within each nursing group suggest that nurses within the North Kennedy were proud of their vocation, despite being in tropical and remote environments.

[60] Trained nurses were those who had completed education and training under the ATNA system and had ATNA membership; untrained nurses were those lacking ATNA membership.

Figure 5.1: Nurses with Dr Ross in 1910 (Townsville University Hospital Library [TUHL], 2023)

Figure 5.2: Mt Alma Hospital Nurses n.d (private collection, 2022)

Figure 5.3: Townsville Hospital Staff 1922 (TUHL, 2023)

Figure 5.4: Townsville Hospital Staff 1918–1919 (TUHL, 2023)

Figure 5.5: Townsville Hospital Staff 1915 (TUHL, 2023)

Figure 5.6: Townsville Hospital Staff 1916 (TUHL, 2023)

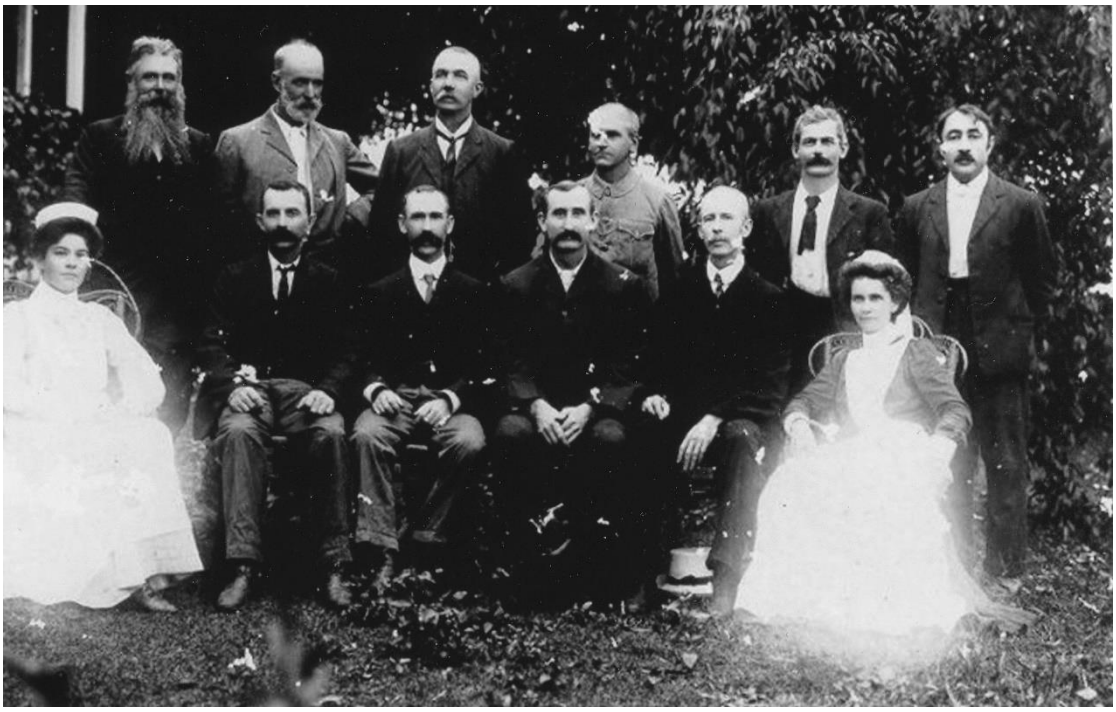


Figure 5.7: Ingham Hospital Staff and Board Members 1909 (private collection, Ancestry.com, 2023

Table 5.2: Nursing Uniforms of the North Kennedy Region (1909 to 1922)

Photograph location	Figure	Year photograph taken	Notable uniform characteristics
Townsville Hospital nurses with Dr Ross	Figure 5.1	1910	White apron over a long-sleeved dress, possible ground length, with white cuffs. Sleeves darker colour than the cuffs and apron. Small white cap on the head. All hair pulled up above the shoulders and placed under caps. Apron covered by a belt and buckles.
Mt Alma Private Hospital, Charters Towers	Figure 5.2	No date	Long dress, white stockings with black or white shoes. Skull cap and veil. Hair under the cap. No belts or buckles over the apron.
Townsville Hospital staff	Figure 5.3	1922	Uniform shin length. White shoes and stockings. Hair above the shoulders and under the cap. Belts and buckles remain.
Townsville Hospital staff	Figure 5.4	1918–1919	Similar dress to previous years. White stockings, shoes and caps. Matron had a nun-like veil on her head. Different belt buckles among the nurses, unknown at this time as to why they were different. Watches are now being worn. Hair above the shoulder but not tucked under the caps as much as in previous years.
Townsville Hospital staff	Figure 5.5	1915	White uniform. Dark buckled shoes and dark stockings. Veil-like caps worn instead of caps with hair above the shoulder.

Townsville Hospital staff	Figure 5.6	1916	Similar dress uniform to previous years with a white apron. Black or white boots. Belt with a buckle around their middle and small caps on their heads. Hair above their shoulders and less under the cap.
Ingham Hospital staff and board members	Figure 5.7	1909	The nurse on the left side of the photograph had a white neck-high dress with a white cap and dark boots. The matron on the right side of the photograph also had a neck-high dress with a dark jacket and a smaller white cap.

This analysis of the nurses' uniforms is based on a small sample from the photographs available. Regardless of where the photograph was taken—outside the hospital, in wards or in the nurses' quarters—all the nurses demonstrated professionalism in their pose and pride in their appearance. Uniforms were well presented, hair was above the shoulders and under the caps and, even when uniforms appeared to shorten in length, a professional demeanour remained. However, if the reader were to consider the veracity of the photograph, what appears in the photograph may not be the reality of nursing. These photographs are of the staged variety with the nurses posed standing in a particular manner, uniforms neat and tidy, around the doctors and matrons of the hospitals. Whereas Figure 5.6 shows two nurses with their hands on the shoulders of the nurses sitting in front of them, it is unknown whether the photographer asked them to do this or whether it is an individual reaction.[61] In addition, because the photographs are black and white, it is unclear whether there may have been additional forms of identification of rank.

5.6.3 The nurse–doctor relationship

Probationers were also taught to maintain their professionalism throughout interactions with doctors and more senior nurses.

> A nurse must begin her work with the idea firmly implanted in her mind that she is only the instrument by whom the doctor gets his instructions carried out: she occupies no independent

[61] Given these are two nurses on the same row, one must wonder whether the pose is staged.

> position in the treatment of the sick person. (McGregor-Robertson, 1902)(in Pritchard, 2017-2018, p.34).

As the above passage indicates, there was an expectation that nurses were subordinate to doctors. This expectation was aligned with the patriarchal norms of the period, which saw women as subservient to men (Yuginovich, 2000).[62] Despite this societal expectation, my analysis identified that nurses maintained their professionalism in the presence of doctors and matrons. For instance, mutual respect was evident between doctors and nurses at the Charters Towers and Townsville hospitals during the study period. For example, Townsville Hospital nurses ensured their uniforms were buttoned up and sleeves rolled down when the doctor or matron came into the room (Jaumees, 2001). This suggests a respect for the hierarchy of medicine wherein nurses must show a professional demeanour in front of the matron and medical staff.

The medical professionals of Northern Kennedy hospitals acted to protect nurses while they were serving the public. One example of how doctors protected their nurses can be found in the Cape Pallarenda Quarantine Station in 1920, when Dr Farrell stood between a group of nurses and a foreign sailor who was threatening to kill them.[63] Dr Farrell was able to calm down the sailor and protected the nurses from sustaining injuries, possibly saving their lives (P. Savina, personal electronic communication, 2022). Although Dr Farrell's motives that day remain unknown, one of the nurses at the quarantine station on that day remembered how nice the doctor was, noting this many years later.[64]

Dr O'Neill, from Charters Towers Hospital, also tried to improve the working and living conditions of the nurses at the hospital. He requested telephones in wards, aired concerns about

[62] Patriarchy means rule of the father (Merone, 2022).
[63] Dr Farrell, an English Doctor on holiday in Townsville, was recruited to help with quarantine station patients.
[64] The nurse's memories of that day were documented by her family when she relayed the story in the 1970s and her granddaughter emailed me a copy of the document, which remains in the family.

staff shortages and looked to provide extra comfort for nursing staff in their dormitories (‘Charters Towers District Hospital’, 1920; ‘Charters Towers District Hospital’, 1921). One of the comfort measures he suggested was separating the sisters from the probationers in their quarters, allowing sisters space away from junior staff and time to themselves (‘Charters Towers District Hospital’, 1921).

Hospital committee members showed concern for nursing staff regarding the length of shifts and the comfort level offered in nursing accommodation. For example, Charter Towers Hospital board members—in particular, Mr Park and Mr Carson, were concerned that ‘the hours [for nurses were] too long and he was in favour of doing something to remedy it’ (‘Charters Towers District Hospital b’, 1921, p. 2). In January 1921, Mr Saunders, another committee member of Charters Towers Hospital, requested warm water for the nurses’ baths in winter, because he believed it was unreasonable to require the nurses to arise at 6 am and have a cold shower (‘Charters Towers District Hospital’, 1921). This request remained unfulfilled in November 1921 and resulted in another board member, Mr Park, also endorsing this request (‘Charters Towers District Hospital’, 1921). Other committee members were not as concerned for the staff, with the high cost of installing a bath with hot water a deterrent for its provision (‘Charters Towers District Hospital’, 1921).

5.7 Chapter Summary

This chapter has outlined the processes involved in becoming a nurse between the years of 1910 and 1925, including the education level required and the particulars of support needed to attend nursing school. The curriculum for nursing schools was established by ATNA before the study research period in 1906; however, it remained the same until the 1950s. The curriculum indicated in the training circular of 1906 was also considered as particularly relevant to the North Kennedy region, with nurses being educated about infectious diseases, quarantine and

the importance of disinfection at a time when there were no antibiotics. Examinations, in turn, provided an opportunity for nursing students to showcase their skills in completing an education worthy of the Nurses' Registration Board. Examinations highlighted the role of hospitals in the North Kennedy region as being quality education providers. In summation, nurses were not only educated in the skills that would serve them in the clinical setting but also in the professional attributes required to be a nurse. The following chapter will outline shifts in approaches to safety and quality within hospital settings.

Chapter 6: Burgeoning Approaches to Safety and Quality in Hospital Settings

6.1 Introduction

The third theme identified during data analysis was the evolution and growth of safety and quality measures in hospital settings. This chapter presents several health, safety and quality initiatives introduced within hospitals in the North Kennedy region between 1910 and 1925. It includes an analysis of how these changes enhanced nurses' abilities to provide an improved level of care. The four sub-themes discussed are: medication dispensing, hospital architecture, infection control and the handling of hospital waste. The discussion focuses solely on safety and quality initiatives implemented in hospital settings, given that evidence and sources relating to other contexts were not found.

Analysis of the data identified that health professionals and hospital committees within the North Kennedy region recognised that elements of healthcare required improvement. As was the case with nursing practices more broadly, the development of health and safety policies, principles and practices in Australia were based on many of the provisions of nineteenth century British health and safety legislation (Australian Council of Trade Unions [ACTU], 2024).[65]

6.2 Medication Dispensing

Medication dispensing and administration was an important part of the role of a nurse, even as a trainee. Trainees were provided education about medication dispensing within their general nursing lectures. Although there was no clear description of the process of dispensing medication within the examined sources, I did find trained nurses at both Townsville and

[65] The British model was informed by the 1878 Factory and Workshop Act 1878. By the 1890s, Queensland passed a Factories and Shop Act making provision for sanitation, cleanliness and adequate working space (ACTU, 2024).

Charters Towers hospitals were responsible for medication dispensing. For example. Sister Lynch was the 'dispensing sister' at Townsville Hospital in the 1920s and was responsible for preparing inpatient and outpatient prescriptions. She also taught other sisters the role so they could cover the position in her absence (Jaumees, 2001). Although Sister Lynch or a proxy sister undertook this task during the daytime, medication dispensing was delegated to trainee nurses at night (Jaumees, 2001). This practice of nurse-led medication dispensing continued at Townsville Hospital until a pharmacist was appointed in the 1940s (Jaumees, 2001; Manion, 2006).[66] The medical staff of the North Kennedy region generally supported the role of nurses as medication dispensers. For example, Dr Taylor, a medical consultant at Townsville Hospital during the 1920s, indicated that he did not remember a single incident associated with the nurses dispensing when reminiscing about his experiences at the hospital (Jaumees, 2001). Charters Towers, however, operated under a different scheme when it came to nurses dispensing medication.

In Charters Towers, nurses were required to dispense medications under the guidance of the doctor ('Charters Towers District Hospital', 1921). However, having nurses dispense medications caused concern for members of the Charters Towers Hospital Committee in 1921. The Home Secretary was contacted about this concern and the return response indicated that, according to s. 23 of the *Pharmacy Act 1897 Act No.7*, a copy of a register must be kept giving evidence that all names within the register must be pharmacists ('Charters Towers District Hospital', 1921).[67] This communication indicates that each dispensary was required to keep a register of staff involved in medication dispensing. To resolve this issue, the Charters Towers Hospital appointed a new junior medical officer in 1923, who took over the role of medication

[66] There was a pharmacist, Cromwell Ridgley, in Townsville up until 1914. Ridgley sold his business in 1914. I could not locate any information as to why his services were not used for the hospital.
[67] The Home Secretary was not named; however, the Home Secretary in 1921 was W. H. McCormack ('Home Secretary's Visit',1921). Home Secretaries are no longer a role in Australia, being part of the Home Affairs office; however, their role was to ensure the safety of communities. They provided reports to parliament.

dispensing (‘District Hospital’, 1923). Despite this requirement, other hospitals reportedly did not implement such measures. There was no information found concerning pharmacy operations at the Lower Burdekin or Ingham hospitals.

6.3 Hospital Design

In Britain, in the late 1800s, doctors helped to improve hospital architecture by designing them in a way that would eliminate miasmas and waste materials believed to be the cause of health problem. Such designs included pavilion planning or the Nightingale ward, as it would later become known (Willis, 2019). Despite the miasma theory being disproven by the early twentieth century, hospitals during this period still featured many of the stylistic norms of the Nightingale ward. For example, Figure 6.1 is a photograph of the men’s ward at Townsville Hospital in 1917. The ward had pavilion-style (Nightingale) features including large windows to promote cross-ventilation and an influx of air.

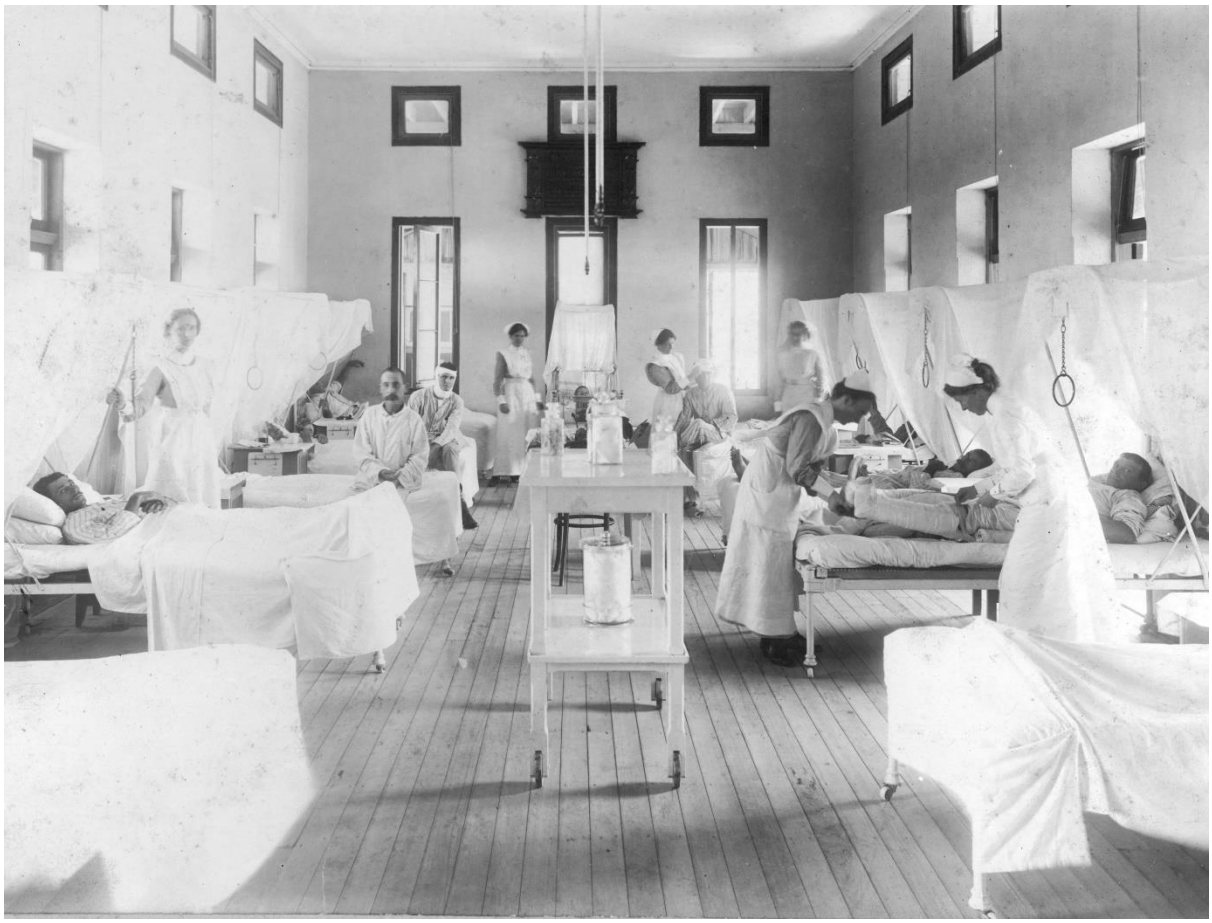


Figure 6.1: Townsville Hospital Men's Ward 1917 (Townsville University Library, 2023)

Externally, both Charters Towers and Townsville hospitals started as single storey wooden buildings in the late 1800s. Both hospitals were relocated to double-storey brick buildings when upgraded in 1883 and 1880 respectively (Jaumees, 2001; 'The Charters Towers Hospital', 1891). Both hospitals looked grand, with wide verandahs, double storeys and large windows. Ingham Hospital was planned in 1884 to have wide verandahs because it was believed that this was the best way to cope with the hot, humid climate (JOL Admin, 2020). A photograph of the Lower Burdekin Hospital in 1920 (see Figure 4.5) shows a single storey building with verandahs surrounding the main area, a water tank and a windmill (Burdekin Shire Council, n.d.). Charters Towers Hospital and Townsville Hospital had fever wards, which were located in separate buildings on the hospital grounds. Fever wards were built to accommodate infectious patients away from the general patient population, preventing the spread of disease by

containing it in one area. Even the drainage from these buildings was kept away from the main water supply to prevent cross-contamination.

The children's ward at Charters Towers Hospital was separated from the main hospital building (see Figure 6.2).[68] However, this design raised safety concerns given that nurses assigned to the children's ward were required to leave the ward unattended if they needed to gather equipment or assistance from the main hospital building ('Charters Towers District Hospital', 1921). This safety concern was formally identified by Dr O'Neill, a medical officer at Charters Towers Hospital. To remedy this situation, Dr O'Neill made a request to the hospital committee for the installation of a telephone line between the children's ward and the main hospital ('Charters Towers District Hospital', 1921). It was agreed that this request was a reasonable one and the work was placed with the Works Committee of Charters Towers Hospital ('Charters Towers District Hospital', 1921). In March 1921, the postmaster promised to carry out telephone connections to wards in the hospital ('Charters Towers District Hospital', 1921). No further mention of the telephones was made that year.

[68] There was initially a separate children's hospital in Charters Towers; however, because bed demand was not excessive, a building was placed within the grounds of the public hospital in 1902 ('Charters Towers Hospital', 1902, p. 48).

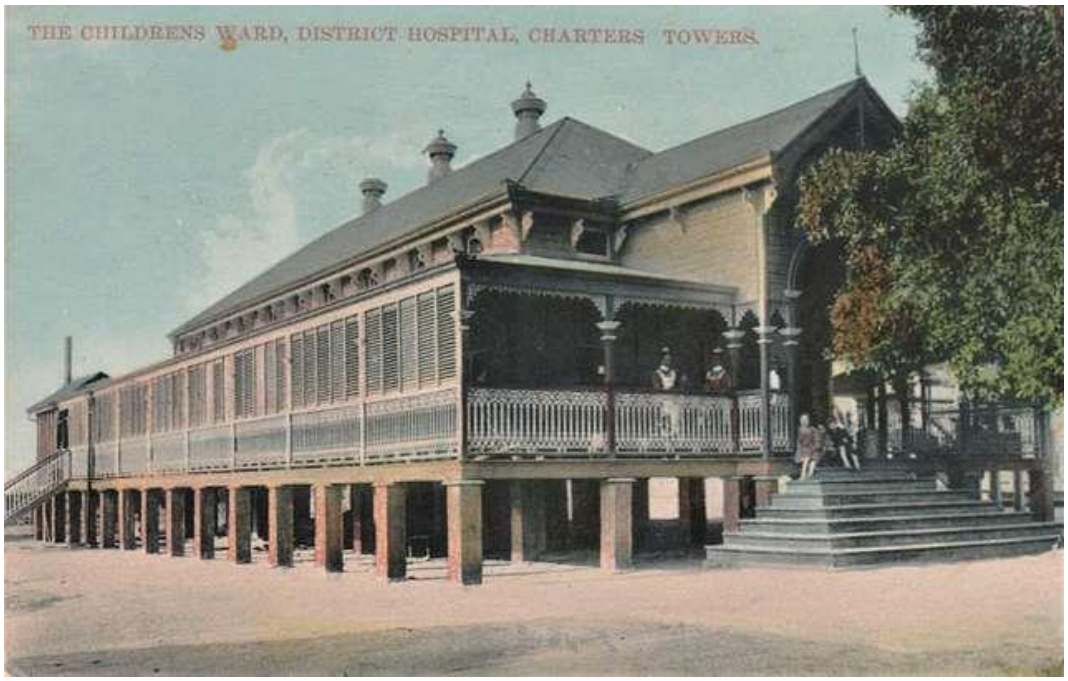


Figure 6.2: The Children's Ward at Charters Towers Hospital 1910 (Picryl.com, 2023)

The other concern about not having telephones within the hospital buildings in Charters Towers was not being able to contact other staff in times of emergencies. When a doctor needed to be found urgently, a 'hierarchy messaging' process was undertaken. As was standard practice at the time, only the sister was permitted to speak to the doctor. Therefore, messages for help may be relayed through several nursing levels, vis-à-vis trainee to more senior trainee, or senior trainee to senior ward nurse, ending with the eventual 'sister to doctor' message. The need to follow a hierarchy highlights the subservient status of nurses during the period.

Although the external architecture and design provided a grand appearance and entrance to the hospitals, the internal design shown in photographs taken during this period was not always conducive to safe and quality care, particularly in times of emergencies or when gathering equipment. For example, Figure 6.1 provides insight into the poor ward design that would undoubtedly have affected safety and quality during emergent situations. First, the lack of curtains around the beds would have meant no privacy could be provided for the patient or the staff conducting emergency treatment. Second, the tables and chairs in the centre of the room

may have impeded the ability to move quickly and safely through the ward. Finally, unless the emergency was in daylight hours, the ability to view the patient clearly and safely, with handheld lamps as the only light source, may have been a concern.

Hospital design also affected nurses' abilities to transfer patients between different clinical areas. For example, the operating theatre at Townsville Hospital was on the second floor. Because there was no elevator or other devices to ease the transportation of patients, wardsmen and nurses placed patients on stretchers and manually carried them upstairs, navigating turns and banisters, to transfer them to the operating theatre (Jaumees, 2001). A similar practice of manually carrying stretchered patients was in place at the Charters Towers Hospital. In 1922, a doctor requested a pneumatic tyred transport stretcher to be purchased to improve the transfer process between wards. Although Charters Towers Hospital was also double-storeyed, there was no indication as to where the theatre was in relation to the wards and stairs if needed.

6.4 Infection Prevention and Control

Being part of a tropical area of Queensland, North Kennedy residents were prone to contracting tropical diseases, including dengue fever, malaria and filariasis. As the population of the region increased, so did the risk of epidemics. Diseases such as dysentery and typhoid arose from poor hygiene standards and substandard living conditions, whereas other diseases were brought in by travellers entering the region. Examination of the nursing curriculum between 1910 and 1925 shows that nurses were educated on 'specific fevers', including infection and contagion, phthisis and rheumatic fever, as well as on disinfection, deodorants and antiseptics (no specific names provided). This education would have provided the nurses with knowledge on how to care for patients with infectious diseases and, therefore, understand the importance of safety in

controlling the spread of disease (ATNA, 1906).[69] There was no evidence of the use of gloves or protective equipment to prevent the spread of infection until 1919.

6.4.1 Tuberculosis

Although diagnoses of tuberculosis were noted in the North Kennedy region, it appeared most prominent in Charters Towers, where it was commonly known as miner's phthisis. Miner's phthisis was caused by the inhalation of silica dust particles from the ore in the mine.

Trainee nurses at the Townsville Hospital would spend two months in the infectious ward, often nursing tuberculosis patients (Jaumees, 2001). After this rotation, they would receive three weeks of annual leave (Jaumees, 2001). The care that the nurses showed for their patients would be detrimental to their own lives, with reports of nurses dying of tuberculosis following exposure to patients in the isolation ward (Jaumees, 2001). Dr Halberstater, a medical superintendent at the Townsville Hospital, gave recognition to these nurses by stating that 'unfortunately, a lot of our nurses died later from pulmonary tuberculosis, and I am sure this was due to their exposure whilst working in the medical wards' (Jaumees, 2001, p. 40).

6.4.2 Influenza

Towards the end of WWI, cases of Spanish flu began to rise globally. Although Australia was able to prepare for its potential arrival to some extent, the first documented case of Spanish flu arrived in Melbourne in January 1919 (NMA) (National Museum of Australia) (2021). Different severity levels in influenza cases in the early stages confused the medical fraternity as to whether the cases were Spanish flu or the remnants of the previous year's flu cases (National Museum of Australia, 2022). This confusion was evident in Charters Towers, where

[69] The use of masks for Spanish flu is discussed in section 6.4.2. There is, however, no evidence of gloves being used.

both Spanish flu and non-Spanish flu cases were admitted to the hospital in 1919 (*Daily Mercury*, 1919).

By May 1919, towns in the North Kennedy region were preparing for the potential arrival of influenza. In Charters Towers, isolation hospitals were established at the district hospital and the state school, as well as patients' own homes ('Charters Towers News', 1919). In Townsville, Dr Nisbet was chosen as the city's health officer and began advising councils to close schools, with the Red Cross already enlisted to make masks for distribution. The matron of Townsville Hospital agreed to conduct lectures on the procedure for treating and caring for patients with Spanish flu ('Meeting of Townsville Committee', 1919). Although it was not identified who the audience for this lecture was, it can reasonably be assumed that it was to the nurses, given their central role in caring for these patients. Townsville had the main hospital of the town and established four isolation hospitals to alleviate the pressure of influenza admissions as the community succumbed and ships came into port requiring help with their infectious crews ('The Influenza Epidemic', 1919). Isolation hospitals were located at St Anne's School (now The Cathedral School, in Mundingburra), Belgian Gardens State School and the quarantine station at Pallarenda. At one stage, even the meatworks at Alligator Creek had an isolation hospital, which was utilised and serviced by ambulance officers and nurses until they, too, were afflicted by influenza ('Cases at Townsville', 1919). By June 1919, schoolteachers were offering their services to care for the rising tide of sick people ('Townsvilles' first death', 1919). Approximately 13 nurses in Townsville fell ill with influenza and required care themselves, including Matron Pengilley, who required admission into the isolation hospital at St Anne's School ('The position at Townsville', 1919).

In Ayr, Dr Savage gave lectures (presumably to other doctors and nurses) and Matron Rogers from Ayr Hospital was giving private instructions on how to prepare for the outbreak ('Lower

Burdekin Notes' a, 1919). By June 1919, those with influenza in the Ayr district were cared for in their own homes, because the isolation hospital in Ayr was designated to admit only patients from other districts who required medical support ('Lower Burdekin Notes' d,1919). The Ayr State School was prepared for use as an isolation hospital. Finally, because the Lower Burdekin Hospital was inundated with patients, the verandahs of the hospital were used for urgent cases. During this fast-moving pandemic, nursing staff were affected, with Nurse Julin from the Lower Burdekin Hospital becoming ill herself, necessitating a voluntary aid detachment nurse to be sent to replace her ('Lower Burdekin Notes' c, 1919). Ayr's isolation hospital opened in mid-July 1919 and Nurse Harper was placed in charge. Patients were transferred to the isolation hospital to address the bed shortage at the Lower Burdekin Hospital. Nurses were known to move from isolation hospital to isolation hospital to provide care where it was needed.

In August 1919, the influenza outbreak subsided enough in Ingham for the isolation hospital to be closed and the remaining patients relocated to the general hospital ('Herbert River Notes b', 1919). Because many local businesses closed as a consequence of the epidemic and food stuffs were in short supply wider afield, nursing staff in Ingham encountered significant issues with maintaining food supplies ('Herbert River Notes a', 1919). This shortage of supplies was not documented in other areas of the North Kennedy region.

Apart from isolation and fumigation in some hospitals, such as Ingham, there was limited care that nurses could provide to the patients with influenza beyond basic supportive measures already attended to, such as quarantine (Australian Institute of Health and Wellbeing, 2022). In Australia, and worldwide, there were no diagnostic tests or vaccines and only limited treatment for secondary infections. Non-pharmacological treatment included fresh air and sunshine (Jester et al., 2018).

6.5 Handling of Body Waste

The analysis of sources, artefacts and evidence identified another safety issue for nurses, namely the handling and disposal of body waste. Body waste was disposed of in various ways during this period. For example, the Charters Towers Hospital Committee record, in meeting minutes noted in 1917, that waste was disposed of in concrete 'slop wells'[70]; there was a view to install septic tanks in the near future ('C.T. District Hospital', 1917). Because of the size of the hospital, septic tanks were installed in different areas at different times. The tank servicing the nurses' wing and the children's ward was installed first. Charters Towers Hospital Committee meeting minutes indicated that this installation was a success, resulting in the committee concluding that a septic system for the rest of the hospital would provide comfort and convenience for both patients and staff alike. Charters Towers Hospital also had outhouses; however, Dr O'Neill stated that 'all the outhouses about the institution were in a congested state and not at all convenient for hygienic purposes' ('Charters Towers District Hospital Monthly Meeting', 1922, p. 2). Ingham Hospital had a septic tank in 1920; however, the Lower Burdekin Hospital was noted to still have a cess pit in 1922.

Handling and manually cleaning the buckets used for waste disposal placed nurses at risk of exposure to infectious diseases carried in body waste. Such handling was a particular safety concern for doctors, such as Dr O'Neill at Charters Towers Hospital. The installation of septic tanks would have lessened the exposure to waste because the tanks were covered and the waste and water would have been treated (Tilley et al., 2006).

[70] There is no definitive definition of a slop well. From the description in the *Evening Telegraph* of 1917, it appears similar to a cess pit, which is a receptacle in the ground where body wastes and rubbish were deposited (Scottish Women Hospital work, 1917; Smith, 2013).

6.6 Chapter Summary

This chapter has described some of the initiatives taken concerning safety and quality in healthcare in the North Kennedy region. Medication dispensing, hospital design and infection control were important sub-themes identified in the data. Although these improvements to safety and quality in the North Kennedy region did not occur quickly, they would have had positive effects, leading to a safer and more hygienic work environment. The next chapter provides an in-depth discussion concerning several of the key elements that shaped the development of formalised nursing in the North Kennedy region of Queensland.

Chapter 7: Discussion

This study has aimed to describe some of major developments in the history of nursing in the North Kennedy region of Queensland. Through the utilisation of Braun and Clarke's (2022) thematic analysis framework, three major themes were identified: contexts of care, formalising education and professionalism, and burgeoning aspects of safety and quality. Chapters 4, 5 and 6 explored these themes, drawing on evidence provided by primary sources, including hospital committee meeting records, photographs and newspaper articles. This chapter explores these themes in further detail, illuminating the myriad ways in which they contributed to the evolution of nursing in North Queensland.

7.1 Contexts of Care

Despite the fact that nurses worked in a variety of settings across the North Kennedy region, the majority of source materials used in the analysis were from the Charters Towers and Townsville hospitals. Information concerning both Ingham Hospital and Ayr Hospital was contained in hospital committee meeting records, with little mention of the role of nurses. The greater quantity of information concerning Townsville and Charters Towers is likely because of the towns' larger populations and the early establishment of their hospitals as teaching hospitals. Furthermore, the communities' promotion, sense of ownership and pride in 'our hospital' reflected an institution that was vitally important to these remote communities. Townsville and Charters Towers hospitals were established hospitals by the 1890s; however, as was the norm for medical care at the time, hospitals were supported by community funding through annual subscriptions and donations. The state government did not begin providing support to hospitals until the middle of the twentieth century. Thus, the Charters Towers community saw the hospital as their own, contributing monthly donations, establishing sewing

guilds to help with linen supplies, providing library services for the patients and holding frequent community events to raise further funds to keep the hospital functioning.

A second possible reason for the heavy focus on hospital records during this period was the drive to shift healthcare from the home to the hospital environment. The impetus for this was largely because of advances in medical treatments and technology and increased understanding of infection prevention and control. In addition, the biomedical model had taken hold as the predominant model of health in the early twentieth century, at least in Western countries. According to this model, illness had physical causes; social and psychological issues were largely not considered (Free Dictionary, 2003-2024). With medical professionals now in the hospitals, the majority of healthcare could be provided 'under one roof'. The hospital became an environment within which staff—such as doctors, nurses, cleaners and orderlies—were employed within strict hierarchical structures to ensure its smooth functioning and provide support and care for patients. Although medical professionals oversaw the clinical aspects of the hospital, committee members from the community ran the hospital in terms of supply, finances and hospital upgrades. Nurses cared for patients under the guidance of the doctors, buildings were maintained by the community's trades and, as medical advances increased, pharmacists provided medication support.

Literature shows that society did not view hospitals as a place for the care of the sick until the late 1890s when advances in medical technology and treatments were made and there was a better understanding of the relationship between germs and cleanliness (Hames Sharley, 2014; National Museum of Australia, 2023). Rather, care was provided by medical professionals in the home environment, including the conduct of rudimentary surgical procedures (Gregory, 2010). With the transition of care to hospital environments, trained and trainee (apprentice)

nurses also moved into the hospital system. As a public health system was established and began to flourish, hospitals began to be utilised by all levels of society (Hames Sharley, 2014).

My findings indicated that nursing took place in a range of other environments. Across the North Kennedy region, for example, nurses worked in environments such as the Townsville State Orphanage, prisons, mental facilities and in private plantations and properties of the district. Despite some meeting records of the orphanage, there is a paucity of information about the other areas, meaning these other nursing environments could not be explored. Such forms of nursing work did not fit with the dominant biomedical model. A possible explanation for this lack of information may be that the requirement to maintain health records was greatly reduced outside the administrative structures of the hospital. This may be because nursing outside the hospital environment may not have been seen as 'formal nursing', informed by the view that trained nurses primarily worked in hospitals.

Literature shows that nursing is seen primarily as a career in the clinical setting of hospitals, with psychiatric nursing not fully recognised as part of nursing until the 1980s (Burrows, 2018). This lack of acknowledgement of psychiatric nursing could be because psychiatry was not seen as part of mainstream medicine until the twentieth century (Lewis, 2014). Aged care nursing also lacks recognition as a career, with many nurses not wanting to work in aged care facilities because of the devaluation of aged care by society (Manchha et al., 2022). Although clinical care has improved in the aged care sector during recent times, studies show that graduate nurses feel unprepared for caring for aged care residents especially in dementia areas. The reason for feeling unprepared was believed to be due to undergraduate nursing curricula having a more acute focus and a lack of gerontology trained academics (Rayner, et al, 2022). The context of care is important with regard to the recognition of nursing and nurses in another way. Godsey

et al. (2020) found, for instance, that individuals are more likely to recall nurses from traumatic events than those in non-emergencies.

The lack of information about many of the healthcare institutions in the North Kennedy region suggests that rural facilities were not viewed in the same light as metropolitan hospitals. By 1909, although both Townsville and Charters Towers hospitals were conducting nurse training, there was concern that other, smaller institutions were being disadvantaged by not being training schools (Strachan, 1996). However, ATNA held the position that small hospitals could not provide nurses with the experiences needed for registration that metropolitan hospitals could. The perceived superiority of metropolitan healthcare remains an issue even in the twenty-first century, with 'bush hospitals' still assumed to provide less sophisticated care (Gregory, 2010). "Bush hospitals" remain an essential part of the bush culture and the communities in which they serve. However, Government funding cuts impact the safety, social and financial wellbeing of citizens of rural and remote towns. Rural medical professionals believe that there needs to be further recognition of the broad and extended scope of practice of health professionals within these rural and remote communities (Colahan, 2018).

A further finding from the contexts of care theme was what could be termed "cultural naivety" and a lack of care for members of other cultures. Although literature shows that Indigenous people were admitted to hospitals within the North Kennedy region during the study period (Centre for Indigenous Family History Studies, 2024), the attitude of medical professionals towards Indigenous people indicated, for instance, a less than caring nature. Colonial attitudes towards Aboriginal and Torres Strait Islander people remained evident throughout the Twentieth Century (Australian Government, 2010). Indeed, the formation of hospitals and the medical movement of patients from the home to the hospital catered for and depended on the white population only (Gregory, 2010). The view that Indigenous people were 'subhuman' and

not easy to care for saw them cared for in tents, infectious wards or specific Aboriginal wards away from the white population (Forsyth, 2007; *The Northern Miner*, 1919). It is worth remembering that it was during the period of focus for this study that the Australian Government began the assimilation of Indigenous children into the white population. Ending in the 1970s, this was the start of the Stolen Generation (Forsyth, 2007).

Although hospital committee records do indicate medical professional attitudes towards Aboriginal patients, I could not locate any research on nurses' behaviours, actions and care for Indigenous patients during that period. Review of the 1906 ATNA training circular shows that there were no topics within the nursing curriculum of the time that covered caring for Indigenous patients or patients from any other culture (ATNA, 1906). At the time of the study, with the pre-eminence of the biomedical model, the traditional medicine that Indigenous people had practised for many centuries was largely ignored. Contemporary literature shows that, even in current times, the full understanding of 'bush medicine' has not been investigated (Oliver, 2013). The difference in medicinal styles may help account for the behaviour of Indigenous people in not utilising hospitals frequently and not staying within the confined environment of a hospital.

7.2 Formalising Education and Professionalism

The formalisation of nursing education in Australia aimed to not only provide trained nurses but a systematic education system. Despite this attempt to ensure uniformity of nurse training between hospitals, my findings indicated that there were several deficits concerning the education of rural and remote nurses. The first of these concerned the tyranny of distance. In addition, metropolitan hospitals were of a larger size and had more staff, items lacked by the hospitals of the North Kennedy region. It is important to consider whether being in a rural or remote area would have affected the quality of nurse education and the ways in which it was

delivered. Not only did the hospitals in the North Kennedy region typically have only a matron and one medical professional to educate nursing staff, but there would have been limited ways whereby the matron and other medical professionals could contact ATNA for curriculum discussion. In addition, the smaller hospitals of the North Kennedy region may not have had access to the resources (e.g., equipment) needed to adequately educate their staff. The paucity of literature as to whether ATNA moderated curriculum delivery implies that medical professionals in the North Kennedy and other remote regions could have influenced the curriculum depending on hospital resources, the professionals' own experiences and the types of diseases and injuries common at the time (Wood, 2011). Two educators remained in Townsville Hospital until the 1940s when four staff were available to educate the nurses (Jaumees, 2001).

Sources show that current rural and remote nurses contend with issues similar to those experienced in the study time. The smaller the facility, the less infrastructure and the more generalised the role of the nurse is, with even the Director of Nursing having a more clinical role in remote areas than their metropolitan counterparts (Muirhead & Birks, 2020). As with towns in the North Kennedy region during the time of the study, contemporary rural and remote areas possess diverse communities, including Indigenous, pastoral and mining populations (Muirhead & Birks, 2020). This diversity may have been beneficial in relation to scope of practice. Nurses of the North Kennedy region had to learn to work with the resources that they had and to take on roles that other hospitals did not have, such as the dispensing role performed by nurses at both Charters Towers and Townsville hospitals. Although the dispensing role ceased for nurses at Charters Towers Hospital in 1924, the role continued in Townsville until the 1940s because of a lack of pharmaceutical support (Jaumees, 2001).

Despite rapid advances in medical treatments and therapies (e.g., the introduction of insulin in 1924 and the care of complex wounds post-WWI), the study has shown that the nursing curriculum remained unchanged between 1906 and the 1950s. This suggests that nursing knowledge was not adequate for the conditions nurses were caring for. It is also clear that the political parties of the time showed little consideration of healthcare issues. Madsen (2005), for instance, suggested that the government of the time was more concerned with staffing Queensland hospitals than the quality of nurse education. For instance, although Labor was elected in 1915, the party already had reforms formulated and health and hospital services were not considered (Patrick, 1987).

The reform of nursing education did not begin until 1943 when the first major investigation into nursing education commenced with *The First Report of the Committee for Re-Organisation of the Nursing Profession in New South Wales* (Department of Education, Training and Youth Affairs, 2001). The purpose of the inquiry was to improve nurse training and formulate long-term policies that would see the reform of nurse training (Department of Education, Training and Youth Affairs, 2001). Although this inquiry concerned nursing in New South Wales, the issues depicted in the report were of concern in Queensland as well. In 1967, a committee was appointed by The Institute of Hospital Matrons of New South Wales and the Australian Capital Territory to consider all aspects of nursing. The first part of a major report stemming from this inquiry determined that nurses were being trained on nursing procedures without appropriate theoretical instruction so they could start on the wards in a shorter time frame. That is, the emphasis was on training that was essentially practical rather than theoretical (Strachan, 1996). The second part of this report showed that nursing education had not kept up-to-date with medical advances, population and social changes (Department of Education, Training and Youth Affairs, 2001).

My study findings showed that the nurses of the North Kennedy region were largely generalist nurses. However, in Brisbane, Dr Hare developed the cold bath treatment for typhoid patients—a treatment he continued in Charters Towers Hospital during his term of employment there. There was no indication within the records of Charters Towers Hospital Committee meetings that nurses were educated about the treatment and its effects. Indeed, Charters Towers had only one infectious ward for all infectious diseases, whereas, in Brisbane, hospitals had specialised typhoid wards and nurses were identified as specialist typhoid nurses. This suggests that rural hospitals and the nurses within were not considered a specialised environment, even when Charters Towers Hospital had a typhoid bath and registered nurses to care for patients. Although typhoid nursing would have been considered a specialist skill—at least in metropolitan hospitals—formal nursing specialisations did not come into effect until the 1950s. Prior to that, although the nurses of the North Kennedy region would have been able to study midwifery, this would have meant travelling to southern cities or interstate given the lack of maternity units in the region until the 1920s. Similarly, to study mental nursing, nurses would have had to travel to the southern cities of Queensland.

7.3 ATNA: Focused on Brisbane

Despite ATNA's formation in 1899 being aimed towards establishing an organisation to oversee registration for trained nurses and allow nurses the ability to discuss all matters of nursing (Burrows, 2018), the findings of this study suggest that ATNA was not always supportive of trained nurses. Although ATNA succeeded in its curriculum revision for all training schools in 1906 and was able to introduce nursing registration in 1912, not all nurses received support from the professional organisation. My findings have shown that although Charters Towers was accepted as a training school and examination centre by 1904, Townsville Hospital was denied the opportunity because it was deemed that there was already one centre in the region. Townsville Hospital had to wait until 1905 for recognition (Jaumees, 2001). The

lack of understanding of distance in rural and remote areas by ATNA was evident here—the 136 kilometres between the two towns would have required nurses take extra time for their travel to their examinations.

It was evident that only particular nurses—specifically, metropolitan nurses—were considered for the ATNA board and accommodated with regard to meetings. ATNA commenced in Sydney with metropolitan nurses in attendance at meetings. As Strachan (1996) noted, country nurses had very few, if any, opportunities to attend meetings and the association did not encourage their contribution. This lack of support of non-metropolitan nurses also extended to a broader lack of support for nurses in the lower levels of nursing—a lack of support that continued for many years. Hence, despite being the professional organisation for all member nurses, ATNA offered access and support to only certain of its members.

It was not until 1904 that a Queensland branch of ATNA was established. Strachan (1996), however, found that the branch also excluded those members not living in Brisbane, giving non-metropolitan members no opportunities to voice their opinions in affairs of the organisation. This study supports this conclusion, with a review of hospital committee meetings from the North Kennedy region finding limited mention of ATNA and their dealings with nurses. In 1911, ATNA did intervene in Ingham Hospital's attempt to become registered as a teaching hospital by stating that because their matron (Matron Timewell) was not qualified neither, therefore, was the hospital ('Hospital Humors', 1911). However, this argument contravened ATNA's own policies concerning a clause whereby nurses trained before 1906 would be accepted as nurses. Despite medical professional intervention, Matron Timewell resigned (notably, she was employed within several months as a matron in another Queensland hospital).

Despite this lack of support from ATNA, nurses from the North Kennedy region did not appear to be affected in terms of education quality or opportunities for promotion to other hospitals or levels in the same hospital. The medical professionals working in both Townsville and Charters Towers hospitals understood the difficulties that both nurses and the hospitals experienced with regard to resource availability compared with facilities located in the cities in the southeast of Queensland. North Kennedy nurses, however, showed educative and leadership skills in various theatres of war during WWI and gained promotions as matrons in other establishments both before and after the war.

By 1920, Strachan (1996) noted that the majority of Queensland hospitals were small, making the coordination of working conditions between hospitals unachievable. However, findings from the study show that working hours between the Townsville and Charters Towers hospitals were the same length, with the difference of only one hour in starting time. Roles for nurses were similar, with specific theatre nurses and dispensary nurses. Roles in Ayr and Ingham hospitals were not discussed in available sources.

The study period ceased in 1925. However, Strachan (1996) highlighted that ATNA continued its distinct lack of support for rural areas and rural nurses into the 1950s. Attempts from student nurse associations to be local representatives for rural areas were denied and ATNA remained with metropolitan matrons and senior nurses in power. Even the Queensland branch of ATNA did not believe that it was important to develop strong representative links with nurses in country areas (Strachan, 1996). Although Strachan (1996) details ATNA into the 1950s as above, by 1924 the Australian Nursing Federation was formed as a national organisation with an aim to unite all nursing organisations. This organisation remains as a pivotal nursing organisation in current times under the new title gained in 2103- the Australian Nursing and

Midwifery Federation (ANMFVIC, 2024). Their position towards rural and remote nurses is beyond the discussion of this thesis.

Even on a global scale, rural and remote nurses appear to remain unheard (Stewart et al., 2020). Professional isolation also remains an issue, along with access to technology and professional development. At the same time, in Australia alone, the role of rural and remote nurses has changed significantly, with nurses now providing care that would be conducted by specialists in metropolitan hospitals. In 2005, the National Rural Health Alliance stated that the Australian Government needed to provide national leadership, education and training activities for rural and remote nurses. In 2023, the *National Rural and Remote Nursing Generalist Framework* (Australian Government b, 2023) was released, foregrounding such factors as the continued reduction in clinical and physical resources, isolation and the broad emergency and health needs of rural and remote communities. The retention and recruitment of nurses to rural and remote areas was identified as an issue. However, recruitment of nurses was not an issue for Charters Towers Hospital insofar as they utilised the staff that they had and promoted nurses through the nursing ranks as positions opened instead of applying for outside assistance.

7.4 Burgeoning Aspects of Safety and Quality

This study showed that there was a growing awareness of the need for safety and quality in healthcare within the North Kennedy region. This focus ranged from the need to ensure safe work environments for staff to concern for infection control. Preventing the spread of infection was particularly relevant at a time without antibiotic support.

Findings from the study show that the design of hospital buildings in the North Kennedy region followed Nightingale's pavilion planning concept, with large windows providing natural light and a flow of air to prevent miasmas. Infectious wards were to be placed at the top levels of hospital buildings or in separate buildings within the hospital grounds, as occurred in both the

Townsville and Charters Towers hospitals. Nightingale's environmental theory was developed across her lifetime and emerged from her belief that maintaining pure air, water, cleanliness and light would result in a healthy environment and prevent the transmission of contagions (Gilbert, 2020). Modern hospital design draws, conversely, on both cultural and medical factors. Although pavilion planning aimed to prevent infection, so too do private rooms that isolate patients from each other (Theodore, 2016).

Another finding from the study concerned the safety of workplaces. For instance, Charters Towers' medical professionals, such as Dr O'Neill, attempted to provide safe workplaces for nurses by asking for telephone connections between wards that were separate from the main hospital building. This was to avoid nurses needing to leave the wards unattended and travel between buildings. Other initiatives to improve workplace safety undertaken by Charters Towers Hospital were equipment upgrades to improve the ease of patient transfers.

Safety remains an issue for rural and remote nurses. What makes this issue even more important is that support for staff wellbeing from management teams can be limited and sporadic (Whiteing et al., 2021). Concerning threats to personal safety, one Queensland nurse stated, for instance, that 'we address this at every single staff meeting; our personal security, it goes on and on' (Whiteing et al., 2021, pp. 1513–1514). Rural and remote nurses remain without adequate education resources and staff ratios, appropriately skilled staff and health department support. Although organisations such as CRANAplus and the National Rural Health Alliance are active in supporting rural and remote healthcare and health professions, including nurses, tragedies such as the death of a remote area nurse, Gayle Woodford (Lim & Martin, 2022), still occur. Such tragedies highlight the importance of engaging with rural and remote staff to understand the plight of nurses and the tyranny of distance in rural and remote areas.

7.5 Chapter Summary

This chapter has discussed how improvements in safety and quality of care began to emerge in the hospitals of the North Kennedy region. Hospital design moved to prevent infection through pavilion planning and construction of infectious wards away from the main hospital site. Considerations for safety when nurses were required to move between separate buildings saw the need for the implementation of telecommunications. Unfortunately, safety remains an issue for rural and remote nurses despite the availability of new technologies. The advent of modern hospitals with air conditioning, antibiotics and infection control policies have decreased the need for pavilion planning, allowing for rooms that hold only four patients. The following chapter concludes the thesis, detailing the strengths and limitations of the study and providing recommendations for future research.

Chapter 8: Conclusion

This thesis has aimed to further understanding of the factors that have shaped the development of formalised nursing in the North Kennedy region. As with all historical research, documentary evidence is inherently incomplete: not all sources were available and few provided a full history of nursing in the North Kennedy region. However, the sources that could be identified have provided context for and insights into what was, in the period in focus, remote area nursing. This final chapter will provide a study overview, summarise the themes identified in the data sources, outline the strengths and limitations of the study and, finally, outline and discuss recommendations arising from the study.

8.1 Study Overview

This study has described the history of nursing in the North Kennedy region between 1910 and 1925, giving a voice to past nurses and foregrounding their work and achievements. The purpose of this was to address the following research question: 'What factors shaped the development of formalised nursing in the North Kennedy region from 1910 to 1925?'. Given the lack of understanding of the origins of nursing in the North Kennedy region and my desire to uncover the development of nursing, the years 1910 to 1925 were chosen because they encompassed a range of significant events that affected the nursing profession, both internationally and domestically. These included WWI, nurse registration and formalised nursing training.

As was outlined in Chapter 2, historical research was chosen as the methodology to guide this research. Primary and secondary sources were analysed to gain valuable information about nurses and the nursing role within the North Kennedy region. Shafer's (1974) four-stage process to historical research guided me through this project. This staged process was chosen because

I found Shafer's (1974) framework manageable and easy to understand as a novice researcher, and was particularly relevant to my research question. Table 8.1 summarises the aim, question, design and findings of this study.

Table 8.1: Study Summary

Criteria	Strategies
Research aim	This research aimed to describe the history of nursing in the North Kennedy region and, through this history, give a voice to past nurses and their work
Research question	What factors shaped the development of formalised nursing in the North Kennedy region between 1910 and 1925?
Research design	Historical research using Shafer's (1974) four-stage process: • understanding sources • searching and collating sources • source criticism and analysis • dissemination
Findings	Three main themes were identified: • Contexts of care • Upskilling education and instilling professionalism • Burgeoning aspects of safety and quality

The findings identified from the sources used in this study were outlined in Chapters 4, 5 and 6. These chapters described the beginnings of improvements to work health and safety, how a nursing workforce was developed and organised for practice within newly established hospital settings, the education curriculum for nursing students and how individual North Kennedy women identified themselves as nurses. These themes and pertinent examples are summarised in Table 8.2. Table 8.3 demonstrates how rigour was maintained throughout the study.

Table 8.2: Themes from the Findings

Theme	Examples from each theme
Contexts of care	• Public and private hospitals • Prison • Orphanage • Plantations • Reception House • Military Nursing
Upskilling education and instilling professionalism	• 1912 state registration • Examinations • Curriculum of learning • Nightingale education framework • ATNA • Uniforms • Unions • Professional relationships • Nursing titles
Burgeoning aspects of safety and quality	• Telephones in wards • Infectious diseases • Medication administration • Lifting and transferring patients

Table 8.3: How Rigour was Maintained within the Study (Using Lincoln and Guba's 2001 Framework)

Element of rigour	Description of attainability
Credibility	Triangulation: using other sources such as newspapers and cemetery records to confirm/deny information. Iterative peer review: seeking and responding to study advisors' guidance and feedback throughout the study.
Transferability	I provided a rich description of the research which can help determine whether results can be transferred into other settings.
Dependability	There was a distinct demonstration of the methods and methodology used within the research.
Confirmability	Use of reflexive journals by the researcher.

The following sections describe the strengths, limitations and recommendations that have been identified through conducting this research.

8.2 Strengths

Identifying the strengths of a study can have two purposes. First, describing the study's strengths can demonstrate to the reader the validity of the study. Second, the quality of the study can be determined in comparison with other studies (Vieira et al., 2019). Some of the strengths of this study are outlined below.

8.2.1 Increasing digitisation of sources and artefacts

With the digitisation of many primary sources and artefacts, I was able to collate and analyse sources to which I may not previously have had access. This access enabled a greater understanding of the healthcare context before the study time period. This, with the results of nurses' examinations, provided important perspectives and more nuanced understandings, leading to a more complete and robust story of the development of nursing during the period in focus. A review of healthcare prior to the study period provided insight into what was considered acceptable healthcare, allowing comparisons to be made to determine if improvements in healthcare had occurred within the study period. Digitisation of historical newspapers was advantageous as I could view the actual pages that I required. As time for a researcher is a valuable commodity, having direct access to the exact page allowed further time for other important research activities, such as data analysis. Online viewing provided me with the ability to locate historical newspapers that may have not been available through local libraries or historical associations.

8.2.2 Utilisation of frameworks to effectively guide this study.

There were two frameworks utilised within this thesis to provide understanding and rigour to the work. These were Wood's (2011) framework for appraising historical sources and Shafer's (1974) framework outlining the stages of historical research. These frameworks strengthened the study in two ways. First, both frameworks provided me, a novice researcher, with enhanced

knowledge and understanding regarding the process of conducting historical research. Without these well-articulated frameworks, I could not have accurately demonstrated the process of working with historical sources in a way that ensures rigour in historical research. Both frameworks were expressed in a manner that allowed me to readily understand and apply core concepts and steps.

8.2.3 Acquisition of new knowledge of nursing in the North Kennedy region

A defining strength of this thesis was the discovery of new information concerning nurses in the North Kennedy region. Much of this new knowledge can be attributed to the descendents of the nurses of the North Kennedy region who supplied photographs and written memories of these nurses and their time at the hospitals across the region. Without this knowledge, this thesis would not have been able to provide information in such depth.

8.3 Limitations

Limitations identify weaknesses within the research that are uncontrolled and may influence the outcome of the study. By ensuring that any potential limitations are identified and discussed, the researcher provides transparency and fulfils ethical requirements (Ross & Zaidi, 2019). Limitations identified from the research are discussed below.

8.3.1 Limited availability of primary sources

A key limitation of the study concerned finding suitable primary sources. Although some family members were able to provide pertinent photographs and stories, not having access to nurses' notes from hospitals resulted in a lack of information regarding the exact role and work of these nurses in the region. For example, despite it being known that nurses used a 'concrete cesspit to dispose of body waste', no further information about frequency of use and whether patients had access to bed pans could be found.

The amount of historical data available from hospitals in the North Kennedy region was also minimal. Although the Townsville University Hospital Library was able to provide access to historical photographs, there was no written documentation available to contextualise these images. There was also a paucity of diaries and letters from nurses. This is not an uncommon issue in historical studies. Lipscombe & Daybell (2022) found, for instance, that few documents from women survive, with letters either being untraceable or still to be discovered, causing a gap in the historical field of letter writing. Lipsombe & Daybell (2022) also found that people within the upper echelons of society were more likely to communicate via letter than those in the lower classes. This limitation did not affect the study in a major way. Although the analysis of more primary sources would have strengthened the research, data exploring the nurses and their feelings were still able to be gained through available secondary sources.

8.3.2 Limited publication of suitable secondary sources

There were only two historical texts about the Townsville Hospital available to view and no historical texts were found for Charters Towers, Ingham or Ayr hospitals. The information gained for those hospitals was, therefore, sourced primarily through historical newspapers. Although numerous books, research articles and grey literature have been written about hospital histories in other states of Australia, and capital cities such as Brisbane (Chynoweth, 2020; Gregory, 2010; Madsen, 2007), only some of these sources mentioned the North Kennedy region. Further, such mentions tended to simply name hospitals in the region or were limited to a few sentences. This paucity of records calls for recognition of these hospitals and nurses as part of the establishment of healthcare within the region.

8.3.3 Limited availability of institutional sources and artefacts

Although this study identified a multitude of quite diverse clinical environments in which nurses of the North Kennedy region were employed, I mainly focused upon nursing practice

within hospital settings. The lack of discussion of other environments was the result of a lack of information available about these other environments between 1910 and 1925. Despite there being some information about nursing within the orphanage and the reception centre, both located in Townsville, discussion about the roles and responsibilities of nurses working at these establishments was limited. The partial information available about these contexts of nursing in the North Kennedy region has, therefore, resulted in relatively minimal discussion about them.

8.3.4 'Invisibility' of Aboriginal and Torres Strait Islander nurses

Despite all effort being made to acknowledge the nursing work that Indigenous women were known to perform in North Queensland, there were no identifiable Indigenous nurses in the North Kennedy region. Telephone consultation in 2022 with Indigenous nurse academic, Professor Odette Best, identified that there was limited knowledge of sources concerning Indigenous nurses in the North Kennedy region. Although photographs were taken of nurses at Charters Towers Hospital who were of cultures other than Caucasian, it was not possible to clearly identify them as being Indigenous. Research by Professor Best (2020) also identified that an Indigenous person could deny their Aboriginality when becoming a nurse and that this may account for the lack of Indigenous identification.

8.3.5 Potential for researcher bias

Bias may occur within studies because of assumptions made by researchers when conducting research, often unintentionally (Mackieson et al., 2019). In historical research with few primary sources, researchers may become complacent in their consideration of secondary sources, choosing those that they either find immediately or those that readily resonate with their world view. This complacency can decrease the quality of the analysis and findings provided (Moller & Skaaning, 2021). In an attempt to eliminate bias from my research, I undertook several

processes. These included writing a reflexive journal in which I could document my feelings and thoughts about the research process, including my responses to the sources I was uncovering. I also regularly discussed elements of my research with my supervisors and had reviews undertaken of my work and sources I wanted to utilise. These processes helped ensure a lack of bias in my selection of sources and in my interpretations, analysis and findings. Finally, in choosing secondary sources, I ensured that I reviewed all sources available, even if I felt they would not be beneficial to my research. Through consulting all sources, I was able to ensure that no information was missed and some of these sources provided additional elements that I would not have considered otherwise.

8.3.6 Imposed institutional limitations

Limitations applied by some organisations also affected the viewing of important materials. Some of these limitations were not foreseeable, such as catastrophic weather events causing the closure of archives or libraries where the content was archived. Another unplanned institutional limitation was a lack of response from organisations when archival requests were submitted. In this instance, although some institutions did not respond at all, others indicated that their department would not have anything to satisfy my request. Interestingly, visiting one institution in Brisbane regardless of receiving such a response produced valuable documentation that even the institution was unaware it possessed.

8.3.7 Defective digitisation of sources

Although there are strengths in having digitised sources, there were also limitations. When sources are digitised, they may be transcribed by hand. In some instances, for various reasons, the transcription either does not match the source or words are missing because of unintelligible words in the document. The scanning of historical documents for archives such as Trove, for example, can cause the darkening of pages or individual words or phrases. Although other

websites, such as Ancestry.com, may have digitised files on individuals, some family sites are private and, therefore, despite being digitised, materials are not available to view.

8.4 Recommendations

Derived from a research project's findings, a project's recommendations can identify other areas that may require further study (Connelly, 2023). I have identified several recommendations as a result of conducting this study. These are stated below.

8.4.1 Historical research in nursing

Although professional nursing organisations promote nursing through International Nurses Day and nursing conferences, the history of nursing is not considered important by the vast majority of nurses. To ensure that the discipline's past is not forgotten, historical nursing research needs to be legitimised as an important and reputable research focus within both post-graduate and undergraduate nursing curricula. The past shapes the present and helps inform the future. More specifically, it is by understanding the past—from evaluating the experiences, emotions and behaviours of previous nurses—that nurses can build a future.

8.4.2 Nursing sources

Although it is not possible to reconstruct nursing documentation and personal diaries and letters already lost, we can control the future of existing sources. Society needs to value what nurses do and promote the archiving of sources that depict the rapidly evolving role of the nurse in contemporary society. Professional organisations should be encouraged to consider the construction of nursing history for the future. Commemorating past nurses' nursing careers can provide insight for future populations, helping them understand the roles nurses had in the past in building the nursing profession to what it is today.

8.4.3 Indigenous nurse research

Although Indigenous nurses in the North Kennedy region were unable to be clearly identified in the study, there is value in promoting this research subject. The Aboriginal and Torres Strait Islander culture pre-dates Australian culture and, despite being viewed as an unwanted part of the new colony, their bush medicine knowledge would have been beneficial to new settlers, especially in rural and remote areas. Indigenous nurse history would provide added depth to cultural safety by providing not just an understanding of Indigenous nursing and the journey of Indigenous nurses through Australian healthcare but insights into Indigenous healthcare.

8.5 Chapter Summary

This chapter has summarised my thesis. After describing my research aim, question, design and findings, the themes from my data collection were formulated into a table identifying the related examples that were discussed in each theme chapter. As with all research, there are strengths and weaknesses. Three strengths were noted in this research, namely the increasing digitisation of sources and artefacts, the utilisation of frameworks to effectively guide this study and the acquisition of new knowledge concerning nursing in the region during this period. There were a number of limitations associated with this study, including the limited availability of primary sources, the low number of suitable secondary sources and, at times, the restricted access to and availability of institutional sources and artefacts. I have also noted the potential for researcher bias, the defective digitisation of some sources and the 'invisibility' of Aboriginal and Torres Strait Islander nurses. Recommendations were stated regarding some of these limitations, including the needs for greater awareness of historical research in nursing, increased preservation of information about contemporary nursing and increased research about Indigenous nurses and nursing practice.

Although no direct applications can be made from these findings to current nursing practice, acknowledgements can and must be made. Despite information being limited, what has been identified provides a story of the region, its nurses and how they worked in an area that was a pioneering gateway to the north. These nurses showed the adaptability of being a rural or remote nurse, working with the knowledge and materials that they had and at a time when there were no antibiotics or flying doctors and metropolitan medical support was a world away.

The ability to learn from history is not something that should be taken for granted. There is more to history than learning from mistakes to ensure the future. It is also about learning from the past to understand the present. Why is the profession of nursing where it is today, how did we get here and what can we take from each moment given to us? These are questions that nurse historians must answer as they endeavour to explore and describe the kaleidoscope that is nursing's fascinating past.

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Appendices

Appendix A: Ethics Application

Appendix B: Letter to Families

Sandra Dash

Lecturer

Nursing and Midwifery
Townsville Qld 4811

Telephone:

International:

11/7/2022

Dear ……..,

My name is Sandra Dash and I am a Nursing and Midwifery lecturer at James Cook University, Townsville. Currently I am studying a Master of Philosophy in which I am exploring the history of nursing in the North Kennedy region between 1910 and 1925. This area covers Townsville, Charters Towers, Ingham, Ayr and Home Hill. Through my research of the local hospitals, I have found your ancestor's name as a nurse that worked within my time period in one of my study areas. It is my goal to tell the story of the nurses from these areas in regard to nursing at that time and how nursing progressed from an untrained, female-only vocation to an educated, inclusive, professional career.

With your permission I would like to use any artefacts from your ancestor to add depth to my research and present your ancestor's story. To aid in my story construction, I am also hoping to locate any diaries or letters written by nurses that may detail their experiences as a nurse. Would it be possible that your ancestor had any communication about her career as a nurse that you are willing to share? All acknowledgement will be given to your family for any help provided in gathering and using such material.

Thank you for your time.

Yours Sincerely

Sandra Dash