Understanding the Complexities of Recruitment and Retention of Allied Health Professionals in Rural Health Settings

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"What is it we are questing for?

It is the fulfilment of that which is potential in each of us.

Questing for it is not an ego trip; it is an adventure to bring into fulfilment your gift to the world, which is yourself."

(Joseph Campbell, 2003, p. 126)

ABSTRACT

The health workforce is stretched to its limits in Aotearoa[1] and abroad. Rural and remote communities, which are often the first to be impacted by workforce shortages, are struggling to recruit and retain staff. Targeted investment in academic, political, and financial strategies have aimed to increase the numbers of doctors and nurses entering the workforce, and to support them to stay. Comparatively little has been done for the professions that make up the umbrella group, Allied Health Scientific and Technical. This doctoral research explored ways to support recruitment and retention in rural communities in these workforces by answering the following questions: What do Allied Health Professionals (AHPs) identify as the attractive aspects of living and working rurally? How could this inform how we recruit and retain AHPs in rural and remote settings?

Reviews of the literature explored what was known about these workforce groups and how they chose rural practice. The reviews also sought to understand the strategies utilised by other health professions and to what effect. The literature review was followed by an Interpretive Descriptive study, using qualitative interviews to explore the perspectives and experiences of 18 allied health participants with rural and remote health experience. Utilising Reflexive Thematic Analysis, the interview transcripts were analysed for meaning in relation to the research questions.

The research identified four significant concepts which are critical to the experiences of AHPs. The first theme is **Sense of Connection and Belonging** which captures the ways that AHPs feel connected to their rural work and community setting. The second theme is **Safe and Supported Practice** and focuses on those components which enable AHPs to do their best work. The third theme is **Creating Roles People Want to Come For** which looks at the various elements that make roles attractive. These were interwoven with a fourth concept of **Fit**, a sense of being in the right space, place, and time.

[1] *Aotearoa* is the *Māori* name for New Zealand. It is commonly translated as 'the land of the long white cloud' (Macmillan Education, 2009; Moorfield, 2023)

In addition to identifying these themes, a collection of practical recommendations has been distinguished for those entities most able to change practice in ways that will enhance the experiences of rural AHPs and, in turn, increase the efficacy of recruitment and retention in rural and/or remote health settings. These entities are people leaders, organisations, recruiters, tertiary education providers, registering bodies and professional associations.

The findings and recommendations, which detail meaningful opportunities to enhance the relationships and resources of AHPs in rural and/or remote health settings, offer a significant contribution to knowledge. The research challenges the existing structures in health systems which privilege medicine and nursing, from resource allocation to scopes of practice, as the system that affects decision-making and empowerment. It has implications for those in leadership, recruitment, education, profession advocacy and governance. It shows that, given the chance, we can build an effective and stable AHP workforce to serve rural and remote communities throughout Aotearoa for years to come.

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KUPUTAKA | GLOSSARY

Acronym	What it stands for
AHA	Allied Health Assistant (Kaiāwhina)
AHP(s)	Allied Health professional(s)
AHST	Allied Health, Scientific & Technical
AUT	Auckland University of Technology
DHB(s)	District Health Board(s)
DHSc	Doctor of Health Science
EN	Enrolled Nurse
FENZ	Fire and Emergency New Zealand
GCH	Geographical Classification for Health
GNARTN	Greater Northern Australia Regional Training Network
HCA	Health Care Assistant (usually taking delegation from nurses)
IT	Information Technology
MECA	Multi-Employer Collective Agreement
MoH	Manatū Hauora | Ministry of Health
NGO(s)	Non-government organisation(s)
NP	Nurse Practitioner
NZ	New Zealand
OE	Overseas Experience
RN	Registered Nurse
RTA	Reflexive Thematic Analysis
SARRAH	Services for Australian Rural and Remote Allied Health
Stats NZ	Statistics New Zealand | Tatauranga Aotearoa
UK	United Kingdom
WC	West Coast (of Aotearoa New Zealand)
WHO	World Health Organization

Te Reo Māori kupu (word)	**English translation** (Ryan, 2012)
Aotearoa	New Zealand
Kaiāwhina	Allied Health Assistant
kai	food
kaimoana	seafood, shellfish
kaumātua	elder, old man
kaupapa	matter for discussion, purpose, topic, issue, policy
kete	basket, kit, bag
kotahitanga	unity of purpose
kuia	matron, old lady
Mana	integrity, standing, prestige
manaakitanga	hospitality, kindness, generosity, support
motu	country, land
Pae Ora	Healthy Futures
pākehā	white person, non-Māori, European
rangatahi	young person/people
tuakana	older person/sibling
teina	younger person/sibling
Te Tiriti (o Waitangi)	The Treaty of Waitangi
whānau	extended family, delivery, to give birth, genus
whenua	land

ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or institution of higher learning.

Jane Elizabeth GEORGE

CANDIDATE CONTRIBUTIONS TO CO-AUTHORED PAPERS

George, J. E., Larmer, P. J., & Kayes, N. (2019). Learning From Those Who Have Gone Before: Strengthening the rural Allied Health workforce in Aotearoa New Zealand. *Rural and Remote Health*, *19*(3), 1-9. https://doi.org/10.22605/RRH4878	George 80% Larmer 10% Kayes 10%

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To my colleagues, and the wider Allied Health, Scientific and Technical community at Te Tai o Poutini | West Coast. Thank you for trusting me with this important kaupapa[2] and allowing me the time and space to bring it to fruition.

[2] *Kaupapa* is used to describe strategy, purpose, the issue, matter or topic for discussion (Ryan, 2012)

ETHICS APPROVAL

Approval for the qualitative portion of this research was obtained via the Auckland University of Technology Ethics Committee. This was obtained on 30 January 2019; reference number 18/424 (Appendix E: Ethics Approval).

1 INTRODUCTION | BEGINNINGS

Worldwide, health systems are under considerable stress. The impacts of the coronavirus pandemic, expectations of communities to be able to access the latest and greatest technologies and treatments, and growing gaps between salaries and cost of living are all weighing heavily on health professionals. These pressures have called into question for some the value of a health career and workforce numbers are dropping, causing significant recruitment issues. Aotearoa New Zealand (Aotearoa) is not immune and appears to be fighting a rising tide of health care workers departing for better conditions abroad. For rural and remote communities, these pressures are exacerbating the long-standing challenges to recruit and retain health professionals.

Allied health professionals (AHPs) are clinicians, scientists, therapists, and technicians; a cohort of over 40 professions in Aotearoa (Ministry of Health, 2021). Each discipline has their own unique and specialised expertise in preventing, diagnosing and treating a range of conditions and illnesses (Mak et al., 2019). These health professionals are usually tertiary qualified and use their knowledge and skills to restore and/or maintain the optimal psychological, cognitive, physical, sensory and social function of patients (Bradd et al., 2018). Within the health setting, these professionals provide key inputs at all levels and for all services, working alongside midwives, nurses, dentists, and doctors. In rural and remote health settings, recruitment and retention challenges have significantly restricted rural dwellers' access to local, timely intervention. This research aimed to explore how to address these challenges drawing from the perspectives of AHPs working rurally in Aotearoa regarding what is working, and what employers, managers, recruiters, and others can do better to improve recruitment and retention for rural and remote health systems in Aotearoa.

Framed by an Interpretive Descriptive (Thorne, 2016) methodology, and enriched by Reflexive Thematic Analysis (Braun & Clarke, 2022), this research was undertaken as a component of the Doctor of Health Science (DHSc) programme at Auckland University of Technology (AUT). More importantly, it was undertaken to understand how health systems and leaders can enhance

and improve their practice to better meet the needs of AHPs who choose to work in rural and remote health settings.

As an allied health leader in a rural community, I was no stranger to the challenges of recruitment and retention at the start of this research in 2017. The DHSc structure, designed to support health leaders to leverage the doctoral journey to influence meaningful change to practice, provided a supportive structure to undertake this inquiry. This focus—to contribute to shaping best-practice recruitment and retention strategies for rural and remote communities—adds immense value to the experience of undertaking doctoral research.

1.1 Aims and Objectives of Research

The primary aim of this doctoral work was to explore the experiences and perspectives of AHPs living and working rurally to (a) understand the attractive aspects of living and working rurally, and from this to (b) inform recruitment and retention practices for rural and remote health settings.

The challenges facing rural health providers in relation to the recruitment and retention of clinical staff have been well documented in Aotearoa and abroad (Buykx et al., 2010; Carson et al., 2015; Chisholm et al., 2011; Dolea et al., 2010; Dunbabin & Levitt, 2003; Farmer & Sivasubramaniam, 2004; Garces-Ozanne et al., 2011; McGrail et al., 2017; Russell, McGrail, et al., 2012; Wakerman et al., 2008; World Health Organization, 2010). A range of hypotheses have been presented regarding the contributing factors; some specific to individual professions and others applicable across the wider health workforce (Atmore, 2017; Bond et al., 2013; Brown et al., 2010; Campbell et al., 2013). As this problem shows no sign of abating across allied health professions (Cosgrave, 2020a), research focus has shifted considerably. Initially, research took a predominantly quantitative approach, with a focus on systematically reviewing policy documents and academic literature, or through secondary analysis of existing surveys (Couch et al., 2021; O'Toole et al., 2008; Walker et al., 2022). This was useful to understand the size of the problem. Yet these approaches do not provide insights into why the problem exists nor specifically identify the various perspectives of those involved in rural healthcare. This has

led to the emergence of more qualitative research aiming to gather those perspectives (Beeler et al., 2022; Cosgrave, 2020a; Jessup et al., 2021; Kumar et al., 2020).

When employers have not objectively known what is contributing to the challenges in recruitment and retention of allied health professionals, they have invested in strategies informed by anecdotal "evidence", individual viewpoints or data developed in the context of the nursing or medical workforce. Because of the ad hoc nature of those strategies, there is no tangible way to measure if these approaches are making a positive difference to AHP workforce stability or growth. Nor are we able to determine if they are perceived to have an impact by AHPs, health leaders and communities involved in rural healthcare.

Many countries continue to predominantly focus on raising the number and practice locations of doctors and nurses, with mixed results for rural and remote areas despite a range of investment and interventions (Bayley et al., 2011; Crettenden et al., 2014). Little investment appears to be focused on the value of growing the various allied health professions or indeed understanding the breadth of their scopes of practice. With higher levels of inequity in rural and remote areas (Heady, 2002), it is essential that health systems, policymakers and employers better understand the role of AHPs and what they can offer to meaningfully engage with the challenges and opportunities rural and remote health service delivery presents (Greater Northern Australia Regional Training Network, 2013).

In Aotearoa, the medical and nursing workforces have long recognised that rural and remote health service delivery offers challenges and opportunities (Atmore, 2015; Atmore et al., 2023; Bell et al., 2018; Doolan-Noble et al., 2021; Nixon, 2017; Ross, 1999). Each profession has prioritised understanding how to respond to these challenges and used this knowledge to take advantage of the opportunities available in rural settings (Blattner et al., 2019; Ross, 2017). Working in partnership with professional associations, unions, health boards and training institutions, medicine and nursing have developed pathways and programmes which aim to strengthen their workforces within rural and remote settings (Haggerty et al., 2010; McPherson, 2017). Engagement with Manatū Hauora | Ministry of Health and other governance systems,

lobbying and influencing legislative processes and working in partnership with internationally renowned think tanks, such as The King's Fund, have also given weight to their efforts (Charles, 2017).

In Australia, medical, nursing and allied health professions have worked to influence and develop a robust network of health professionals who can reach out across the vast areas to rural and remote communities requiring health services (McGirr et al., 2019). Understanding the activities and impact of these groups provides a lens for developing the allied health rural workforce in Aotearoa, in ways that are flexible enough to respond to the unique needs of each rural area.

1.2 Introducing Rural Communities

Members of rural communities feel like they have always needed to be their own champions to gain access to a version of healthcare designed specifically for their needs—that is, locally connected and equitable with urban healthcare provision (Barnett & Barnett, 2003; Eyre & Gauld, 2003; Petrucka & Wagner, 2003). Some of the ways they have attempted to influence local health provision is by lobbying, fundraising, and establishing trust hospitals, as well as supporting young people to leave their rural communities to access education and training to become health professionals. However, as the Aotearoa health system has undergone numerous cycles of health reform, many rural communities feel that they have lost control of the mechanisms they had built or relied on to determine what local healthcare is (Blattner et al., 2022). For example, pivotal relationships with traditional decision-makers, fundraising and the repurposing of local assets are all under review. With another health system reform in process, surety of care closer to home which matches community needs seems to be even more vulnerable. Despite what appears to be the best intentions for rural communities, there are unintended consequences already apparent for patients travelling to care, and not being able to access traditional funding such as National Travel Assistance (a scheme that supports those eligible with travel and accommodation costs, based on health interventions requiring considerable travel or high frequency of specialist health appointments) (Te Whatu Ora, 2023).

Added to this is the sense of loss many rural dwellers experience—and to a lesser degree their urban counterparts—with respect to consistency of relationship with their primary care clinician; usually a General Practitioner (GP). This has led to an emphasis on growing the GP workforce and doing more to attract GPs to rural areas which successive governments have attempted to support. To a lesser degree, the same can be said of the response to the nursing and midwifery shortages, with programmes like the New Entry to Practice (NETP) (Technical Advisory Services, 2017), satellite training programmes supporting people to do more of their training in their own communities (New Zealand College of Midwives, 2022) and support for the growing Nurse Practitioner workforce. By comparison, little appears to have been developed to promote and grow the allied health scientific and technical professions or to support rural health systems to engage with this wide array of professions, or to strengthen their presence in rural communities and therefore their impact on rural healthcare.

1.3 INTRODUCING AHPS

As has already been touched on, "Allied Health" or "AHPs" are shorthand titles given to a broad range of professional groups made up of the allied health, scientific and technical (AHST) workforces. In Aotearoa, there are more than 40 professional groups (Ministry of Health, 2021) included within this broad category, some regulated by the Health Practitioners Competence Assurance Act (2003), regulated by the Social Workers Registration Act (2003) or self-regulated. Allied health professionals work in a variety of health, justice, education and social service settings and are often autonomous practitioners; they do not require oversight, direction or delegation from another profession such as doctors (Ministry of Health, 2021). Each discipline has their own unique and specialised expertise in preventing, diagnosing and treating a range of conditions and illnesses (Mak et al., 2019). These health professionals are usually tertiary qualified and use their knowledge and skills to restore and/or maintain the optimal psychological, cognitive, physical, sensory and social functioning of patients (Bradd et al., 2018). The most commonly available professions include Dietitians and Nutritionists, Laboratory Scientists, Occupational Therapists, Pharmacists, Physiotherapists, Psychologists, Medical Imaging Technicians and Social Workers. Less well recognised as professions of the

AHST collective include Anaesthetic Technicians, Orthoptists & Optometrists, Oral Health Therapists (dental "nurses") and Naturopaths (Appendix A: Workforce Numbers by Professions).

1.4 DEFINING RURALITY

In 2017, at the commencement of this research journey, Aotearoa lacked a robust tool for defining rurality. Use of Statistics New Zealand (Stats NZ) data had been the predominant (if rather imperfect) tool, offering classifications ranging from (1) highly rural/remote, (2) rural areas with low / (3) moderate / (4) high urban influence, to (5) independent/satellite and (6) major urban groupings (Fearnley et al., 2016, p. 78). The first three were collectively assigned as rural, with the latter three as urban. However, many people living in rural areas of moderate and high urban influence, work in neighbouring urban centres and therefore use urban services. Further, areas that meet the geographical proximity or population volume for "rural" may also have services locally (such as a local base hospital) that reduce the impact rurality often has on health.

To ensure that participants had the relevant knowledge for this study, it was recognised that participants would need to disclose where they lived and where they worked so the Stats NZ classifications could be applied. This would require a high level of trust between potential participants and the research team at the first interaction. This posed a potential recruitment barrier related to them disclosing their workplace, by way of identifying their rural community, when their managers may well be known to the research team. As such, for the purpose of this research, it was decided that participants would self-determine if they met the criteria for having experience in a rural and/or remote health role. In the absence of formal classification data being collected at screening, descriptive data were captured which provided insights into key characteristics of the rural/remote contexts in which participants worked.

In 2021, a new geographic classification for health (GCH) system was developed which offers a highly validated alternative for determining rurality in Aotearoa (Whitehead et al., 2021). It is an easy to use, web-based algorithm (Whitehead, 2022). The strengths and limitations of using

self-identification as a means of identifying AHPs who are working or have worked in rural and remote settings will be discussed further in Chapter Nine.

1.5 How I Came to Undertake this Research

I was born in a rural community and had both sets of grandparents and numerous extended family members who lived in rural settings. But I did not work rurally until I joined the District Health Board's (DHB) leadership team on Te Tai o Poutini | West Coast in 2016. Until this time, my career had been varied. I had worked in Aotearoa; in retail, information technology (IT), recruitment and social work roles in statutory and non-government organisations (NGOs) in the health and mental health sectors. I had also worked in the United Kingdom (UK) as a locum social worker in health, mental health, and social services across Greater London.

At the West Coast DHB (WCDHB) I was excited to lead a diverse team. I knew we could be well placed to contribute to rural health services, and great patient outcomes. The team members were enthusiastic, and their leaders were dedicated. Yet each team or professional group was made up of just a small number of staff; sometimes just one or two to cover all age ranges, clinical areas, service settings and communities spread across more than 23,000 km^2. Our AHPs were understaffed, under-resourced and weighed down by the sense of being an afterthought.

This sense of afterthought was exemplified by newly funded roles that were being created around the motu[3] for AHPs but were being redirected on the coast to become nursing roles, often on specialist nursing pathways. I was horrified because I believed that it was the advanced practice roles that attracted AHPs to new settings, as mine had done for me. Yet, when I challenged the organisation on these decisions, I was presented with a narrative of long-standing challenges to recruit and retain AHPs. When I tried to advocate for keeping the roles as AHP roles I was asked, "How could we offer a specialist role such as this to an AHP, when we can't even fill the front-line roles?"

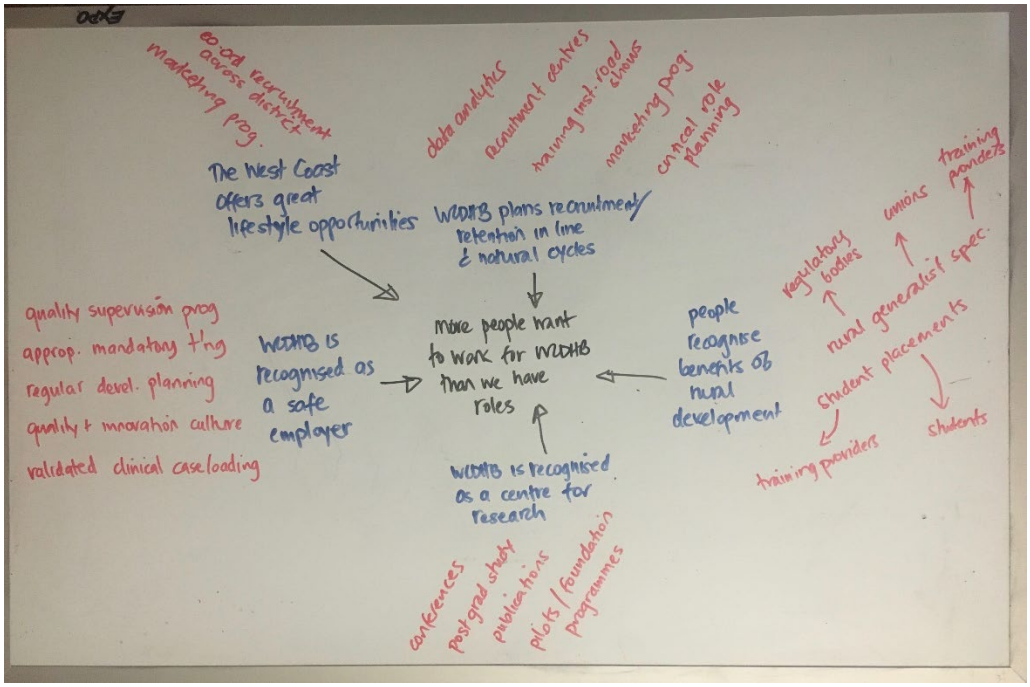
[3] *Motu* translates directly as island, and also represents country when speaking about *Aotearoa* (Ryan, 2012)

When I dug into this with my AHP leaders I felt their sense of resignation. They conveyed an impression that AHPs were only valued for their role in “clearing beds”. They believed that trying to educate organisational leaders or our nursing or medical colleagues into the full scope of what an AHP could do would fall on deaf ears. With the constant churn of AHP staff, they felt they only had time to make sure that basic services were covered, that existing staff were practising safely, and were feeling cared for. It was all very well aspiring for AHPs to take a lead in delivering preventative and restorative community-based services, or specialist clinical practice. But without a stable core of staff, there simply was not the energy or the confidence that we could pull it off on the coast.

So, I began to explore what I thought it would take to attract and retain more AHPs; both new graduates and those with experience. I started with the aspiration that “more people want to work for the WCDHB than we have roles” at the centre and built a mind map (see **Figure 1** below).

Figure 1.

Mind Map



As the map grew and I talked about it with colleagues, I noticed that most people thought it contained features that would make the coast the place to work. However, they also thought that we did not have the time or the people to deliver on those aspirations. The sense that we needed people on the "front-line" remained pervasive. By "front-line", people were mostly referring to having AHPs on the wards helping to discharge patients, or to pull them out of the Emergency Department to prevent an admission. There was little time or resource to provide community care, and preventative care was not even an aspiration for most clinical leaders. If I could provide them with practical, immediate strategies to recruit and then retain their staff, then great. For many, they had been keeping their departments running on the smell of the proverbial oily rag[4] for years. If they stopped running, for even a moment to consider an alternative, they felt the real risk that they would lose whatever status or respect their team had in the eyes of the wider hospital team.

That perspective was felt by our front-line staff as well. Despite being highly skilled and qualified health professionals, registered to practice in a myriad of settings and across patients' lifespan and health needs, they told me they felt that they were underfunded, underappreciated, and treated with far less respect than their nursing or medical colleagues. Because they were so often trying to support more patients than they had time for, their ability to set career goals beyond their everyday work was restricted, as was their sense they could take time away from practice to learn and grow. They also saw that the protected time and funding dedicated to the ongoing professional development of nursing and medical colleagues did not seem to be available to them.

The act of comparing the conditions of their professions to others is not markedly different from what AHPs and allied health leaders do in urban settings, particularly within smaller or newer AHST professions. Nonetheless, it did appear to be exacerbated in my rural setting. I was really interested to see whether we could learn more about what drives the beliefs or realities of these

[4] An idiom primarily heard in New Zealand or Australia, used to express surviving on the absolute minimum necessary (The Idioms, 2023)

comparisons. Could this sense of there being differences in work experience and conditions across professions play a role in what attracts and retains AHPs in rural settings?

I was also interested in the relationship between rural health professionals and their city-dwelling peers and how this may affect recruitment and retention in rural health settings. For example, the perception rural AHPs appeared to hold was that their urban counterparts believed them to be less skilled or capable, or that they were working in an environment where their skills were being wasted. These perceptions may be driven by a phenomenon described as "urban narcissism" by Adjunct Professor Ruth Stewart (the current Australian Rural Health Commissioner) at Aotearoa's recent National Rural Health Conference (2022). Urban, or geographical narcissism, geographically locates expertise in the urban centres or big cities and "often unconsciously devalues rural knowledge, conventions and subjectivity" (Baker & Hess, 2019, para. 6). I observed this to be sorely felt by many rural health professionals, whether they had directly and explicitly experienced it or not. I believe, for AHPs, the combination of comparison with other professions and the imposter syndrome driven by urban narcissism creates issues of self-worth. I wondered if it also impacts on their decision to work in rural or remote settings.

This was all supposition. Yet, there did not seem to be any formal exploration of the truth of these anecdotes, either operationally or within the literature. To build a community of health professionals who feel seen, included, and have a sense of belonging in their workplaces and teams, supposition and anecdote were not enough. I wanted to ask AHPs with the experience of, or interest in, working rurally what matters to them in choosing that rural role, to see if I could gain a more robust sense of the features of a community worth being a part of. The DHSc programme at AUT created a framework for me to safely and rigorously undertake this.

Since being accepted into the programme, I have observed that the DHSc is designed as a journey of self-discovery, leadership development and the ability to change practice as much as an initiation into academic life. I have been challenged at every stage to read, reflect on and test theories on who we are as leaders, health professionals and members of society.

1.6 NZ Health System Reforms as an Opportunity and a Lens

In April 2021, the Aotearoa Minister of Health, the Honourable Andrew Little, announced a significant programme of redesign for the Aotearoa health system, resulting from the *Health and Disability System Review* commissioned by the government in 2018 (Department of the Prime Minister and Cabinet, 2021). This redesign is based on the recognition that our health system is failing; it is disproportionately failing Māori, and it is failing to keep people out of our most invasive health care systems such as hospitals, operating theatres, and residential care.

The priorities outlined by the government for this design were that:

- Health New Zealand will replace the 20 DHBs for all planning & commissioning, thereby removing duplication (including cost)
- A Māori Health Authority will work in partnership with Health New Zealand to improve services and ensure equitable health outcomes for Māori
- Manatū Hauora | The Ministry of Health (MoH) will focus on policy, strategy, and regulation, as well as strengthening the country's ability to respond to threats such as pandemics via a Public Health Agency
- The energy, focus and attention of the system will shift from an illness to a wellbeing model, based in communities, prioritising primary care and integration of professions, services and technologies.

The Aotearoa reforms were yet to be proposed at the commencement of this doctoral journey, in 2017. Therefore, they did not feature in my initial planning or application for candidature on the DHSc programme. Nevertheless, given such an emphasis in the *Review* findings on workforce and rural inequities, my research does need to be considered in the context of these health reforms. It is my hope that the findings will have practical utility in the new context of health delivery for Aotearoa. As such, I have included an introduction to the reforms here as context and will consider implications of my findings in this context in my discussion chapter (Chapter Nine).

In all the roles I have held since returning to Aotearoa from the UK in 2011, I have seen the ways the current system is failing. Māori have significantly worse health outcomes than most other New Zealanders (World Health Organization, 2014), they die sooner and report an inherent mistrust of the system (Waitangi Tribunal, 2019). The needs and desires of people experiencing disability are not often visible within health provision, community design and development, or society "at large"(Karetai Wood-Bodley, 2023). The disparities between what health and community services are available to a person living in a city, a town or a remote/rural setting are vast (Crengle et al., 2023). Those living with mental ill health continue to be stigmatised, and struggle to access supports and services that can make a positive difference (Cunningham et al., 2023).

The opportunities created by the health system reforms for allied health to contribute earlier, more often and to a greater depth of scope are plentiful (Hogan, 2021). Offering pathways to earlier intervention and health-promoting strategies is a role for allied health to take leadership in during this change. Undertaking my research within the context of these reforms provides an additional lens of inquiry. We, the professions allied to each other, have an amazing opportunity to realise and deliver our value to transform the experiences of growing up, living, and ageing well through these reforms. It is my hope that this research will support policymakers, educators, professional bodies, and employers to ensure a thriving AHP workforce can be realised in our rural and remote communities.

1.7 Overview of This Thesis

The following sections of this thesis aim to step the reader through the research journey. This will include an overview of the methodological underpinnings of interpretive description, positioning of the author within the context of this research and the methods undertaken, including an anonymised introduction to our participants. The document will culminate in chapters explaining and discussing the research findings and finally offering some practical considerations for meaningful change. **Figure 2** (see below) illustrates the structure of the thesis. Chapters are positioned consciously to demonstrate the exploration of literature in the

context of an early publication, as well as to offer a dedicated chapter of recommendations as a component of discussing the findings (Chapter Eight).

Figure 2.

Structure of Thesis

Chapter One: Introduction | Beginnings

This chapter offers an overview of this thesis, introducing the reader to the aims and objectives of the research, offering definitions of key concepts, and introducing the researcher and the research context.

Chapter Two: Engaging with the Literature | Developing the Question

This chapter describes the literature review process, which was undertaken in two phases due to publication of an early version of the review. It also provides an overview of included papers for each phase of the review process.

Chapter Three: Study Selection | Reviewing The Literature

This chapter presents the published narrative review constructed during the early literature review phase. It contains a manuscript presented in the format consistent with the thesis. The manuscript in its published form is appended at the end of the thesis (Appendix B: Published Article). This chapter then presents further reflections following the updated literature review.

Chapter Four: Methodology

This chapter explains the process of finding methodological fit, and the component parts of the chosen methodology. It also provides an overview of the study design.

Chapter Five: Positioning Self in Interpretive Description

This chapter weaves the context of the researcher with the chosen methodological underpinnings.

Chapter Six: Methods

This chapter covers the component parts of the research, starting with the research aim and questions, and includes the ethical approval, recruitment, data collection and analysis.

Chapter Seven: Findings

This chapter presents the key themes of the research; Sense of Connection and Belonging, Safe and Supported Practice, Creating Roles People Want to Come For, and Fit

Chapter Eight: Practical Implications | Changing Practice

This chapter discusses a range of recommendations which have been developed from the research findings, targeted for specific groups, and contextualised to current literature.

Chapter Nine: Discussion

This chapter frames the research findings within the contexts of their relationship with rurality, the pandemic, and the Aotearoa health reforms. It also compares findings with existing literature and offers some opportunities for future research.

1.8 CONCLUSION

As this chapter has introduced, there was a strong need to address the ongoing challenges with recruitment and retention of rurally and remotely based AHPs when this doctoral research commenced in 2017. As this work has progressed, amidst the coronavirus pandemic which started in 2019 and the major health system reforms which came into effect in 2022, the challenges of appropriately staffing rural and remote health systems has reached a level of urgency many describe as a crisis. It is my aim that this thesis will offer sound recommendations to address this crisis.

2 ENGAGING WITH THE LITERATURE | DEVELOPING THE QUESTION

In this chapter, I step the reader through the process undertaken to engage with the literature across Aotearoa, Australia and further afield, from a variety of data sources. I will then illustrate the results of this engagement; how the initial literature search results were refined, and the quality of the papers ultimately included. Because an early narrative review of the literature was published in 2019 (George et al., 2019), and did not include detail about the review methods, this chapter will provide that detail. The published review will then be presented in Chapter Three. The literature reviewed following publication will also be discussed in this chapter. Limitations of the literature review process will be examined, and reflections on the key learning from this process will be offered.

2.1 LITERATURE REVIEW METHODOLOGY AND METHODS

A literature review is a formal process of searching and evaluating any available literature relating to a chosen subject or topic area, to summarise, synthesise and critically analyse this existing knowledge (Galvan, 2017). This process allows us to understand what has already been done, if anything, by identifying gaps, inconsistencies or disagreements and to confirm or challenge our thinking that the question we have is worth studying before we embark on our research (Thorne, 2016). The approach used for this literature review was made up of two parts. Firstly, at the beginning stages of the DHSc journey, literature was sourced as part of a learning exercise with AUT librarians. A range of search methods were trialled during the training session, and literature that appeared to relate to the topic was tagged for later review. The reference lists of the identified papers were also reviewed, and further suitable literature identified. This early scoping provided an overview of what was available and therefore a foundation to build my research questions upon.

Latterly, when preparing to write the assignment that would ultimately become the published literature review in this thesis, I drew on the principles of systematic literature reviews. Systematic literature reviews are, as the name suggests, a systematic approach to identifying and

engaging with literature within a set of parameters (Gough et al., 2017). With a solid question to answer, and a clear understanding of what will be included or excluded, we can work methodically through the often-vast array of literature available via online platforms, as well as literature less accessible due to its status as hard-copy only.

While the Methodology chapter (Chapter Four) will go into more depth about the overarching methodology used in this research project, it is important to describe here the role that my methodology, Interpretive Description (Thorne, 2016), played in shaping my engagement with the literature. Interpretive descriptive methodology is a qualitative research methodology for applied practice, such as health. To approach a literature review, for the purpose of finding a "researchable problem" (Thorne, 2016, p. 50), we are required to locate ourselves. We must question how we think about the field of research, how we stay abreast of new ideas within the field, and how our discipline orients us to the problem or the field.

Interpretive descriptive methodology requires researchers to fully immerse ourselves within the field(s) we are searching, and not just rely on modern technology such as search engines and keywords (Thorne, 2016). This is because we need to become skilled in seeing patterns across the body of knowledge; which references are cited most often, what gaps exist and what biases or perspectives are overtly stated. Additionally, when we begin to look beyond the literature of our own discipline we may miss the nuance due to a lack of familiarity with that discipline or may not recognise the benefit that literature beyond the traditional, such as "grey literature", could offer (Benzies et al., 2006).

2.2 Search Strategy | Deciding What is Relevant

The literature relating to recruitment and retention of allied health clinicians in rural areas is limited. Relevant themes and patterns have not been well documented in Aotearoa-based literature. Within the literature that exists, the links between known elements such as Medicine or Nursing and the larger rural health professional context have not been well made. This in turn highlights the absence of literature specific to AHPs, making a solid case for advancing the knowledge through qualitative research (Thorne, 2016).

In Australia, the Greater Northern Australia Regional Training Network (GNARTN), the Services for Rural and Remote Allied Health in Australia (SARRAH), as well as the Australian State of Queensland's government agency are most notable for their research into this topic (Allied Health Professions' Office of Queensland, 2013, 2014, 2015, 2017; Greater Northern Australia Regional Training Network, 2013). Beyond Australia, publications on these topics are less centralised to specific organisations or representative groups. This required me to look both widely and creatively to find relevant and informative articles, by searching for literature about individual professions, exploring back issues of journals that I saw mentioned in the literature and via social media accounts of AHP researchers and rural academics.

In the earliest stages of my familiarisation of the literature, curiosity led me from article to article, and across both formal and grey literature (Arksey & O'Malley, 2005; Thorne, 2016). However, it was quickly apparent that I needed to build a robust process to ensure I did not unnecessarily or unwittingly exclude literature, or that I would not find myself off track by way of an interesting adjacent topic.

A broad set of keywords was identified to commence the search across all media. These keywords were Allied Health Professionals AND (Rural OR Remote) AND (Recruitment OR Retention). Additional keywords were later used when the initial searches failed to identify formal or grey literature of relevance and to ensure I had not missed any relevant literature, particularly in the local (Aotearoa) context, and for individual AHP workforces. These additional keywords are shown in **Table 1** below.

Table 1.

Additional Keyword Terms

Professions	**Context**	**Phenomenon of Interest**
Occupational Therapy	Health Workforce	Turnover
Social Work	Rural Medicine	Pipeline
Physiotherapy	Policy	Incentives
Pharmacy	Healthcare Provision	
Dietetics	Generalists	

2.2.1 Data sources

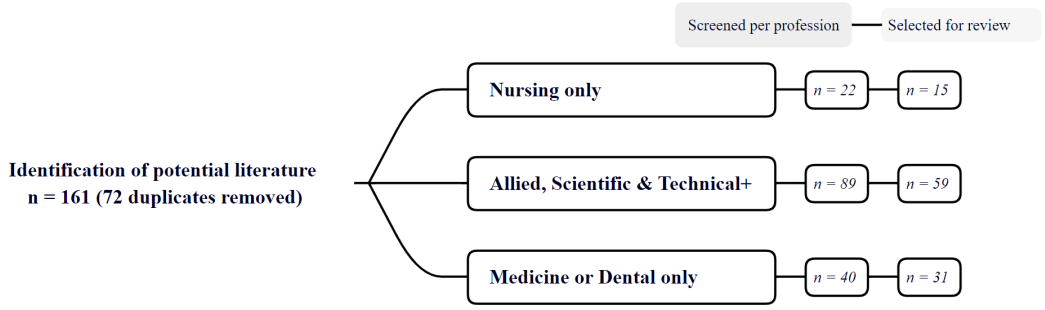
Most of the literature was sourced via online databases such as the AUT library general search engine and advanced search via EBSCO, PsychINFO, Scopus, Ovid and ScienceDirect. Relevant disciplinary journal repositories were also used as well as recommendations from the WCDHB Librarian, who shares articles of interest across the DHB in addition to sourcing full text articles on request. The generalised search engine was selected on the basis that it would identify results widely, from what was expected to be a relatively small sample. As the body of literature grew, the bibliographies of relevant articles and theses provided further literature for review. Relevant grey literature including reports, theses, conference proceedings, health system and government documents were also utilised.

2.3 Study Selection | Reviewing The Literature

In total, 161 abstracts were retrieved and reviewed for relevance in the initial literature search phase in 2017-2018. Many articles appeared to be about a wide range of rural health professions and required a full reading to ascertain which specific profession(s) were included in the study. This led to the separation of articles that included AHPs from those that only referred to medicine or nursing professions, as illustrated below (**Figure 3**):

Figure 3.

Initial Literature Search Results (Quantity)



Papers were excluded if they focused solely on Kaiāwhina[5], allied health assistants (AHAs), or care workers, because these groups are not registered health professionals. However, given Kaiāwhina are part of the allied health workforce, although outside the definition of AHP (see Chapter One, Section 1.3), abstracts relating to these workforce groups were retained separately to allow for the possibility that their inclusion could become relevant as the research progressed.

2.3.1 Quality of included papers

Included papers primarily used quantitative methodologies; mainly secondary analyses of survey data such as National Minimum Data Sets and longitudinal studies (Afenyadu et al., 2017; Carson et al., 2015; Chisholm et al., 2011; Garces-Ozanne et al., 2011; Gardiner et al., 2013; Johnston et al., 2017; Kim & Hopkins, 2016; Leys et al., 2017; McGrail et al., 2013; McGrail et al., 2017; Ministry of Health, 2006; O'Sullivan et al., 2017; Pain et al., 2015; Russell, McGrail, et al., 2012; Russell, Wakerman, et al., 2012; Wilkinson et al., 2003).

The second most common methodology used was systematic literature review, including policy review (Bourke et al., 2014; Buykx et al., 2010; Connell et al., 2009; Dolea et al., 2010; Fisher & Fraser, 2010; Glinos, 2015; Hsueh et al., 2004; Kearns & Moon, 2002; Laven & Wilkinson, 2004; Martineau et al., 2004; Nancarrow et al., 2015; O'Connor & Hooker, 2018; Rechel et al., 2016; Russell et al., 2017; Wakerman et al., 2008; Wilson et al., 2018). This suggests that at the time of my initial literature searches (2017-2018), researchers had been predominantly looking for answers within demographic data or within the literature that already existed.

A critical appraisal of the sourced literature was undertaken where the relevance (high/medium/low) of the article to the research question was considered, as well as strengths and limitations of the study. Relevance scoring was based on the following criteria:

- High = AHP + New Zealand/Australia
- Medium = Other Health Profession + New Zealand/Australia OR AHP + Other Country
- Low = Other Health Profession + Other Country

[5] The term *kaiāwhina* translates as assistant, and describes non-regulated roles in the health and disability sector (Ryan, 2012; Te Tāhū Hauora | Health Quality & Safety Commission, 2023)

Table 2 (on the following pages) provides an overview of papers identified in the initial search, including their relevance score and strengths and limitations. It includes three papers from 2019 that were not in the original search but feature in the subsequently published article (Section 3.1), having been identified during its preparation, and before the second literature search.

Table 2.

Initial Literature Search Results (Quality)

Paper	Year	Methods	Relevance for Research Question (High/Medium)	Strengths	Limitations
Sheppard & Mackintosh, 1998	1998	Review	High[6]	Early consideration of emerging technologies use	Some content is outdated
Parkin et al., 2001	2001	Qualitative	High	Examines skill sharing between rural and urban	Small sample size
Sheppard, 2001	2001	Quantitative	High	Explores increased need for breadth of scope	Specific to physiotherapy
Dunbabin & Levitt, 2003	2003	Review	Medium	Examined data relating to training programmes in a number of countries	Medically focused
Durey et al., 2003	2003	Qualitative	High	Considers cultural components of rurally raised students considering health careers	Indigenous cohort very small
Wilkinson et al., 2003	2003	Quantitative	Medium	Good sample size	Specific focus on GPs
Dawson & Ghazi, 2004	2004	Qualitative	Medium	Supports quality of interprofessional relationships	Small cohort | Scottish context only
Denham & Shaddock, 2004	2004	Mixed M'd[7]	High	Specifically considering disability workforce/setting	Limited to three AH professions
Farmer & Sivasubramaniam, 2004	2004	Quantitative	Medium	Offers comparative data to common themes in international literature	Scottish context only
Hsueh et al., 2004	2004	Quantitative	Medium	Deep and broad focus of specifics of training programmes internationally	Specific to medicine

[6] Articles that scored low for usefulness in relation to the research question are not included in this table
[7] Mixed M'd stands for Mixed Methods

Paper	Year	Methods	Relevance for Research Question (High/Medium)	Strengths	Limitations
Laven & Wilkinson, 2004	2004	Sys. Review	Medium	Covered large timespan for publications	Specific to medicine
Steenbergen & Mackenzie, 2004	2004	Qualitative	High	Considers specific needs of new graduates	Specific to occupational therapy | Small sample size
Allen, 2005	2005	Editorial	High	Illustrative	Brief
Stagnitti et al., 2005	2005	Quantitative	High	Broad and diverse cohort	No direct link between CPD and retention found
Taylor & Lee, 2005	2005	Quantitative	High	Focus on access to technology	Participants were all occupational therapists
Devine, 2006	2006	Qualitative	High	Examined inclusion of rural health issues & skills alongside core discipline-specific skills	Participants were all occupational therapists
Glasser et al., 2006	2006	Quantitative	Medium	Offers recommendations beyond specific employment features	Illinois, US focused | perspectives of CEOs only sought
Humphreys et al., 2006	2006	Review	Medium	Offers a conceptual framework	GP focus
Gillham & Ristevski, 2007	2007	Qualitative	High	Identified themes not prevalent in other literature	Does not explain what strategies they will implement
Thomas & Clark, 2007	2007	Mixed M'd	High	Identifying aptitude features for working rurally	Cohort drawn from NT, Australia only
Allan et al., 2008	2008	Mixed M'd	High	Explores boundaries and biases	Only interviewed pharmacists and social workers
Boshoff & Hartshorne, 2008	2008	Mixed M'd	High	Identifies strategies to respond to rural service delivery challenges	Specific to occupational therapy
Keane et al., 2008	2008	Quantitative	High	Replicable | Creates data set resource for further study	Sample limited to two regions in Australia
O'Toole et al., 2008	2008	Quantitative	High	Considers public vs private employment factors for retention	Exploratory | Data from SW Victoria, Australia only
Ruston, 2008	2008	Review	Medium	Consideration of localisation to Australia of UK/NHS model	Model considered specifically for physiotherapy

Paper	Year	Methods	Relevance for Research Question (High/Medium)	Strengths	Limitations
Schoo, 2008	2008	Editorial	High	Retention requirements	Based on physiotherapy literature only?
Smith et al., 2008	2008	Quantitative	High	Adds to Australian rural AHP dataset	Only surveyed Northern NSW, Australia
Wakerman et al., 2008	2008	Sys. Review	Medium	Examines options to improve sustainability of rural primary care	Limited literature available where options have been evaluated
Connell et al., 2009	2009	Review	High	Considers impact of gendered dynamics on workforce	
Haggerty et al., 2010	2009	Mixed M'd	Medium	Multiple cohorts surveyed	Specific to nursing
Jones et al., 2009	2009	Quantitative	Medium	Longitudinal | Replicable	Specific to medicine
Manahan et al., 2009	2009	Qualitative	Medium	Identifies impact of personal values	Study sample from British Colombia, Canada only
Brown et al., 2010	2010	Mixed M'd	High	Sizeable sample | builds on research themes across literature	Only surveyed dieticians
Buykx et al., 2010	2010	Sys. review	Medium	Comprehensive synthesis of themes	Unclear definition of length of stay
Dolea et al., 2010	2010	Sys. review	Medium	Interested in studies of implementation evaluations	Limited eligible studies
Fisher & Fraser, 2010	2010	Review	High	Contextualised "pipeline" beyond medicine	Stage 1 appeared limited to secondary school intervention
Heilmann, 2010	2010	Editorial	High	Diverse recommendations	Brief
King et al., 2010	2010	Mixed M'd	Medium	Examines doctoral level qualification as entry-level degree	US context | Physiotherapy/Physical Therapist specific
MacDowell, 2010	2010	Editorial	High	Advocating for regular all ages school-based career education	Brief
O'Toole et al., 2010	2010	Qualitative	High	Links themes with policy implications	Participants drawn from Victoria, Australia only
Bayley et al., 2011	2011	Qualitative	Medium	Explores effects of compulsory rural placements	Specific to GP vocational training
Chisholm et al., 2011	2011	Quantitative	High	Large data set	Limited generalisability

Paper	Year	Methods	Relevance for Research Question (High/Medium)	Strengths	Limitations
Garces-Ozanne et al., 2011	2011	Quantitative	Medium	Explores international patterns of workforce mobility	Specific to medicine
Smith et al., 2011	2011	Quantitative	High	Comparative study with sizeable samples, and consistency of results	Specific to one region of NSW, Australia
Szabo, 2011	2011	Editorial	Medium	Explores international recruitment of AHPs	Specific to US
Bourke et al., 2012	2012	Sys. review	High	Utilises a conceptual framework to undertake review	Would be great to see it applied
Campbell et al., 2012	2012	Sys. review	High	Examined motivation to work rurally using Herzberg's classification	Lacks life stage context
Dywili et al., 2012	2012	Sys. review	Medium	Impacts of expectations & culture by overseas trained HPs	Limited literature (particularly for professions other than medicine)
Keane et al., 2012	2012	Qualitative	High	Examined both push and pull factors	Specific to rural NSW, Australia
Slagle et al., 2012	2012	Quantitative	Medium	Comparing recruitment strategies rural vs urban	Specific to Tennessee, US | AH definition has some differences
Russell, McGrail, et al., 2012	2012	Quantitative	Medium	Considers generational differences	Only analysed GP workforce data
Russell, Wakerman, et al., 2012	2012	Quantitative	High	Offers key metrics to simply measure workforce turnover/retention	Basic ("crude") tool
Whitford et al., 2012	2012	Quantitative	High	Robust sample size | Analysed generational differences	May not be generalisable due to % of workforce responded
Bond et al., 2013	2013	Quantitative	High	Built upon previous workforce study (same instrument)	Short report
Campbell et al., 2013	2013	Quantitative	High	Explores human characteristics for patterns | Compared with medical & nursing studies	Small effect sizes
Conomos et al., 2013	2013	Quantitative	High	Sizeable sample | Analysis of values patterns	Specific focus on psychology

Paper	Year	Methods	Relevance for Research Question (High/Medium)	Strengths	Limitations
Gardiner et al., 2013	2013	Quantitative	Medium	Interventional study	GP cohort only
Greater Northern Australia Regional Training Network, 2013	2013	Report	High	Focus on skill sharing impact for rural generalist workforce efficacy	Only explored one aspect of the AH rural generalist programme
Hastings & Cohn, 2013	2013	Quantitative	Medium	Analysed conditions for recruitment, from Mental Health workforce perspective	Specific to Appalachian region in US
McGrail et al., 2013	2013	Quantitative	Medium	Longitudinal | Adds to themes in other literature	GPs main focus
McKimm et al., 2013	2013	Review	High	Exploration of extended scope practice	Limited attention paid to AHPs
Nancarrow et al., 2013	2013	Mixed M'd	High	Service redesign focus	Diversity of data sources
Bourke et al., 2014	2014	Review	Medium	Identification of suitable mentoring model to support retention	"Tele" mentoring, although mentioned, seems secondary to F2F
Campbell et al., 2014	2014	Qualitative	Medium	Links historical GP/obstetrics role with emerging Rural Generalist pathways	Obstetrics/GPs focused | single programme in one state of Australia
Crettenden et al., 2014	2014	Review	Medium	Future workforce modelling	AHPs not included
Morell et al., 2014	2014	Quantitative	High	Recruitment programme impacts	No retention data | No control data (people not recruited)
Saxon et al., 2014	2014	Sys. review	High	Exploration of extended scopes	Only looked at physio-, occupational and speech therapies
Schmidt & Dmytryk, 2014	2014	Qualitative	High	Partnership models between public and private employers	Physiotherapy specific
Shelker et al., 2014	2014	Quantitative	Medium	Examines impacts of rural training initiatives	Medicine | Otago University (NZ) programme specific
Swain, 2014	2014	Review	High	Possibilities of Rural Generalism for AHPs	Focused specifically on pharmacists
Atmore, 2015	2015	Review	Medium	"Transalpine" service model of rural generalism	Sole focus on medicine

Paper	Year	Methods	Relevance for Research Question (High/Medium)	Strengths	Limitations
Bath et al., 2015	2015	Quantitative	Medium	Exploration of practice and personal characteristics	Specific to physiotherapy | Saskatchewan, Canada context
Borthwick et al., 2015	2015	Review	High	Examines power and interprofessional conflict	Limited resolution options
Carson et al., 2015	2015	Quantitative	Medium	Adding examination of European rural workforces to international literature	Poor definition of who made up AHP cohort
de Gruchy et al., 2015	2015	Quantitative	High	Advanced AH practice in ED setting - impacts	Physiotherapy specific | one ED site only (Melbourne, Australia)
Durey et al., 2015	2015	Review	High	Adapting rural pipeline concept to various AHPs	Unclear whether pipeline is specifically rural schools or all
Gallego, Dew, Bulkeley, et al., 2015	2015	Qualitative	High	Focus specific to disability sector | comprehensive sample size	Rural NSW, Australian context only
Lyle & Barclay, 2015	2015	Review	High	Highlighting funding considerations to support high quality policy/programmes	Brief
Nancarrow et al., 2015	2015	Mixed M'd	High	Comprehensive analysis of Rural Generalist programme	Specific to Queensland, Australia
Pain et al., 2015	2015	Quantitative	High	Supporting research by rural AHPs	Proposes requirement for co-location of research fellows
Spiers & Harris, 2015	2015	Review	High	Reinforces broader findings internationally	
Willems et al., 2015	2015	Delphi	High	Sustainability options for pipeline immersion programmes	Singular programme/location
Campbell et al., 2016	2016	Mixed M'd	High	Understanding impact of traits on self-assessment of fit for rural role	Limited to 4 AH professional groups
Ducat et al., 2016	2016	Qualitative	High	Supervision access & effectiveness	Unclear whether legislation/practice requirements play a role
Fearnley et al., 2016	2016	Review	Medium	Criteria for inclusion/exclusion in rural classification	Requires NZ place name knowledge

Paper	Year	Methods	Relevance for Research Question (High/Medium)	Strengths	Limitations
Martin et al., 2016	2016	Qualitative	Medium	Offers consumer perspective	Sole focus on paramedicine | Ontario Canada
Pelham et al., 2016	2016	Qualitative	High	Perspectives of field educators of interprofessional programmes	Small cohort, with potential positive bias
Thompson et al., 2016	2016	Sys. Review	Medium	Extended scope specific to MSK physiotherapy	Diversity of types of literature analysed restricts synthesis
Atmore, 2017	2017	Review	Medium	Exploration of general practice models	Narrow range of HPs mentioned
Barnes et al., 2017	2017	Review	Medium	Pharmacists in general practice	NHS situated | lack of generalisability
Boehm et al., 2017	2017	Quantitative	High	Supports previous findings of this topic	Occupational Therapy workforce specific | Single university setting
Brown et al., 2017	2017	Mixed M'd	High	Longitudinal examination of immersive placement programme	Initial sample size is small, potential for bias
James Cook University, 2017	2017	Programme	High	Education programme overview	Specific to Australian system/context
Johnston et al., 2017	2017	Quantitative	High	Reorientation of placement opportunities to increase rural offerings	Physiotherapy student clinical placements only
Marks et al., 2017	2017	Quantitative	Medium	Role substitution/skill sharing	Medical>Physiotherapy (MSK) specific
McGrail et al., 2017	2017	Geomapping	Medium	Identification of features of community that attract workforce	Appears oriented to doctors' preferences
McKillop et al., 2017	2017	Mixed M'd	Medium	Supports previous findings of impact of immersion programmes	Specific to single medical immersion programme
Nixon, 2017	2017	Presentation	Medium	Governance of rural generalism	Medical perspective
O'Sullivan et al., 2017	2017	Quantitative	Medium	Characteristics of rural specialists	Examination of medical specialities only
Ross, 2017	2017	Quantitative	Medium	Examination of identity of rural nurses	Single location (Otago, NZ)

Paper	Year	Methods	Relevance for Research Question (High/Medium)	Strengths	Limitations
Russell et al., 2017	2017	Sys. Review	High	Synthesis of determinants of primary care HP retention	Limitations relating to targeted searches by profession
Bell et al., 2018	2018	Qualitative	Medium	Exploration of components of Rural Nurse Specialist roles	Very small sample size for interviews (n = 4)
Goodman et al., 2018	2018	Mixed M'd	High	Expanded scope ED physiotherapy in rural setting	Impacted by recruitment challenges
O'Connor & Hooker, 2018	2018	Sys. Review	Medium	Physician assistants as extension of rural workforce	Narrow perspective on skill sharing
Taylor & Glass, 2018	2018	Review	High	Impact of rural curriculum for pharmacy	Limited relevant literature available to link rural curriculum to choice of rural workplace
McGirr et al., 2019	2019	Quantitative	Medium	Examines outcomes of Rural Clinical School Program	Specific to medicine
Nixon & Lawrenson, 2019	2019	Editorial	Medium	Consideration of rural school model for Aotearoa	Medically centric
Taylor et al., 2019	2019	Mixed M'd	High	Impact of rural placements on rural pharmacy workforce	Sampling bias is possible

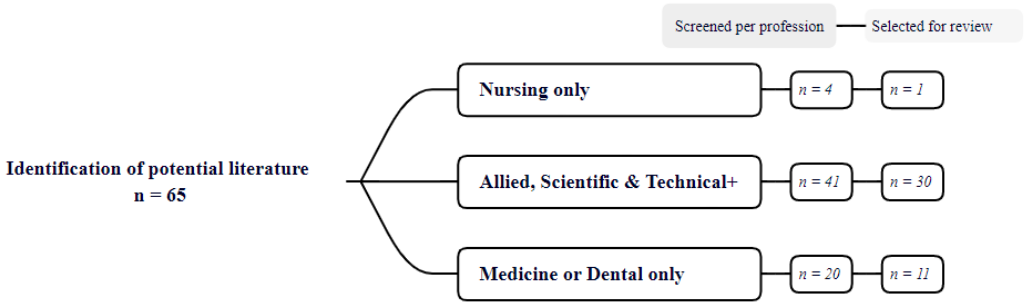
2.4 UPDATING THE REVIEW

Following the data collection phase, and a slowing down of research activity, due to my responsibilities as a health service leader during the coronavirus outbreak, and subsequent pandemic response, I returned to the virtual stacks to undertake another search of the literature in 2022. I utilised a similar approach to the first literature review, in that I used the following keywords: Allied Health Professionals AND (Rural OR Remote) AND (Recruitment OR Retention). I then added the additional keywords listed in **Table 1** (see Section 2.2 above). As in my previous search, I also looked at any references appearing in the bibliographies of the newly sourced, relevant articles, which fit my search parameters. The date range for this secondary search overlapped the previous search to identify anything suitable that may have been missed. Where this search differed was through the use of a range of grey literature such as blogs (Benzies et al., 2006) which led to additional literature beyond what had been sourced using the library search engines.

Figure 4 illustrates the new search results, broken down into articles that included AHPs and those that referred only to medicine or nursing professions, as was done in **Figure 3** for the initial literature search results (see Section 2.2.1). Excluded articles were again those that focused solely on Kaiāwhina, allied health assistants, or care workers.

Figure 4.

Subsequent Literature Search Results (Quantity)



These were critically appraised in the same manner as the first literature review, with strengths and limitations of the study, as well as relevance (high/medium/low) considered using the same criteria as was used in the first review. **Table 3**, on the following pages, provides an overview of these papers.

Table 3.

Subsequent Literature Search Results (Quality)

Paper	Year	Method	Relevance for Research Question (High/Medium)	Strengths	Limitations
Brown et al., 2017	2017	Mixed M'd	High[8]	Longitudinal	Small cohort studied thus far
Haskins et al., 2017	2017	Survey	Medium	Included all health profession workforces on shift in each hospital in one 24hr timeframe	Urban cohort disproportionately larger than rural participants
Hil et al., 2017	2017	Survey	Medium	Spread of ages and years qualified	Dieticians only
Irving et al., 2017	2017	Qualitative	High	Focus on cultural competence with Indigenous populations	Interprofessional subset – dental team
McKillop et al., 2017	2017	Mixed M'd	Medium	Demonstrated consistency of decision making re rural practice pre- and post-programme	Medically focused | Small sample size
Burgis-Kasthala et al., 2018	2018	Quantitative	Medium	Exploring peer networks and resilience of rural students	Specific to medical students
Roberts, 2018	2018	Editorial	High	Highlights the disproportionate funding of medicine in rural health workforce strategy work	Specific to Australian health budget
Axtens et al., 2019	2019	Qualitative	High	Perspective of relationship with "place" broader than "home"	Specific focus on osteopaths
Blattner et al., 2019	2019	Qualitative	Medium	Compared report/review documents and interview data	Medical practitioners sole focus
Johnson et al., 2019	2019	Qualitative	Medium	Majority of interviews with people who had chosen not to practise rurally	Single cohort study - dentists
Wakerman et al., 2019	2019	Qualitative	Medium	Study focused on high workforce turnover/Indigenous population	Study only focused on one community

[8] Articles that scored low for usefulness in relation to the research question are not included in this table

Paper	Year	Method	Relevance for Research Question (High/Medium)	Strengths	Limitations
				environment, with cross-analysis of international literature	
Cosgrave, 2020a	2020	Qualitative	High	Findings have utility beyond the specific study conditions	Focused on one state of Australia only
Cuesta-Briand et al., 2020	2020	Qualitative	Medium	Examined career decision making behaviours against validated model	Specific focus on junior doctors
Denese et al., 2020	2020	Quantitative	High	Longitudinal study of AHP and nurse graduates	Lacked comparison/control group
Furness et al., 2020	2020	Qualitative	High	Demonstrates the positive impact diversity of caseloads (a feature in rural settings) as students have on confidence in first graduate role	Small cohort
Holloway et al., 2020	2020	Sys. Review	Medium	Contextualised for countries with similar medical systems	Limited range of publication scopes or types | Focus on doctors
Johnson et al., 2020	2020	Qualitative	Medium	Rural and Urban characteristics tables	Single cohort study - dentists
Konkin et al., 2020	2020	Qualitative	Medium	Examines clinical courage as a feature of rural practice	Only interviewed doctors
Kumar et al., 2020	2020	Qualitative	High	Specifically focused on transition into rural practice	Some professions *n* = 1
Malau-Aduli et al., 2020	2020	Qualitative	Medium	Profile spread of interviewees	Specific focus on International Medical Graduates in Queensland
Martin et al., 2020	2020	Qualitative	High	Examines specificity of rurally focused practice	Specific to physiotherapists based in Queensland
O'Sullivan & Worley, 2020	2020	Sys. Review	High	Advocates for longitudinal studies about outcomes of proposed solutions	Time limitations of study may have impacted scope of material reviewed
Ogden et al., 2020	2020	Sys. Review	Medium	Synthesis of 27 studies	Specific to GPs

Paper	Year	Method	Relevance for Research Question (High/Medium)	Strengths	Limitations
Peel et al., 2020	2020	Qualitative	Medium	Large sample size	Focus on localised training for GPs in Queensland
Barker et al., 2021	2021	Mixed M'd	High	Significant sample with variety of professions	Participants from state government organisations predominantly
Beccaria et al., 2021	2021	Lit. review	High	Highlights role of relational connections for building health workforce	Challenges test-ability of qualitative findings
Beeler, 2021	2021	Qual (Thesis)	High	Examines sole practice implications	Sole focus - podiatrists
Campbell et al., 2021	2021	Survey	High	Examined student placements from the perspective of the impact rural clinicians can have (AHPs & nurses)	Specific to Australia's Northern Territory
Cosgrave, 2021	2021	Qualitative	High	Application of WoP-RIFramework	Potential bias due to multiple roles of author
Couch et al., 2021	2021	Sys. review	High	Supports previous review findings	Complexity of analysing qualitative studies
Daniel et al., 2021	2021	Sys. review	High	Themes consistent with other systematic reviews	Specific to pharmacist workforce
Jessup et al., 2021	2021	Mixed M'd	High	Large, diverse cohort	Specific to Tasmania, Australia
Lienesch et al., 2021	2021	Survey	High	First article on this topic I have found	Study limited to physio- and occupational therapists
McMaster et al., 2021	2021	Mixed M'd	High	Additional analysis of AHRGP programme from a different state's perspective	"Development positions" required specific candidates i.e. not grads/advanced practitioners
Ramsden et al., 2021	2021	Lit. review	High	Generates foundation for considering impact of digital learning	Did not study link between digital learning & recruitment/retention
Sutton et al., 2021	2021	Quantitative	High	Supports rural origin/education factor	Recruitment restricted to one graduating year at two universities

Paper	Year	Method	Relevance for Research Question (High/Medium)	Strengths	Limitations
Yisma et al., 2021	2021	Quantitative	High	Tracks rural classification against presence of professions by volume	Limited focus of cohort (profession & location)
Beeler et al., 2022	2022	Qualitative	High	Illustrative pathway to attrition	Sole focus - podiatrists
Beks et al., 2022	2022	Sys. review	High	Examination of geographical classification systems | Majority of Health Professions covered	Only looked at peer reviewed literature
Blattner et al., 2022	2022	Qualitative	Medium	Leadership focus rather than profession focus	
Dymmott et al., 2022	2022	Lit review	High	Focus on factors that support/impact retention specifically	Limitations to reviewed papers relating to AHPs due to definition
Taylor et al., 2022	2022	Qualitative	High	Consideration of role theory relating to interprofessional practice	From pharmacist perspective, rather than the perspectives of all AH professionals involved
Walker et al., 2022	2022	Sys. review	High	Possibly first published review of this focus in Aotearoa	Limited available relevant literature

2.5 CONCLUSION

This literature review process was designed to provide the context from which to commence a programme of research into an operational challenge in a remote health setting. The process of engaging with the literature that has been described in this chapter was one that had two clear periods and utilised the interpretive descriptive approach. The next chapter provides a synthesis of evidence identified, firstly in the form of a published paper, and then by providing an overview on evidence published since that publication.

3 PUBLISHED LITERATURE REVIEW

This chapter comprises a published review in *Rural and Remote Health* (George et al., 2019). The published review (Section 3.1 and 3.2) is then followed by additional updated commentary and a conclusion (Sections 3.3 - 3.6).

The full citation for the article is:

George, J. E., Larmer, P. J., & Kayes, N. (2019). Learning from those who have gone before: Strengthening the rural Allied Health workforce in Aotearoa New Zealand. *Rural and Remote Health, 19*(3), 1-9. https://doi.org/10.22605/RRH4878

The manuscript is included here with citations, figures and tables formatted consistent with the thesis. A copy of the published article is found in Appendix B: Published Article.

3.1 PUBLISHED ARTICLE

3.1.1 Abstract

Context and issues: The pipeline for the allied health, scientific and technical workforce of Aotearoa New Zealand is under growing pressure, with many health providers finding recruitment and retention increasingly difficult. For health providers in rural settings, the challenges are even greater, with fewer applicants and shorter tenures. As the health needs of rural communities increase, along with expectations of uptake of technologies and the Ministry of Health's strategy to ensure care is provided closer to home, being able to retain and upskill the diminishing workforce requires new ways of thinking.

Lessons learned: Understanding the activity that has been undertaken by medical and nursing workforces in New Zealand and abroad, as well as the work of the Australian allied health workforce provides context and opportunities for New Zealand. The challenge is for educators, professional bodies, the Ministry of Health, and health providers to develop new ways of thinking about developing a rural workforce for the allied health scientific and technical professions.

3.1.2 Introduction

Healthcare delivery in rural and remote areas is challenging. It is challenging because the people who live in rural and remote areas are few and far between, providing limited opportunities for efficiencies in service delivery. It is challenging because there are perceptions about rural communities having less: less to offer, less quality, less access. And it is challenging because rural and remote health care looks different than urban health care, and that makes it difficult for urban trained health professionals to imagine themselves working rurally, to understand how they will get access to ongoing professional development, how they could contribute to research and innovation. Because of these types of challenges, it can be difficult to attract health professionals to work in rural areas.

Additionally, patient care has become more complex, due to an increasing ageing population and increasing comorbidities (Ministry of Health, 2019). This has resulted in the increased specialisation of all healthcare professions, and in-depth exploration of issues by each specific profession (Davies, 2000). Yet in rural settings, this increased specialisation is often unattainable, particularly for allied health professionals, due to constrained resources, recruitment challenges and small numbers of patients requiring input from any given specialty. It can also be unhelpful, with expectations from professional bodies, communities, and educators, that all clinicians should have the opportunity to specialise – expectations that cannot be met in communities with small populations.

The medical and nursing workforces in Aotearoa New Zealand have also needed to respond to these challenges and take advantage of the opportunities available in rural settings. Working in partnership with professional associations, unions, health boards and training institutions, they have developed pathways and programs that aim to strengthen their workforces within the rural and remote settings (Ross, 2017). Engagement with the New Zealand Ministry of Health (MoH) and other governance systems, lobbying and influencing legislative processes and working in partnership with internationally renowned think tanks such as the King's Fund (Charles, 2017) have also given weight to their efforts.

Medical, nursing and allied health professions (AHPs) in Australia have worked to influence and develop a robust network of health professions to serve the vastly distributed rural and remote communities requiring health services (Dolea et al., 2010). Understanding the activities and impact of these groups provides a lens for developing the AHP rural workforce in New Zealand, in ways that are flexible enough to respond to the different needs of each rural area. As such this article aims to provide an overview of health workforce development in New Zealand, highlighting opportunities and lessons for future workforce development, and look abroad to what our AHP colleagues have already learnt that could be of benefit to New Zealand rural AHP workforce development.

3.1.3 Context

The West Coast District Health Board (DHB) serves the communities of the West Coast of the South Island (Ministry of Health, 2017c). This DHB is the most rural of all DHBs as it does not have any urban communities. The West Coast DHB covers over 23 000km^2 and has a population of 32 600 people (about 1% of the New Zealand population), equating to about 1.4 km^2 per person (Statistics NZ, 2017). The West Coast population differs from the national average, being slightly older, with fewer Māori, a very low number of Pacific people, and a higher proportion of population in the lower decile (Ministry of Health, 2017b).

The West Coast economy has historically relied on the export of raw materials such as gold, coal, timber, and dairy products to provide employment within the district. In recent years tourism has increased; however, most overseas visitors spend an average of only one night in the district (Nathan, 2016). The health sector also provides a considerable number of jobs, with the West Coast DHB considered one of the largest employers of the district, with more than 950 staff working across the 13 facilities, and wider community settings, in full- and part-time roles (West Coast District Health Board, 2017).

This district, as with other areas of New Zealand where mining operations have been key contributors to the national economy, has a long history of being supported to recruit and retain

health professionals, acknowledging both the risks associated with mining and the contribution made to the national economy. Support has been in the form of additional bonded financial incentives, which were provided to local health services via the various models of statutory health provision (Quin, 2009). One of the most recent incentive models is the three-year Voluntary Bonding Scheme (Ministry of Health, 2017b). This scheme, open to doctors, nurses and a small number of midwives, sonographers, and dentists, supports 350 health professionals each year, to work in hard-to-staff areas of the country. This scheme provides student loan repayments or cash payments where no loan is held, set at around $10,000 for doctors, and on average $3000 for other professions each year (World Health Organization, 2014). The scheme is overseen by Health Workforce New Zealand (Health Science and Technical Workforces Working Group, 2013), a unit of the MoH.

3.1.4 New Zealand health workforce development

The establishment of Health Workforce New Zealand (Health Science and Technical Workforces Working Group, 2013) in 2009 was the result of a growing need for a coordinated response to the pressures on the New Zealand health and disability workforce (Ministry of Health, 2016a), across rural and urban settings. Health Workforce New Zealand is the primary provider of funding for post-entry clinical training in New Zealand (Ministry of Health, 2016a). Honouring the work of their predecessor, the Clinical Training Agency (Field et al., 2018), key priorities remained focused on raising the number of New Zealand trained doctors and lowering the average age of the nursing workforce through support for entry to practice for nursing graduates (Technical Advisory Services, 2017).

New Zealand has a significantly lower number of people entering medical training than the OECD (Organization for Economic Cooperation and Development, 2017) average: 33.7 New Zealand graduates per 1000 health practitioners compared to 37.5 across the OECD (World Health Organization, 2014). Of these, only about 1% of medical students indicate a desire to work rurally once qualified (Hsueh et al., 2004). Accordingly, much effort has been focused on supporting the

training of the medical profession in New Zealand, increasing overall funded training places as well as specific programs of rural focus (Nixon & Lawrenson, 2019).

The two medical schools in New Zealand, at University of Otago and University of Auckland, are situated at either end of the country. Both offer pathways to support growth in rural and remote workforces. To date, the strategies employed by medical training programs have been twofold. First is working to identify those students who come from rural areas who meet the academic requirements for medical training and offering them preferential entry into university. The basis for this is that research, both in New Zealand and abroad, has demonstrated that those students from rural areas are much more likely to practice medicine in rural and remote locations than those from urban settings (Garces-Ozanne et al., 2011; Hsueh et al., 2004; Jones et al., 2009). Second, programs aim to immerse medical students in rural practice; research has shown that medical students who complete a portion of their training in a rural or remote setting are more likely to return to rural areas to practice medicine (Garces-Ozanne et al., 2011; Shelker et al., 2014). Arguably, combining these features should increase the likelihood that students will become rural medical practitioners once qualified (Shelker et al., 2014). Yet despite these efforts, concerns remain that the supply of medical practitioners for rural areas remains weak (McPherson, 2017; Thomas, 2017).

For the nursing profession, the last decade of the 20th century brought increasing difficulties for the nursing workforce regarding recruitment and retention, alongside a growing realisation that the workforce was rapidly ageing. It was also recognised that, for those seeking to employ new graduates, the workforce shortages created a highly competitive environment between health providers (Gage & Hornblow, 2007; Haggerty et al., 2010). Rural health systems and communities were being hit hardest, with low numbers of graduates taking up rural employment opportunities.

In response to this, in 2006 the Clinical Training Agency commissioned a Nurse Entry to Practice program to provide a sustainable workforce into the future (Haggerty et al., 2010). The program was designed to support graduate nurses to develop into competent nurses, within a safe team nursing environment. This program provides funding to DHBs to supplement the salary for each graduate nurse during their first year of practice, and the bidding process for applicants and potential

employees ensures a fair distribution of graduates across the country (Technical Advisory Services, 2017). Bidding requires new graduates to express their preferences regarding employment placements and employers to register their requirements regarding number and skill mix of graduates (Technical Advisory Services, 2017) .

Working alongside the medical and nursing workforces, the professions that make up the allied health, scientific and technical workforce, known as allied health, are many and varied (Boyce, 2006). Most common are the therapy professions of physiotherapy, occupational therapy, dietetics, speech-language therapy, and social work; and the medical imaging technologists and those who work in the dental, pharmacy and laboratory settings. For the New Zealand public health system, these professional groups are pivotal to the patient journey as they contribute to the multidisciplinary make-up of healthcare teams (Weller et al., 2019). This collective of professions is equivalent to around a quarter of the nursing workforce and is slightly smaller than the medical profession, who are equivalent to one-third of the nursing workforce (Ministry of Health, 2017a).

In 2009 the Ministerial Review Group was set up to make recommendations to the Minister of Health on the future direction of health and disability services in New Zealand. They identified AHPs amongst the key workforces experiencing consistent and significant gaps in rural and provincial areas (Ministry of Health, 2014). Despite that review, the primary focus of Health Workforce New Zealand activity has remained on the medical and nursing workforce, with no additional funding for AHPs.

There is limited research seeking to understand the social and political factors relevant to the current distribution of funding by Health Workforce New Zealand, and in particular the lack of targeted provision of AHPs inherent in these existing systems. Those who have reviewed the development of the various New Zealand medical associations, and to a lesser degree the New Zealand Nurses Organisation, capture a narrative of collective bargaining power and political influence (Bagg et al., 2010; Gage & Hornblow, 2007), which may at least in part contribute to the medical and nursing professions having more visibility in workforce strategy development.

3.1.5 Specialism and extension of scope

The nursing profession have worked hard to demonstrate their professionalism and capability across the scope of nursing practice, and are now making significant contributions as primary care practice nurses, clinical nurse specialists and nurse practitioners within the general practice and emergency medicine environments (Pearce et al., 2011). This increased professionalisation by nurses has created opportunities for the substitution of doctors with nurses, and pharmacists in some settings, and supplementation to the medical workforce (McKimm et al., 2013). In contrast, opportunities to work to a wider scope by other health professional groups are yet to be robustly explored (Angley et al., 2015; Barnes et al., 2017; Shen & Kelly, 2012).

There are many examples of the specialist areas of nursing and medical practice. For doctors, being vocationally registered means having developed a specialist area such as obstetrics, anaesthetics or more than 30 other vocations within New Zealand. This specialist registration allows doctors to work independently, after completing an accredited postgraduate program (Medical Council of New Zealand, 2017). Clinical nurse specialists have developed expert knowledge in the medical specialty they are allied to, strengthened by their postgraduate study (Roberts et al., 2011). These specialty areas include cancer, stroke, gerontology and orthopaedics (The University of Auckland School of Nursing, 2017). Further study can also qualify them to become nurse prescribers in their area of clinical practice; though both clinical nurse specialists and nurse prescribers require a level of medical oversight and supervision that nurse practitioners are not required to have.

In 2003 New Zealand adopted the *Health Practitioners Competence Assurance Act 2003* in order to have one legislative framework across the health professions that provided protections to the public in relation to health, safety and competency of health professions (Ministry of Health, 2018). This opened the dialogue for many health professions previously without these policy protections and requirements. Yet for some professions this was a missed opportunity to create a partnership both across those professions that are allied to each other (Boyce, 2006) and with nursing and medicine. This was attributed in part to the inter- and intra-professional rivalries that exist across individual allied health professions as well as between nursing, medicine, and allied health, as well as across

professions working within and beyond the scope of health. These rivalries are accentuated by each profession's use of different practice languages and jargon, clinical frameworks and views (Nicholls & Larmer, 2005). For each, seeing themselves as autonomous professional groups, with a commitment to demonstrating their profession's unique contribution to the patient journey, appears to have overridden AHPs' desire to exercise more collective power within the health workforce (Borthwick et al., 2015).

These rivalries and the desire to be recognised as autonomous professions has also driven an increasing focus on advanced and extended scopes of practice, and the specialisation of professionals within the various professional groups, registration boards and professional bodies (Borthwick et al., 2015). For some AHPs the very nature of their professional training marks them out as specialists: anaesthetic technicians, paramedics, orthoptists for example. For others, such as physiotherapists, occupational therapists and dietitians, the path to specialist practice may not commence until after the initial 'core' years of clinical practice. Examples of specialist practice include neurodevelopmental physiotherapy, orthopaedic physiotherapy, paediatric diabetic dietetics, speech pathology and hand therapy (Daker-White et al., 1999; Dawson & Ghazi, 2004; de Gruchy et al., 2015; Desmeules et al., 2012; Goodman et al., 2018; Marks et al., 2017; Ruston, 2008; Saxon et al., 2014; Thompson et al., 2016).

Each area of specialisation offers benefit to both the patient journey and to the efficacy of the medical or surgical intervention, such as with musculoskeletal physiotherapy led orthopaedic assessment and treatment programs which identify and offer intervention to those patients who may otherwise require surgical intervention. Certainly, McKimm et al. describe these specialised or advanced practitioners as professionals working at the interface between medicine and their own profession (McKimm et al., 2013). Nevertheless, the expectations of the specialised or advanced practitioners, special interest groups, registering bodies and the other disciplines they work with are that the specialism and advanced practice is maintained through an exclusive focus of continuing professional development into that specialist area. Yet this level of activity and focus is often out of reach for rurally based practitioners.

3.2 LESSONS LEARNED

3.2.1 Generalism and delivering health care to rural populations

For rural practitioners, who work within small and vastly spread populations, and who are expected to work across the range of needs and patient types that present to the health service, maintaining competency and specialism in multiple advanced fields of practice is time consuming and costly. Additionally, it is very difficult for practitioners to maintain multiple specialist areas of practice when their opportunities to put their knowledge into practice are far fewer than their urban counterparts.

This suggests that generalism, specifically rural generalism (Nixon, 2017), is a better focus for AHPs in rural areas who need to work across a diversity of people. How then do these practitioners achieve the same recognition and standing with their peers that are afforded to their specialist colleagues? Perhaps the tension here is just that: finding a way to recognise rural generalism as an advanced scope in its own right.

3.2.2 Frameworks to support generalist practice

The creation of HealthPathways by the Canterbury District Health Board and wider adoption of localised versions across many health systems in New Zealand, Australia and, more recently, the UK and Canada have provided a framework that can support rural practitioners to maintain their competence in navigating multiple speciality areas (Kenealy et al., 2015). HealthPathways are locally agreed guidelines that are organised as an online manual, and they describe how particular health conditions are managed within the local context to which they are applied (HealthPathways Community, 2017). While initially designed for general practices, to aid community management of patients, and activation of specialist advice and intervention, these online manuals have also been designed for pathways within hospital settings (Canterbury District Health Board, 2017).

A number of articles have been written about the ability of HealthPathways to create the conditions to guide ‘best practice, best use’ of the right clinical resource, which can assist in the rural setting (Kenealy et al., 2015; McGeoch et al., 2015; McGeoch & Shand, 2015). In contrast Leggat et al.

(2015) raise the debate that HealthPathways is at odds with professions who are trained to employ critical thinking, and see themselves as self-regulating. Regardless, the current development of pathways for AHPs would indicate more support than dissent.

Skill sharing and delegation offer another avenue for guiding the best use of the right clinical resource. The Calderdale Framework (Smith & Duffy, 2010) is a workforce development tool that has been adopted by the Directors of Allied Health, Scientific and Technical within New Zealand. The framework ensures safe and effective patient-centred care and provides a clear and systematic method for reviewing skill mix, developing new roles, identifying new ways of working and facilitating service redesign (South Island Directors of Allied Health Scientific & Technical, 2015). Initially designed in the UK to safely develop the skills of the non-regulated allied health assistant workforce, its success in providing a competency framework with clear clinical task instructions for delegation or skill sharing across the allied health workforce has seen its applicability extend into the regulated and non-regulated nursing workforce in the UK (Smith & Duffy, 2010).

3.2.3 What can Australia teach us?

Australia, in parts much more rural and remote than the West Coast of New Zealand, has also needed to address the challenges of AHP service delivery. They too have adopted the Calderdale Framework (Smith & Duffy, 2010) with the state of Queensland having been most enthusiastic in its implementation, and supportive to other states, and to New Zealand services adopting this model (Nancarrow et al., 2013). A considerable amount of quality research and activity occurring across rural and remote Australia can guide the New Zealand AHPs (Boehm et al., 2017; Boshoff & Hartshorne, 2008; Bourke et al., 2012; Boyce, 2006; Burgis-Kasthala et al., 2018; Conomos et al., 2013; Greater Northern Australia Regional Training Network, 2013; Leys et al., 2017; McGirr et al., 2019; O'Toole et al., 2010; O'Toole et al., 2008).

One way that the Australian AHP workforce has adapted to meet the needs of those rural and remote communities is through the expansion and extension of scopes of practice. This has been achieved through interprofessional practice, skill sharing and delegation (Pelham et al., 2016). McKimm et al. (2013) have described the benefits of expanded/extended scope to include increased productivity,

reduced wait, and reduced cost. Australia has also been able to implement a number of AHP-led models of care, such as in Queensland, where various professions work as first contact practitioners, in settings such as emergency departments, and ear nose and throat outpatient, orthopaedic and neurosurgical specialist outpatient clinics (Clinical Excellence Division, 2016).

Partnering with education providers has also been a key success factor for strengthening the health professions working within rural and remote Australia. Recognising the need for a better connection between education and health, Health Workforce Australia led a nationwide discussion to shift the 'business as usual' approach towards a sustainable integrated program (Crettenden et al., 2014). This resulted in nationally coordinated action between government, industry, and education, alongside the various professional bodies that would better meet community needs. In turn, universities such as James Cook University and Queensland University of Technology have developed collaborative programs aimed to fill both current and projected future workforce challenges (James Cook University, 2017).

The Greater Northern Australia Regional Training Network has developed a rural and remote generalist allied health project to 'support the development of clinical training models for allied health professionals' (Greater Northern Australia Regional Training Network, 2013) as it recognises that the lack of understanding of the tasks required by these professionals in rural and remote areas was limiting the ability of educators and organisations to provide training and resources, or design effective models of care (Greater Northern Australia Regional Training Network, 2013). The postgraduate program designed for early career AHPs that emerged from this work has created a pathway to develop practical, work-integrated skills that support the needs of rural and remote communities (James Cook University, 2017).

3.2.4 The future of health workforce education in New Zealand

A not dissimilar theme appears within the MoH literature, where there are references to Health Workforce New Zealand proposing the creation of more generic roles such as rehabilitation practitioners, who would be 'more effective' (Ministry of Health, 2014) than specific roles such as in physiotherapy or occupational therapy, particularly in harder-to-staff and smaller workforce areas.

The literature proposes streamlining learning across AHPs to allow for members of the allied health, scientific and technical workforce to 'gain new skills or switch disciplines without having to start from scratch' (Health Science and Technical Workforces Working Group, 2013; Ministry of Health, 2014). The literature proposes development of a health sciences degree with elective papers for specific therapeutic interventions – something not currently available in the New Zealand education environment – in a form that is within the scope of the *Health Practitioners Competence Assurance Act*.

Taking what has been learnt, from the examples above, and leveraging this learning within the context of the current MoH New Zealand Health Strategy (Ministry of Health, 2016b), has potential. Certainly, the strategy appears to have some strong preventative and population health aspects, which could be interpreted as advantageous to the advancement of AHPs. Action 24 of the strategy specifically states that we must 'identify ways to best use the skills and expertise of the allied health workforce' (Ministry of Health, 2016b) as well as work in partnership with other ministries, including education, to ensure that workforce development enhances diversity, capacity, capability, flexibility and sustainability through succession planning (Ministry of Health, 2016b).

This health strategy is not markedly different from the last, nor from the activity occurring elsewhere in the health system (Ministry of Health, 2016b). Given this and given we have not necessarily seen a parallel shift in allied health roles, some consideration needs to be given to the role of the MoH in bringing this to fruition and strengthening and optimising use of the allied health, scientific and technical workforce. At a recent Health Informatics New Zealand Conference, the Accident Compensation Corporation (ACC) (Mulligan et al., 2012) CEO Scott Pickering (Pickering, 2017) spoke about the ways that ACC is transforming, including their commitment to working in partnership with physiotherapy education providers, to ensure they are preparing graduates for ACC's activity. While partnerships are key, preparing a workforce for a narrow specialist scope such as that of physiotherapy within the ACC-funded accident and injury space will continue to silo and restrict professions and add to the challenges for rural recruitment.

Conversations with education providers suggest they are also committed to a broadening of professional practice rather than just further specialisation. The University of Otago, for example, is committed to extending and enhancing their Rural Health Plan (Division of Health Sciences Rural Working Party, 2015) to reflect the necessity for interprofessionalism, generalism and a breadth of scope, and fluidity within professional partnerships for rural healthcare workers who 'work closely together and often share caseloads' (Division of Health Sciences Rural Working Party, 2015). Together with the Auckland University of Technology and the University of Auckland, they aim to find ways to 'do things differently and better' (*Rural Medicine School Well Intended But Misplaced*, 2017), including exploring the potential to further extend the scopes of practice of nursing and other health professions.

3.2.5 Where to next?

An examination of the strategies that have been utilised by the medical and nursing workforces within New Zealand is useful in helping AHPs to understand the politics and areas of leverage available when strengthening the voice of AHPs at national and district levels. So too does an examination of the development of rural allied health practice in Australia, where rural generalist postgraduate training is creating opportunities for a variety of AHPs (Greater Northern Australia Regional Training Network, 2013; James Cook University, 2017).

The traditional, hierarchical models that continue to exist within health systems have been disrupted, in part, where the necessity of rural service delivery has required it. Rural medical generalists, rural nurse specialists and rurally focused urban specialists delivering care remotely via telehealth are a testament to how the power is starting to shift (Lucas et al., 2016). Realising ways for AHPs to meet the needs of rural populations is key to the survival of allied health within the public and private health settings, and indeed the survival of locally based health services. These rural populations, usually small, present limited opportunities for the development of specialist practice and limited funding to provide the higher staffing levels needed to travel significant distances, to see small numbers of patients. Working collaboratively and in interprofessional ways leads to better health outcomes (Makic & Wald, 2017), creates efficiencies and enhances the professional development

and enjoyment of the clinicians involved (Dimas et al., 2016).

Unless the various and markedly separate AHPs are willing and able to live within the duality of professional clinical autonomy and collective professional identity, the opportunity to develop cross-disciplinary partnerships, embrace interprofessionalism and build workforce capabilities seems largely unachievable. How then do other professions, whether as a collective, such as the allied health, scientific and technical workforce, or individually, such as physiotherapists developing a rural generalist scope overseen by their registering body, create further shift? What questions do we need to ask next, as a workforce? And who do we need to engage with and work in partnership with to ensure that the allied health workforce of the future will have the skills and knowledge required to support the health and wellbeing of rural and remote communities? And lastly, for now, should this work be for AHPs collectively, or should our focus be on ways that AHPs, nursing and medical staff can share the power, share the clinical activity, and truly place ourselves around our patient, who is at the centre of what we do?

With workforce shortages, changing community expectations and new ways of working developing rapidly, AHPs in Aotearoa New Zealand have an opportunity to lead the change required for rural health care. Partnering with our nursing and medical colleagues and learning from our colleagues in other countries who are working to solve these issues for allied health as well, offers an opportunity to positively influence national strategy as well as targeted development of the rural AHP workforce.

3.3 Further Reflection from Updated Review

Having ascertained the approach for the majority of literature available during the time period of the first review, it seemed appropriate to build my research in a way that would capture the thoughts, feelings and beliefs of rural and remote AHPs directly. This would offer a different way of considering the challenge of recruitment and retention; one that is grounded in what those who work in rural and remote places tell us. Additionally, given the dearth of literature relating to AHPs in

Aotearoa, undertaking research directed at this population would bring significant impact, regardless of the study findings.

When the subsequent literature review was undertaken in 2022, it was pleasing to see that the available literature was growing in terms of approaches, perspectives, and backgrounds of authors (see **Table 3**). Key learning from this additional published literature is described in more detail below in Section 3.5. Since publication in 2019, academic interest in strengthening the rural and remote allied health workforce has grown. Having been unable to find any articles relating to strengthening this workforce in Aotearoa for our original literature search during 2017-2018, it was great to source two papers published in the subsequent years. Of these, one is a scoping review "to determine what is currently known of the AH workforce in rural Aotearoa" (Walker et al., 2022, p. 259), and the other utilised a qualitative descriptive approach to understand podiatrists' perceptions of working rurally (Beeler et al., 2022).

Offshore, this body of work is also growing. Replication of our literature search of articles published prior to 2018 was conducted in 2022 and a further 30 articles relevant to AHPs were identified, compared to 59 during the initial search. This is a notable increase in literature over the last five years which is heartening. Most of the literature continues to be from Australian authors and contexts (Axtens et al., 2019; Barker et al., 2021; Beccaria et al., 2021; Beks et al., 2022; Brown et al., 2017; Campbell et al., 2021; Cosgrave, 2020a, 2021; Couch et al., 2021; Daniel et al., 2021; Denese et al., 2020; Dymmott et al., 2022; Furness et al., 2020; Irving et al., 2017; Jessup et al., 2021; Kumar et al., 2020; Lienesch et al., 2021; Martin et al., 2020; McMaster et al., 2021; O'Sullivan & Worley, 2020; Ramsden et al., 2021; Roberts, 2018; Sutton et al., 2021; Taylor et al., 2022; Yisma et al., 2021). Despite issues of recruitment and retention in rural areas of AHPs being experienced worldwide, there were only four new relevant articles relating to Aotearoa, compared to 15 in the initial search. Across all literature there continues to be a balance between research focused on education (pre-qualification) and employment (post-qualification).

3.4 Limitations of Review

This review includes articles from diverse communities, and a wide range of health and disability systems. This diversity was important, because rural communities are diverse and so are the range of professions within the collective known as Allied Health, Scientific & Technical (AHST). This diversity also meant that the spread of article topics lacked quantity within each topic area. Due to the relative scarcity of literature in any specific topic, all methodologies and epistemologies were included. Starting out broadly, and then using additional specific keywords, allowed me to broadly sweep relevant fields of research. Still, this somewhat organic approach to identifying relevant papers may mean that not all relevant articles were identified. Additionally, taking a learner researcher approach to literature searching meant that some search strategies were not discovered until later when the search was updated in 2022 (see Chapter Two, Section 2.4). One example of this is the use of academic blogs, and the citations and links used in those articles such as at attractconnectstay.com.au or optimizingruralhealth.org.

3.5 Key Learning

This process of engaging with the literature relating to the recruitment and retention of health workforces, in Aotearoa and abroad, and more specifically on allied health workforce literature, identified a number of key areas of interest. First, at the time of the initial literature search (2017), there was no literature specifically relating to recruitment and retention of AHPs authored in Aotearoa. Between 2017 and 2022, three articles about rural AHP recruitment and retention, including my own published review, had been published (Beeler et al., 2022; George et al., 2019; Walker et al., 2022). The concentration of literature from Aotearoa continues to focus on the medical workforce, primary care specifically, though is again not large. Fortunately, much can be gained from the research emerging from our Australian AHP research counterparts. With similarities between the rural regions in Aotearoa and the regional areas in Australia in aspects including population density, demographics (such as age, socio-economic status) and local health service availability, parallels can be drawn from Australian research findings.

Second, the literature over both time periods has shifted from a predominance of quantitative research and systematic reviews to more qualitative research engaging with those working and leading front-line rural and remote health care delivery. The most common topic of research relates to the education of the future AHP workforce, with a range of articles exploring the structures of rural clinical placements (Brown et al., 2017; Johnston et al., 2017; Taylor & Glass, 2018; Taylor et al., 2019; Walker et al., 2018) and experiences of those hosting and undertaking rural clinical placements (Craig et al., 2014; Gum et al., 2013; McKinlay et al., 2016; Mortimer et al., 2019; Pelham et al., 2016; Prout et al., 2013; Racic et al., 2019; Shannon et al., 2005). This research has found that student experiences of rurally based health education were largely positive, increasing their understanding of rural communities and their likelihood of working in a rural or remote setting in the future. Of more importance clinically was their finding that undertaking a component of clinical placement in a rural or remote community prepared students to better understand a broader range of vulnerable populations, an essential component of culturally sound clinical practice (Prout et al., 2013).

A third key area of interest is the subset of literature considering the role of specialism, generalism and extended scopes of practice. This literature considered what rural clinical care looked like from a disciplinary approach, often described as Rural Generalism. The term rural generalism "refers to a service, or to a position, or practitioner delivering services that respond to the broad range of healthcare needs of a rural or remote community" (Services for Australian Rural & Remote Allied Health, 2023). Within the literature, it most commonly appears as being a medical scope of practice (Nixon, 2017); reflective of the longevity of the rural generalist medicine tradition internationally, rather than because rural generalism is only a medical scope of practice. While not as well advanced, programmes to define and develop rural generalism in nursing, midwifery, pharmacy and the allied health therapies are increasingly featured within the literature (Bell et al., 2018; Lyle & Barclay, 2015; Marshall & Aileone, 2020; Swain, 2014; Walker et al., 2022). The literature is growing with evidence to support the potential of rural generalism to achieve better outcomes for rural communities (Allied Health Professions' Office of Queensland, 2015; Blattner et al., 2019; Lyle & Barclay, 2015;

Worley, 2023). The career pathways rural generalism creates for AHPs may offer an additional attraction to working rurally.

Given the increase of research activity relating to AHPs in rural communities, and to reducing health inequity for rural and remote New Zealanders, more locally produced literature is now available. So, too, has the volume of literature grown in Australia and further afield. This has come with a shift towards more engaging research, aiming to highlight what is happening on the ground, what has been tried and what is worth trying again or instead.

Collectively, it adds strength to both the call for more to be done to develop, recruit and retain AHPs, as well as the acknowledgement that this is a complex problem which requires a range of solutions including linking and co-ordinating existing strategies (Wakerman et al., 2019). The insights provided within the literature as to how other countries and other professional groups have approached the challenges of attracting and retaining health professionals to rural and remote areas offer tangible strategies to assess with AHPs in Aotearoa, and those seeking to employ them. For Aotearoa, the gap of knowledge remains as to what is required for this wide-ranging set of professions, to be willing and able to work in rural and remote locations. The current model of funding and support for the training of health professionals is impacting on this challenge.

3.6 CHAPTER SUMMARY

This chapter has drawn together the original literature review, published in 2019, with a further review undertaken to capture all of the research that has emerged between that time and the finalisation of this manuscript. It has found that, while more people are placing research attention and activity on the gap in knowledge about how to successfully recruit and retain AHPs in Aotearoa's rural and remote health systems, more is still needed. Without Aotearoa-specific research to draw on, we will continue to look to our near neighbours in Australia, and further afield to gain insights from their research efforts.

4 METHODOLOGY

4.1 INTRODUCTION

In this chapter, I will articulate the key principles, aspirations and objectives that informed the methodological direction of my research. This chapter also sets out a theoretical orientation to my thesis. I will describe my ontological and epistemological position and how my methodological approach has been designed to provide robustness, rigour, and respect for the data and those who have shared their stories and experiences.

4.2 SEEKING TO UNDERSTAND

At the beginning of our research careers, the "how" of research was described as the tools, the frameworks, and the devices we use to collect data, such as questionnaires. When asked, "What methodology are you using?" the most common response was either quantitative or qualitative, or a mix of the two—mixed methods (Creswell, 2018). James (2015) uses an iceberg metaphor to illustrate that methodological design is the combination of tools/instruments, methods, methodology, ontology, and epistemology. In the metaphor, James (2015) reminds us that while we can only see the methods of a piece of research, namely the tip, or about 10% of the iceberg above the water, the study or "ology" underpins the methods (methodology), how we know things (epistemology), what is real (ontology) and what is valued (axiology). If we were to carve off a section of this research iceberg, we would again only see a tip or around 10% of the new iceberg; it requires its entire make-up to function or float, as is the case with a real iceberg (James, 2015).

Each of these "ologies" are distinct and all are required to scaffold the research question. Daniel and Harland (2018) offer a starting point for thinking about ontology and epistemology as follows: "Ontology is synonymous with our personal beliefs, views and values and epistemology is about the ways we come to know something" (Daniel & Harland, 2018, p. 33). It is by understanding our own answers to each of these ologies that we can build research that will be meaningful, ethical, and replicable, through our choice of methodology. Methodology is concerned with the potential and

limitations of the various techniques, procedures, or methods of scientific enquiry (Grix, 2002). This journey of understanding could be described as linear, as illustrated in **Figure 5** below.

Figure 5.

Interrelationship between the Building Blocks of Research

Ontology	**Epistemology**	**Methodology**	**Methods**	**Sources**
				
What's out there to know?	What and how can we know about it?	How can we go about acquiring that knowledge?	Which precise procedures can we use to acquire it?	Which data can we collect?

Note. From "Introducing Students to the Generic Terminology of Social Research," by Grix (2002), *Politics*, 22(3). https://doi.org/10.1111/1467-9256.00173. Copyright 2002 by Political Studies Association. Reprinted with permission.

Grix (2002) challenges us to exercise caution when defining methodological design as having a directional relationship between these key building blocks. Rather, it is worth considering that the methodological design process is a circular one, where we develop our personal beliefs, values, and views by considering what there is to know. The design process explores how we can deepen or expand what we know, identify the best methods to acquire this knowledge, and apply the mechanics of the method to collect the required data, which will provide new insights into what is out there to know, bringing us full circle again.

Understanding each of these components helps us to describe the systematic thinking we set out to apply to the chosen topic or research question. This is described as the research philosophy, the way in which we aspire to invoke curiosity (O'Leary, 2017). When considering the challenges rural health providers face in recruiting and retaining clinical staff, it is useful to consider how curiosity has been invoked thus far.

Through my analysis of existing literature (Chapter Three), I was able to identify some specific ways curiosity has been applied to the question of how to overcome these recruitment and retention challenges in rural and remote health settings. As described previously, the literature specific to the recruitment and retention of AHPs in rural areas is limited, with GNARTN (Greater Northern Australia Regional Training Network, 2013), and the Queensland government predominating (Allied Health Professions' Office of Queensland, 2013, 2014, 2015, 2017).

While not evident at the beginning of my own research endeavours, over the course of the last five years researchers have shared findings gained through in-depth qualitative interviews (Beeler et al., 2022; Brown et al., 2017; Cosgrave, 2020a; Cosgrave et al., 2018a; Kumar et al., 2020). These pieces of research all appear to take a constructivist approach; acknowledging that the reality of the experiences being studied are co-created between the researcher and participant, the latter being the focus of the research (Guba & Lincoln, 1994). I would argue that this approach, of learning from those who directly experience working as AHPs in rural and remote areas, is essential. Without asking those who are making the decisions to come, stay or go, recommendations for the recruitment and retention of staff may miss the mark. Therefore, I recognised that choosing a constructivist epistemological approach was important.

As a researcher, my personal values, professional background, and rural connections influenced my choice of philosophical approach. I explore these in more depth in the next chapter (see Chapter Five). My philosophical approach is strongly informed by my social justice values (my axiology), specifically Social Justice Theory (Liamputtong, 2009). This theory is, like I am, concerned with equity, access, participation and rights, all significant values of my profession and brought into focus in the context of rurality.

With so many repositories of knowledge worth bringing to the research question, being able to approach multiple areas in a very open, unstructured way and use the knowledge gained to bridge these perspectives may be the best approach to uncover a theory strong enough to inform changes to

the way New Zealand funds, educates, supports, and empowers the allied health workforce to work in rural and remote settings.

4.3 Finding Methodological Fit with the Research Question

The challenges facing rural and remote health care, although well documented (Bourke et al., 2012; McGrail et al., 2013; Russell et al., 2013), have yet to find robust and lasting solutions, at least in terms of well-evidenced research. For those employing AHPs, there is even less to be found in academic literature, or policy reports which can guide health providers, educators and policymakers who wish to resolve the chronic shortage of staff and high turnover. Understanding the perspectives of those who may hold the answers to the challenges of recruitment and retention of allied health professionals in rural and remote locations is a driver for this research.

Within the Aotearoa context, those most likely to hold answers to why rural and remote health services are constantly challenged in relation to allied health staff recruitment and retention are likely to be the staff themselves; including those currently and previously employed and those exploring but yet to join rural and remote health teams. Gaining insights from these groups requires a methodology which centres on the participants' experiences, and recognises how these are shaped by cultural and social factors (Guba & Lincoln, 1994). This research aims to explore what matters to allied health professionals working in a rural/remote health setting (or having worked in one) and, as a result, to develop insights for future recruitment and retention strategies. Exploring these features may assist in strengthening the rural workforce pipeline. With this in mind, several methodological options were considered including Grounded Theory (Glaser & Strauss, 2017), Action Research Theory (McNiff, 2013), Case Study Research (Yin, 2014) and Interpretive Description (Thorne et al., 1997).

4.4 Considering Methodological Options

The first of the methodological options considered was "Grounded Theory" (Glaser & Strauss, 2017). The grounded theory approach aims to develop theories from the data, rather than approach the data with a hypothesis in mind. Glaser and Strauss (2017) proposed that it was better to immerse oneself in

the data, gathered through interviews and observations, rather than setting out to prove or disprove a hypothesis. In grounded theory, the researcher moves back and forward throughout the data analysis, comparing and coding the themes which are "emerging". These codes are then mapped via relationships to each other to ultimately define the overall theory or core phenomenon as well as causal conditions, strategies, and consequences (Charmaz, 2014).

While some research has been undertaken as to why rural areas struggle to recruit and retain health professionals, there is little clear evidence of a comprehensive understanding of what the problems are, as defined by the professionals themselves, the governing bodies, politicians, or academics. Grounded theory's aim of discovering the problems from those perspectives—and, furthermore, to find out how those people would define solutions (Smythe, 2012)—provides an opportunity to better understand "what's happening here?" (Glaser, 1978).

"Action Research Theory" was also considered because it is open-ended, or iterative, and allows continual cycles of change, reflection, and learning (Koshy et al., 2011, p. 6). It places the researcher inside the research, rather than as an observer looking in from the outside (McNiff & Whitehead, 2011). The methodology of action research provides a systematic approach to looking at the behaviour of the researcher and participants, in this case AHPs working in rural and/or remote locations, as it relates to the research topic and the reason(s) for that behaviour. It provides a form of self-evaluation, as the researchers progress through cycles of activity to achieve change within their studied environment. Ultimately, action research aims to empower those on the front-line to take action to improve their practice, rather than being subject to the research of others (Lewin, 1946).

"Case study" research (Yin, 2014) was the third qualitative methodological option considered. This methodology employs a strategy of investigating an existing, real life and often complex issue using multiple sources of evidence (Harrison et al., 2017). This means that the research is happening within the actual context where the phenomena being studied are occurring. By doing this, the researcher can notice and take into consideration all of the contextual factors, all those relationships, activities and circumstances that are going on as well (Hancock & Algozzine, 2016, p. 15). The case study approach

may be descriptive, exploratory or explanatory and be focused on the process, or the outcome; asking "What is going on? How was it done?" or "Does it work?" (Hancock & Algozzine, 2016, p. 39). Case study methodology is often used when there is little known about the phenomenon, and therefore more structured approaches such as structured interviews, questionnaires or surveys cannot be designed, as it is not clear which questions to ask (Harrison et al., 2017).

The final qualitative option considered was "Interpretive Description" (Thorne, 2016). This methodology focuses on creating a broad, contextually situated description and understanding of a particular phenomenon based on the viewpoints and experiences of the individuals involved. With origins in the clinical profession of nursing, this pragmatic approach supports researchers to develop knowledge about human phenomena, such as experiences of health and illness, without sacrificing theoretical or methodological integrity (Thorne et al., 1997). This methodology is not prescriptive, and encourages researchers to utilise the most appropriate design techniques available from across the full range of qualitative approaches—whatever will support the research question and maintain the integrity of the purpose of the study (Thorne, 2016).

Interpretive Description was developed in recognition of the fact that existing methodological tools were being woven together by practitioner researchers when one method alone could not meet the needs of their clinical research. It also arose out of the recognition that there was a tendency to rely on a range of philosophical and methodological traditions from outside the discipline, rather than acknowledging the depth of disciplinary theory and learning that the researcher could build on (Thorne et al., 1997).

Having considered these four options, it was useful to compare each methodology to determine which would offer the best fit with my topic and research questions. The pros and cons of each approach in relation to my aims and purpose are included in **Table 4** on the following page:

Table 4.

Comparison of Methodologies for Best Fit with Topic and Research Question

Methodology	**Advantages to using this approach for my study**	**Disadvantages to using this approach for my study**
Grounded Theory (Glaser & Strauss, 2017)	- Takes a "what's happening here?" approach to studying people's experiences - Predominantly gathers data through interviewing - Allows the researcher to become completely immersed in the data rather than examine it with a hypothesis in mind	- Sample sizes can be very large - Time and resource intensive - Difficult to define parameters and potential impacts on participants at the outset - Primary focus on process and theory development, rather than producing applied knowledge/tangible recommendations for practice
Action Research Theory (McNiff, 2013)	- Open-ended, allowing for continual cycles of change - Collaborative approach - Positions researcher within the research	- Requires a clear plan of action to be identified prior to commencement of study - Requires intensive investment by participants as co-researchers - Transferability can be an issue
Case Study Research (Yin, 2014)	- Well set up to examine processes - Allows for multi-case design - Suitable for examining documents as well as interviews/observations	- Researcher subjectivity can be an issue, particularly where a cohort is as varied as allied health professionals are - Requires onsite observations which would limit diversity of participants due to geographical location and dispersion
Interpretive Description (Hunt, 2009; Thorne, 2016)	- Allows for the collection of rich and detailed descriptions - Real-world applicability - Centred on participants' experiences - Flexible - Focused on generating practice-oriented findings - Values and legitimises existing disciplinary knowledge and practice experience as part of the research process	- Limited resources for situating methodology - Less commonly known methodology, making it challenging to be supported to use - Can create uncertainty as to the degree of interpretation required

Each of these methodological approaches offers effective tools to examine the research question, and each have strengths and weaknesses in relation to my research question and aspirations. Having explored these options, I decided to use Interpretive Description (Thorne, 2016) given it provided a pragmatic approach, and supported the intended direction of the research; to discover strategies and apply these to improve the recruitment and retention of allied health professionals in rural or remote settings.

4.5 TAKING A PRAGMATIC APPROACH | INTERPRETIVE DESCRIPTION

Interpretive Description seeks to access an important kind of knowledge about human subjective experience (Thorne, 2016). This research methodology was developed by Sally Thorne and colleagues and aims to support clinicians to undertake research, within their sphere of practice, which is meaningful and produces findings which are applicable within that practice setting (Thorne et al., 1997).

As its name suggests, this methodology emphasises the importance of interpreting the data within its context. As researchers, we are required to go beyond describing the data to instead both understand and interpret the meaning within it. This allows us to develop a detailed and nuanced description of the phenomenon we are studying (Thorne, 2016). Recognising and working with the contexts of what is being studied—whether that is the clinical, cultural, social, or historical context—is also important, in order to understand and describe contextual issues, as the methodology requires. Interpretive Description recognises that clinical researchers commonly look for meaning and explanation that will support improved clinical care, rather than being satisfied with a description of the phenomenon alone (Thorne et al., 2016).

Interpretive Description is a deliberately flexible approach which draws from a range of methods and tools commonly ascribed to methodologies such as grounded theory, ethnography, and phenomenology. Interpretive Description is described as a pragmatic methodology due to its aim to produce findings with application to real-world clinical practice. For this reason, the research question needs to be situated within the practice setting, the data taken from the practice setting and interpreted

in the context from which it was taken, so as to generate new knowledge for that context (Thorne, 2016).

Interpretive Description research takes place within the context where the phenomenon occurs and sets out to see the phenomenon in its natural state (Lincoln & Guba, 1985). Furthermore, it supports researchers who are drawn to understand all of the detail; the who, what, where, when and how that makes up the phenomenon being researched (Sandelowski, 2000). Descriptively capturing the phenomenon provides one component of the approach.

Data analysis is initially based on the coding of data and "memoing" by the researcher. This activity is overlaid by an interpretative inquiry where the researcher is challenged to constantly question what they are seeing; "Why is this here? Why not something else? And what does it mean?" (Thorne et al., 2016, p. 7). This provides the framework to uncover themes, leading to new insights, while maintaining integrity and credibility due to the epistemological rigour of the analytic process. Strategies that scaffold this rigour include checking understanding with participants, peer debriefing or academic supervision and drawing from multiple data sources (Thorne, 2016).

Interpretive Description assumes that knowledge is socially constructed and subjective. It requires us to acknowledge the context from which we produce our findings and recognise that our own experiences and assumptions can influence how we interpret the data. Interpretive Description also recognises that social phenomena are complex and multi-faceted because of being shaped by social, cultural, and historical contexts. Recognising the importance of these contexts is key to understanding our study, as is recognising that they can influence how we interpret the data (Thorne, 2016). These epistemological and ontological assumptions are relevant for my research. This is because, as a health leader within a rural context, I am invested in learning how to improve the recruitment and retention of allied health professionals. Maintaining cognisance of these assumptions throughout the study will support me to ensure I am challenging my pre-existing understandings, checking my own assumptions and being as responsive to the data as possible, rather than being influenced by the contexts that have shaped my desire to address this area of research.

Theoretical scaffolding is an important component of Interpretive Descriptive methodology, in that it ensures the researcher knows themselves as well as knowing the existing knowledge and literature on the desired area of study (Thorne, 2016). The latter is achieved through conducting a literature review, as I have presented in Chapters Two and Three. The former aspect of theoretical scaffolding—knowing myself as researcher—requires an understanding of my positioning and practice experiences, which are examined in the next chapter (see Chapter Five). Moreover, it requires me to reflect on how my identity as an AHP informs not only my view of the world but of the research process itself.

As Interpretive Description aims to deliver quality research which will make sense of something that is already understood by clinicians, it also operates within the real-world context of health care that is as diverse and changeable as the humans within it. Therefore, the intended outcomes of an interpretive descriptive study are to offer a "tentative truth claim" (Thorne et al., 2016, p. 4), which can extend insight into practice decisions, informing clinical reasoning and resonating with the clinical instincts of our audiences (Thorne, 2016).

4.6 Quality and Rigour in Interpretive Descriptive

While Thorne (2016) is very clear that Interpretive Description methodology does not provide a road-map for research methods, it does provide the researcher with the concepts, procedures and principles that allow us to defend the worth of our research on more than simply our word (Thorne, 2016). Thorne argues for an appropriate level of credibility in both research design and reporting. This can be achieved by ensuring that the research design is scaffolded by both the evaluative criteria of qualitative research and a solid foundation of the disciplinary domain within which we are seeking knowledge (Thorne, 2016). This supports health researchers to meet clinical and professional obligations, in terms of recognising the moral responsibility researchers have to ensure the findings could reasonably and safely be applied to real-world situations.

Interpretive Description methodology sets out four quality principles to support rigour and trustworthiness. These principles are coupled with a moral obligation that behoves health science disciplines to be of benefit to individuals and the collective (Thorne, 2016) beyond the usual standards

of qualitative research. The first principle is *Epistemological Integrity* (Thorne, 2016, p. 233) whereby there needs to be clear resonance between what we want to research and how we want to research it, as well as a comprehensive understanding of the point of view from which the research approaches the question. These components ensure that the findings fit logically with the research process and are therefore credible.

My research design supports this principle in that I want to know, "What matters to AHPs in rural/remote contexts?" I am researching this question by asking relevant AHPs and we are approaching this question from the perspective of rural/remote health leadership. The research design is also underpinned by my professional, rural, and clinical identity, which I describe in more depth in the next chapter (see Chapter Five). Through recognising what I bring to the research design, I am able to identify how aspects of my *self* have contributed to developing the research questions, constructing meaning from the data and unintentionally impacting on the process of research in undesirable ways (Thorne, 2016, p. 79).

The second principle is *Representative Credibility* (Thorne, 2016, p. 234). This requires the researcher to demonstrate they have considered the research question and gathered the data from a multitude of perspectives, viewpoints or "angles of vision" (Thorne, 2016, p. 234). Through gathering data from a range of professions, and drawing on literature both locally and internationally, as well as both relating to AHPs and other professions, the aim has been to develop knowledge that accounts for these multiple views. However, this aspect of credibility should not be reached by striving to have a sufficient volume of participants, nor by giving priority to those with the most status. Instead, Thorne (2016) recommends we use thoughtful and transparent sampling logic, which I have described further in my methods chapter (see Chapter Six).

Analytic Logic, the third principle, needs to be demonstrated comprehensively; as Thorne notes researchers cannot simply reassure the reader that they have used an inductive reasoning process (Thorne, 2016, p. 234). Being descriptive to explain our reasoning is an essential part of the process by which we illustrate, with our data, what we have learned. Evidence of this inductive reasoning is

laid out in subsequent chapters of findings, practical implications and discussion (see Chapters Seven to Nine), which will also demonstrate observance of the final principle, *Interpretive Authority* (Thorne, 2016, p. 235). This requires the researcher to demonstrate their trustworthiness in interpreting the data for the reader to have confidence in the findings and to be able to engage in the data themselves, in ways that support that confidence.

This study has been designed to respond to these principles of rigour and trustworthiness, to understand how to create a rural and/or remote work environment where people choose to work. It asks the people who do, have or are considering work in these environments *what matters to them*. There is a clear connection between what is unknown and who might know. The sample size allows multiple views to be taken in the collection of data. The use of "appreciative inquiry" (see Section 4.7) is intended to reduce tensions created by perceived power. The research design can be logically described and, when reported, is done in ways that are meaningful and believable.

4.7 APPRECIATIVE INQUIRY | VALUES TO DRAW FROM

"Appreciative Inquiry" is a philosophy developed by David Cooperrider as a component of his doctoral defence, and was oriented to organisational life (Cooperrider & Srivastva, 2013). It is based on the concept of the "heliotropic effect"; that is, that plants grow towards their light source (Arundell et al., 2021). Cooperrider argued that with the use of open-ended questions and focus on strengths, people would be able to respond with stories, engage in conversation and collaborate with their organisations to disrupt existing practices of focusing on deficits (Sharp et al., 2018).

Described interchangeably as a tool, a philosophy, a method and a methodology, Appreciative Inquiry utilises a four-phase inquiry process, known as the 4-D model: Discover, Dream, Design and Destiny (Griggs & Crain-Dorough, 2021). This process is intended to adhere to specific tenets. These are that inquiry begins with appreciation, that it is relevant to the system within which it is being utilised, that it is collaborative, and that it creates new knowledge which is both relevant and compelling (Dewar et al., 2020; Jefford et al., 2021).

Rather than using the specific methodological four-phase inquiry process, I have drawn on the tenets of Appreciative Inquiry's values in a way that weaves strengths-based inquiry with my own professional and personal values. I explore this further in the next chapter (Chapter Five) where I provide more context to my personal orientation towards the values and principles of Appreciative Inquiry.

4.8 Overview of Study Design

Table 5 (see below) provides a high-level overview of my study design and approach to addressing my research question and aims, pulling together each of the aspects of methodology used in my study that I have discussed in this chapter, and introducing the methods that will be discussed further in Chapter Six.

Table 5.

Overview of study design

Thesis title	**Understanding the complexities of recruitment and retention of Allied Health Professionals in rural health settings**	
Research focus	What do Allied Health Professionals (AHPs) identify as the attractive aspects of living and working rurally? How could this inform how we recruit and retain AHPs in rural and/or remote health settings?	
Theoretical worldview	**Axiology** *The study of the nature of value*	**Social Justice Theory** Informed by values of equity, access, participation and rights, and focused on noticing the diversity of values which exist within the area of research (Liamputtong, 2009)
	Ontology *Nature and form of being*	**Relativist** Recognising that reality is constructed through our lived experiences and interactions with others
	Epistemology *Nature of knowledge*	**Constructivism** Understanding that reality is co-constructed between the researcher and participants whose individual experiences are the focus of the research

Methodology How do we know the world, or gain knowledge of it?	**Interpretive Descriptive** (Thorne, 2016) Designed to qualitatively examine applied practice, from a disciplinary perspective, to address complex, experientially determined questions
	Appreciative Inquiry (Cooperrider & Whitney, 2005) Focuses on the strengths, successes and positive aspects of people and systems to support effective change
Sampling **The selection of a subset of the population of interest in a research study**	**Population: General sample** • Adult (over 18), allied health professional with rural or remote health care experience (self-selected)
	Purposive Sampling This sampling technique supported the selection of participants which meet the research purpose based on specific criteria, which included seeking diversity of: • allied health professions • ethnicity • location in Aotearoa New Zealand. **Information Power** (Malterud et al., 2016) This framework guided the determination of sample size, based on the research question, analytical approach, and quality of data
Methods A series of steps, or collection of methods, taken to acquire knowledge.	**Recruitment Survey and eligibility screening** https://aut.au1.qualtrics.com/jfe/form/SV_d0G6tsykbp4ijNX Software Used: Qualtrics™ (Qualtrics, 2018) **Semi-Structured Interviews (Appreciative Inquiry)** Guided by open-ended interview questions (see Appendix C: Interview Guide)

Data analysis	**Reflexive thematic analysis** (RTA) with the goal of identifying patterns of meaning within the data (Braun & Clarke, 2022)

4.9 CONCLUSION

The Interpretive Description methodology has been chosen as the most appropriate methodology because of its pragmatic approach to examining challenges within the practice setting. The main aim of this research is to identify the features that are most attractive to AHPs living and working in rural and/or remote communities, to inform recruitment and retention strategies. Through understanding the features that relate to AHPs seeking or maintaining employment, we can improve the recruitment and retention of this workforce, thus contributing to the improvement of services and health outcomes within underserved rural and/or remote communities. Utilising Interpretive Description methodology supports this aim, paying attention to each individual interviewed as well as identifying patterns and themes across individuals, professions and locations (Thorne et al., 1997). It also aligns with who I am as a researcher, clinician, and citizen of rural communities.

5 POSITIONING SELF IN INTERPRETIVE DESCRIPTION

This chapter takes up the challenge of positioning myself within my research, and will describe Thorne's reasoning for this challenge, as well as the perspectives that have shaped my approach to this research. As the previous chapter has explained, Thorne developed Interpretive Description to support the "fundamentally complex and messy" (Thorne, 2016, p. 11) pursuit of knowledge that can advance clinical practice and a profession's scope and impact. Inherent in this approach is a recognition on the part of the researcher that their own discipline brings with it a certain way of viewing the world. Also inherent is a sense of critical reasoning developed from the academic rigour of the qualification(s) associated with that discipline, and its application in practice. Thorne cautions us to gently hold this disciplinary orientation so that we can think as "wildly" (Thorne, 2016, p. 166) as possible; whether in reviewing the literature, or as we come to know our data and construct meaningful patterns through our analysis of that data.

When I embarked on this research journey, I did so as a health leader working in a rural location, as I have shared in Chapter One. I had identified a practice problem; ongoing challenges recruiting and retaining AHPs to my services. I had already begun to explore practical options to improve this situation, but this curiosity-driven inquiry felt loose, broad and lacking in credibility. The opportunity to apply formal inquiry to the problem, by way of the Doctor of Health Science programme at AUT, provided a container for my curiosity and a structure, through Interpretive Description.

In getting to know that structure, and in particular Thorne's challenge to researchers to "position your study within the disciplinary orientation that shapes it" (Thorne, 2016, p. 60), I had a growing sense that my disciplinary orientation does not only originate from my clinical social work discipline, but also from my experience as a health leader working in a rural setting. These three key areas (social work, health leadership, rurality) critically shape who I am as a researcher as well as a practitioner. Further reflection was warranted to better articulate how who I am contributed to my understanding of the literature and therefore how I developed the research question. In this chapter, I provide a reflective account of each of these three aspects to make explicit my positioning and the role that

these perspectives have had as I have navigated data collection and analysis to reach the conclusions I offer.

5.1 DISCIPLINARY | SOCIAL WORK

The social work understanding of "person in environment", coupled with our commitment to relationships and connection, underpins the way I engage in my responsibilities as a colleague, clinician, and leader.

> Social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion, and the empowerment and liberation of people. Principles of social justice, human rights, collective responsibility, and respect for diversities are central to social work. Underpinned by theories of social work, social sciences, humanities and indigenous knowledges, social work engages people and structures to address life challenges and enhance wellbeing. (International Federation of Social Workers, 2023)

Historically, practices in social work approached working with clients by identifying and overcoming obstacles, solving problems that stood in their way, and connecting clients with resources that they did not possess (Kelly & Gates, 2010). By working instead to discover and use their strengths, assets, and resources, we can offer clients an opportunity to reframe their experiences. This is the basis of strengths-based practice, an approach that is holistic; taking into account a client's abilities and circumstances in their entirety, and multidisciplinary working with others in the client's own networks as well as professionals (Baron et al., 2019).

The Recovery Model in mental health utilises a strengths-based approach to focus on a client's abilities, strengths, and resources to enable them on their journey towards recovery (Rapp, 2011; Xie, 2013). Aotearoa was an early adopter of the Recovery Model in mental health services, and the model's translation into practice was in its infancy when I undertook my clinical training placements in mental health services in the early 2000s (O'Hagan et al., 2012). This provided me with great opportunities to learn the value of taking a strengths-based approach, as I had occasions to compare

and contrast client engagement and outcomes when a strengths-based approach was used versus when client behaviour was pathologised or a deficits approach was used. The strengths-based approach also aligned with my values of appreciation and fairness, in that it offered space to get to know the client, reflect back to them aspects that were valuable rather than rely solely on the assessment of others.

Over the course of my social work and leadership career, I have used the strengths-based approach to shape how I work clinically, and in my engagement with staff and colleagues. When I was introduced to the Appreciative Inquiry approach (Cooperrider & Whitney, 2005) on my return to Aotearoa, while working in a mental health non-government organisation (NGO) as part of the Canterbury earthquake recovery, I quickly saw the synergy with strengths-based practice. I commenced my Masters research during that time, and began to incorporate the Appreciative Inquiry "cycle" (Cooperrider & Whitney, 2005, p. 21) into both research and service delivery.

In preparing the novice researcher to undertake data collection through interviews, Thorne counsels us to understand our strengths and weaknesses, and be prepared to unlearn the practices we have developed for clinical conversations, positioning ourselves as a "neutral facilitator" and "curious learner" (Thorne, 2016, p. 140). The role of neutral facilitator is inherent in social work as well, yet the role of social worker within agencies shapes or narrows our curiosity as we work to achieve the organisation's goals or hold the client's goals at the centre despite the organisation's wishes. Reflecting on how I have been pulled towards the goals of my organisation when recruiting and retaining staff was a critical component of readying myself to engage with my participants in a neutral way. So, too, was finding a balance between this neutrality and the component of my disciplinary self that would aid my role as curious learner; namely, my commitment to social justice.

The broader social justice aspect of social work, whereby social workers challenge social injustice and pursue social change (particularly in relation to vulnerable groups), was not something I consciously articulated as an aspect of my professional self in my leadership role. The wisdom of hindsight offers the links between the research aim to make life better for people in rural and remote communities and two important dimensions of social justice—fairness and equality (O'Brien, 2009).

These are also woven within the context and perspectives brought to this research. So, too, are other common features of social work such as systems theory, solution-based approaches and person-centred care (Fry, 2010), topics also emerging in the health leadership and management literature.

5.1.1 Privilege

My identity as a Social Worker has been shaped by the study of oppression, dehumanisation, and social justice. Within the Aotearoa New Zealand context, that includes the value of Kotahitanga[9], calling us to focus on "challenging injustice and oppression in all its forms, including exploitation, marginalisation, powerlessness, cultural imperialism and violence" (Aotearoa New Zealand Association of Social Workers, 2019). This training, overlaid on personal values of fairness and transparency, has meant I have intellectually been mindful of inequity, racism, and bias. Translating this knowledge into an embodied anti-racist practice was challenging.

In 2020, events in the United States, involving police violence towards Black people, created a global movement for White people to take action to consider their privilege and how the way that privilege is used is impacting on those with Black bodies, brown bodies, people from cultures or religions associated with colour. For me, this kickstarted a conscious journey to recognise my own privilege—White, able-bodied, Catholic upbringing, university educated, healthy, financially independent, professionally qualified—and to start to translate what I had already learned about inequity, racism and bias into my leadership, clinical practice, and citizenship.

When I considered the environmental or geographical privilege I had, and how it related to the focus of my doctoral research, I recognised that while I had been born rurally, and raised by rurally raised parents, I had a lot of privilege. This privilege came from living in the city during the stages in my life that allowed me to benefit from city schooling, from being able to get an after-school job, which led to the privilege of car ownership, funding for university, the privilege of being able to live at home while attending university, and student placements. For rural children who remain in rural or remote

[9] *Kotahitanga* is translated as unity of purpose, solidarity and coalition (Ryan, 2012)

areas, even those from families with financial privilege or the privilege of parents who support university education, many of the opportunities I listed are not available to them. Notably, there are no tertiary providers in rural areas. Rural children may not have role models to demonstrate or allow them to believe they can pursue a university education. These barriers to learning and growing within their own context are therefore significant.

Becoming more mindful of how my privilege creates voids in my curiosity and critique has been a fundamental challenge and opportunity afforded to me through the DHSc and by a wide range of social justice commentators and influencers. I am grateful for both my privilege, and the ways I can use it to hold space for the voices of rural and remote communities.

5.2 LEADERSHIP

My health leadership has always felt informed by my clinical discipline of social work, in terms of the inter- and intra-personal skills I utilise to lead, empower, and provide supervision to front-line leaders and staff. The ways that we are raised as leaders, just like the ways that we are raised as clinicians, leave an indelible mark on how we engage in our work. With the social work underpinnings discussed above, learning to lead within a recovery-focused industry and using strengths-based leadership principles (Rath & Conchie, 2008) provided a safe and supportive environment to develop leadership skills that are people-centred. It also allowed me to focus on maximising the experience and strengths of the workforce, individually as well as collectively. Just as it informed my clinical practice as a social worker and novice researcher, Appreciative Inquiry (Cooperrider & Whitney, 2005), a model that promotes self-determined change through a focus on the strengths that exist rather than the weaknesses, became part of my leadership kete[10].

In the busy context of a ward, hospital, or health system, looking for the problems or gaps so they can be plugged is commonplace. This can translate into the way that leaders approach their workforce; as challenges, rather than opportunities. Whenever I have fallen into the mindset of focusing on what is

[10] *Kete* means basket, kit or bag and is used here (and in common usage) as the abbreviated form of *kete aronui* or basket of knowledge and skills (Ryan, 2012)

wrong with someone, I have quickly found I lose connection with my sense of self as a leader and sense of wellbeing as a human. I have also found that in some settings, if I engage with my staff from a strengths perspective and speak of them in this manner, my approach can be dismissed as Pollyannaish, or excessively optimistic. Appreciative Inquiry provided the theoretical underpinning to explain and justify my approach, although I did not convince everyone! Being clear on what principles and perspectives inform my leadership, even when other leaders think they should be different, has been a key component of my development as a leader.

While I have not drawn on Appreciative Inquiry as a methodology using the "4-D cycle" (Cooperrider & Whitney, 2005, p. 21), the general tenets of Appreciative Inquiry were formative to shaping the development of my research question, "What do AHPs identify as the attractive aspects of living and working rurally?" As previously described, Appreciative Inquiry complements a strengths-based approach and, as such, it felt like the right lens with which to frame the goal of the research; that is, to understand how AHPs can be successfully recruited and retained in rural and remote health settings, rather than focusing on barriers to recruitment and retention.

My strengths-based orientation is also woven through the interview questions which invite the participants to share their vision for the future. As later chapters describe further, using strengths-based language with participants promotes conversations that could support the development of hypotheses, to translate what is learned from the data into the possibility for meaningful change. This is something I have observed time and again during supervision or mentoring sessions, where individuals have discovered they have resources which will support their goals.

My leadership approach is also underpinned by the tenet of social justice I mentioned earlier. As a professional leader for the collection of workforces that make up the Allied Health, Scientific and Technical professions, drawing on the social justice focus to achieve fairness and equality of treatment and outcomes for those workforces has been paramount to my leadership approach. In a health system that is still very hierarchical, being able to demonstrate a fairness of treatment across the varied AHST professions also models how the system should treat all professions. Championing

the rights and recognition of these professions is also an important research aim, given the scarcity of research evident in the literature relating to AHP workforce in rural areas.

5.3 RURAL CONNECTIONS

At a rural health conference in 2019, a presenter elicited a laugh from the audience when he said, "If you have seen one rural community [pregnant pause], you have seen one rural community". Of course, this is funny because people who live and work in rural and remote communities really do believe that their community is unique. On the West Coast, this is amplified whereby the people in Buller believe that people in Greymouth are vastly different, and different again are our South Westland or Grey Valley neighbours. This is despite them being considered one region from a system and organisational perspective.

Where you are less likely to get disagreement is in the perspective of rural people that those in the larger city centres think rural communities are backwaters and the people less capable, less worldly, or less valuable (Baker & Hess, 2019). While this perspective is inherently untrue, infamous incidents like that of former Prime Minister Helen Clark referring to Coasters as "Feral" (Young, 2001) have left a legacy.

While raised mostly in urban settings, I had the good fortune of being born rurally into an extended family network where rural lifestyles were prominent. Aunts and Uncles on both sides of my family lived on farms as employees, and my father was employed as a top-dressing pilot until he joined the police force; a career that stationed our family in a rural community in my last years of primary school. Holidays were predominantly spent in one rural community or another with family or friends, helping out at shearing time, hand milking, collecting kaimoana[11], learning to drive a tractor in a straight(ish) line or generally running free on the land. When back at home in the city, watching "A Dog's Show" (NZ On Screen | Iwi Whitiāhua, 2023), especially on the nights my Uncle was

[11] *Kaimoana* means seafood (Ryan, 2012)

competing, was a highlight. My connection to land, being in wide open and remote places, and a familiarity with rural and farming culture shaped me as much as my inner-city Catholic education.

My rural context created the conditions for this research, and the lens developed throughout my childhood of the value and the challenges of rural ways of life helped me to navigate the data collection. My background and the views of my rural family and friends also influenced how I constructed my expectations of rural life and communities, which required awareness, curiosity, and challenge as I held interviews, analysed the data, and engaged in the process of developing themes.

5.4 CONCLUSION

Recognising how the ways we view the world are unique to us and are shaped by the context and values of our discipline, our function and connection to whenua[12] is essential in Interpretive Descriptive endeavours. As this chapter has articulated, situating myself within my disciplinary, leadership and rural subjectivities enabled me to begin a practice of mindful awareness within this research context. It enabled me to recognise that I weave many parts of myself into the inquiry – both in terms of my research focus and methods.

[12] While *whenua* has more than one translation, in this instance it means land (Ryan, 2012)

6 METHODS

This chapter presents a comprehensive overview of the methods employed in this study. First, I will introduce the research design utilised in this study; the aims, participants, and recruitment processes. Then I will describe how the data were collected and analysed. I will conclude with an exploration of the potential research impacts and how these were scaffolded to support and enhance the study aim.

6.1 RESEARCH AIM

As I outlined in the Introduction (Chapter One, Section 1.1), the purpose of this study was to explore the reasons why allied health professionals choose to work in rural/remote areas in Aotearoa, by understanding what they identify as attractive aspects of living and working rurally. By understanding this, it is hoped that I will be able to articulate strategies to support rural and/or remote health systems to better recruit and retain AHPs.

6.2 RESEARCH QUESTION

What do Allied Health Professionals (AHPs) identify as the attractive aspects of living and working rurally? AND **How could this inform how we recruit and retain AHPs in rural and/or remote health settings?**

6.3 ETHICS APPROVAL

Approval to conduct this research was granted by the Auckland University of Technology Ethics Committee (AUTEC 18/424). A copy of this approval is in Appendix E: Ethics Approval. Locality approval was also obtained from recruiting localities. Key ethical considerations relevant to this study are discussed later in the chapter.

6.4 ELIGIBILITY FOR PARTICIPATION

People were eligible to participate if they were a registered AHP, as described in the Health Practitioners Competence Assurance Act (2003) or the Social Workers Registration Act (2003), and self-identified as having recently worked (within the last five years) in a rural or remote setting, were

currently working in such a setting or were actively seeking work in one. It was believed that participants self-identifying in this way would be able to speak to their experience of seeking employment and being employed in rural/remote settings, with recency providing consideration of contemporary health system and political contexts.

To clearly signpost for people to self-select into the study, I was deliberate in the language I used in the recruitment advertisements (see Appendix F: Study Advertisement), in the request email sent to organisations who might promote the research (see Appendix G: Request to Promote Research Email and Appendix H: Professional Bodies Contacted to promote research), and in where I advertised. Each set of correspondence included a clear link to the technology platform (Qualtrix™) which held more information about the study and information about the ethics approval process. Contact details of the research team were prominently placed for ease of access.

6.4.1 Exclusion criteria

People were excluded if they identified as a profession other than allied health, such as midwife (n = 1 applied to join the study but had to be declined). Because the designation of "rural/remote" was not clearly defined at the time of recruitment, as I described in the Introduction (Chapter One, Section 1.4), people were not required to prove their rural/remote status to participate.

6.4.2 Recruitment

Potential participants were recruited through multiple sources including through advertising via social media and organisational newsletters, reaching out to existing professional networks (see Appendix H: Professional Bodies Contacted to promote research), emailing DHB and primary health organisation (PHO) networks, and word of mouth. Information flyers were designed (see Appendix F: Study Advertisement), which provided an overview of the study, contact details for myself and my principal supervisor, and a QR code and weblink. This QR code and weblink directed potential participants to a Qualtrix™ survey (see Appendix I: Qualtrics Recruitment Survey) where they were able to learn more about the study and to register their interest in participating. A more in-depth information sheet was provided on the site (see Appendix J: Participant Information Sheet -

Interviews). This information sheet was also provided to potential participants who wanted to retain a copy of it separately from the survey. It was also used for any organisation requiring locality approval prior to them promoting the research.

Qualtrix™ (Qualtrics, 2018) is an online survey software available to AUT researchers, providing a secure platform for collecting and holding personal information. In this case, it was used to capture initial consent to be contacted and to collect data that could support screening for eligibility, and which could be used to inform sampling decisions (described further below). With that in mind, key demographic information was captured including gender, age, ethnicity, qualification(s), registering body, years of clinical experience, time spent working in a rural health setting and when (year).

Five of the people who volunteered to participate worked for either the West Coast DHB, where I am employed or Canterbury DHB, our transalpine partner. Those potential participants were invited to discuss their participation with one of the supervisors of this research, as independent parties, should they wish to. This provided a safe space for them to discuss any concerns and reduce risks relating to coercion. They were also made aware through the consenting process that their decision to participate, or not, would not impact on their role in any way and that they could contact the AUT Ethics Committee at any time, should they have concerns.

6.5 SAMPLING

The sampling approach utilised for this study was purposive sampling (Emmel, 2013; Malterud et al., 2016; Palys, 2012). Purposive sampling is a method used when the population being studied is small. It is used to ensure that the size of the sample, or group of participants, is sufficiently large and varied to meet the aims of the study. It requires researchers to be reflexive, so as to recognise what data are being collected, and what perspectives are missing or needed, throughout the data collection process (Emmel, 2013). I used this approach to ensure I would achieve diversity across a range of key characteristics within my participant group with an explicit focus on diversity of representation and experience. To achieve this diversity, I reviewed the list of potential participants and initially offered interviews based on the desired characteristics, which are outlined next.

To determine the size of the sample, I drew on Malterud's Information Power model (Malterud et al., 2016) which challenges us to ensure our sampling methods are "as robust and defensible as possible" (Malterud et al., 2021, p. 68). This approach offers five factors to consider: (1) the study aim, (2) how specific the sample is, (3) the use of established theory, (4) quality of dialogue between the researcher and participant, and (5) variation within the sample (Malterud et al., 2021). The factors provide guidance for sampling design to optimise information power, thereby lowering the required number of participants.

These factors translated into my research as follows. The research aim was to identify the attractive aspects of living and working rurally for AHPs, to inform recruitment and retention of that cohort in rural and remote settings. My desired sample was AHPs who currently live and work in rural and/or remote health settings, or have recently done so. I aimed to recruit at least six participants who were newly hired in rural/remote locations and at least six participants who had been working in a rural/remote area for more than one year. I also aimed to recruit participants who were considering a role in a rural/remote location, and those who had recently left a rural/remote role. This would allow me to speak with a wide range of AHPs throughout rural Aotearoa, and at varying stages of their career. In speaking with such a range, I hypothesised that I could produce transferable findings that were not specific to a geographical location, professional group or generation.

I also aimed to recruit participants who were representative of the broad allied health workforce, in terms of profession, gender and ethnicity. These aspects speak to the potential for variation in the sample, as defined by Malterud et al. (2021). The remaining two factors were the use of an established theoretical framework—in this case, Interpretive Description (Thorne, 2016)—and the quality of the dialogue between the researcher and participant. As a novice researcher, and interviewer, this last factor was potentially the weakest.

Considering these factors, it was determined that setting a sample range that allowed for diversity/variation and specificity within the sample, and that was large enough to accommodate any weakness within the dialogue factor, was essential. As Interpretive Descriptive studies can have

samples of almost any size (Thorne, 2016), application of the theoretical framework in that specific sense was appropriate. In addition to Malterud's criteria, I took into consideration what sample size would be manageable within the DHSc timeframe. With all these things in mind, I aimed to recruit between 18 and 24 participants, giving me sufficient information power while also ensuring a sample size manageable within the context of my DHSc.

6.6 PARTICIPANT SELECTION

The following table (**Table 6**) illustrates the range of professions, locations, genders and ethnicities of the people who volunteered to participate in the study via the Qualtrix™ survey (Appendix I: Qualtrics Recruitment Survey). As very few of the fields in the survey were mandatory, a number of the potential participants' demographics were unknown initially (see **Table 6** below). During the screening of these unknown respondents, some were discovered to be midwives and whānau ora navigators, who were not eligible to participate based on this study's inclusion criteria, outlined earlier in this chapter. This reduced the potential pool of participants to 42, with $n = 3$ found to be ineligible based on profession.

Table 6.

Potential Participant Characteristics

Professions	**Count**		**Gender**	**Count**
Psychologist	1		Female	35
Music Therapist	4		Male	6
Social Worker	18		Other incl unknown	4
Physiotherapist	4			
Dietitian	1		**Ethnicity**	
Occupational Therapist	2		African	1
Dental Therapist	1		British	1
Speech Language Therapist	1		North American	1
Pharmacist	2		European	1
Unknown	11		Māori	7
			Pacifica	1
Location			Pākehā New Zealander	26
North Island	24		Unknown	7
South Island	14			
Unknown	7			

As **Table 6** illustrates, 45 people indicated their interest in taking part via the Qualtrix™ survey (Appendix I: Qualtrics Recruitment Survey). As this was a much larger group than required, the sampling strategy described above was utilised. Selecting participants that came from a range of professions, as well as a variety of geographical contexts across Aotearoa, provided a picture of the collective profile of participants from the outset of recruitment and allowed ongoing recruitment to be targeted at any gaps. With some allied health professions being especially difficult to recruit and retain for rural communities, such as psychologists and pharmacists, I was motivated to include participants from those professions (Te Pou o te Whakaaro Nui, 2018).

It was also important to include participants from across as many regions as possible, because of expected variation in perspectives of what "rural" is across Aotearoa. Having participants from a wide range of rural areas across the nation was also key to gaining an understanding of the unique sets of features and challenges relevant to this topic that each community has; therefore, exploring the diversity and breadth of experience across settings was important.

Selecting participants who represented the diversity of gender and ethnicity across Aotearoa's AHP workforce was also important, while acknowledging that reliable data about the demographic makeup of these professions is challenging to obtain. After reviewing the first tranche of volunteers' data and making initial contact with all the volunteers, it became clear that a balance would need to be found when selecting participants. This was because participants are representative of a number of criteria, so selecting for one can create imbalance in another area. An example of this was gender; one profession had 95% of the volunteers who identified as male.

In practical terms, this sampling strategy was applied by first contacting all those who had volunteered who were the only representative of their profession in the sample pool. Where several people from one profession had volunteered, those first contacted were living in parts of Aotearoa where there were not yet other participants.

Twelve volunteers agreed to be interviewed as a result of this initial selection process. A further six participants were added at various stages throughout the data collection phase to address sampling gaps.

6.7 DATA COLLECTION | QUALITATIVE INTERVIEWS

Conducting individual, face-to-face, semi-structured interviews was the primary method of data collection, undertaken exclusively via videoconferencing. These interviews were audio-recorded to provide a record of the interview and to enable verbatim transcription. I conducted the majority of interviews unless the interviewee was known to me in my employed capacity. An independent

interviewer was used for those interviews, in acknowledgement of the conflict relating to my dual role as the primary researcher and clinical leader of AHPs in that DHB.

Semi-structured interviews are a common tool utilised for data collection in Interpretive Description studies. This is because the questions can be used as a basis for the interview, without restricting the purposeful dialogue (Hunt, 2009). A selection of topic areas underpinned but did not limit the scope of the interviews (see Appendix C: Interview Guide for a full copy). Interviews were anticipated to take between 60 and 90 minutes, and interviewees were informed of this as part of the recruitment process. In practice, most interviews were between 45 and 60 minutes. These were conducted using Zoom™, the free videoconferencing platform, which has the functionality to record the session in both video and audio forms.

The interview process was designed to gain an understanding of how the participant chose an allied health profession, whether other people influenced or supported their decision-making, and what led to them working rurally. I was interested to explore how participants made decisions more broadly, not only just about where they worked, and to get to know them by learning about what drew them to their profession. This offered insight into how much of their decision to work rurally was based on their upbringing (such as how decisions are made), their personality or the strategies of potential employers. The questions then explored what is attractive about where and for whom people work; with prompts on topics such as environment, educational opportunities, social network, role type, and terms of employment. These prompts were chosen as they featured in recruitment and retention, and workforce wellbeing literature. It was important that the interviewer did not lead the participants as it was important that their perspectives and experiences were heard, rather than be limited by the interviewer's perceptions or assumptions. While many of the questions could be read and responded to without any connection to rural or remote settings, prompting once the initial question was answered was used to then draw further discussion on their rural or remote experience specifically, if that was needed. Gathering data in this way allowed a fuller picture of the participants' perspectives and experiences to be gained, whether they were different in urban or rural contexts or similar.

Table 7 illustrates examples of the questions used to explore the various features of interest. A working copy of this question sheet with annotations can be found in Appendix D: Interview Questions Sheet (with markups).

Table 7.

Examples of interview questions

Features of Interest	**Examples of Questions**
Participant's decision to become an AHP	How did you decide to become a ### (their specific profession)? What attracted you to that profession?
Participant's experience of rural/remote health	Is your current job based at home or do you TRAVEL there, did you move there? How did you choose this role?
Key features of jobs	Thinking about jobs you have had, or that close friends or relatives have had, that were great, what were things about those jobs that made them appealing, that made you feel most engaged and effective?
Supporting decision-making	Can you tell me about a person who has helped you make a decision that turned out well? What advice did they offer? What did you value about their contribution?
Professional satisfaction	What are the three things you would most want to see happen during your professional career?
Research question	What do you think it will take to overcome the challenges of recruitment and retention in rural/remote areas? Do you agree with the literature that says people need to be born or trained in rural areas to choose to work rurally?

Using videoconferencing technology allowed far more flexibility with scheduling interviews, as the participants could offer times and dates in or out of work hours to fit their schedules and it was not reliant on when travel could be booked for the researcher. As a backup measure to the Zoom™ recording function, a voice recorder was also used to save a second instance of the audio from the interview. The best-quality recording was then provided to the transcriber. This transcription was undertaken firstly by a contracted typist, a medical secretary who had signed a confidentiality agreement (see Appendix K: Confidentiality Agreement - Transcription). It was then reviewed by the interviewer who checked the transcript for accuracy with their notes from the interview, or to decipher anything that was not easy to hear on the recording, where required.

I did initially consider conducting some follow-up focus groups to check for resonance of preliminary themes and to generate ideas for practice and strategy, drawing from the findings. Due to ongoing challenges with research progress emerging from and experienced due to the coronavirus pandemic, my supervisors and I decided to not progress with that step.

6.8 ANALYSING THE DATA

The primary method of analysis was Reflexive Thematic Analysis (Braun & Clarke, 2006). The underlying philosophy of Reflexive Thematic Analysis (RTA) is rooted in constructivist epistemology, consistent with Interpretive Description methodology. Being reflexive as researchers is therefore required, acknowledging that any interpretations of the data will be influenced by those assumptions and preconceptions the researcher holds. In this way, researchers are acknowledging that they do not offer an objective, universal truth but rather offer a rich understanding of the data from the area of study, because of their positioning and perspective. Being theoretically flexible, RTA invites the researcher to be guided by the data rather than held within a specific theoretical structure or concept. This dual flexibility of reflexive thinking and theoretical openness requires transparency as the study is progressed and reported (Terry et al., 2017).

The six phases set out by Braun & Clarke (2006) that framed the analysis, and within which I was positioned as an active participant, were:

1/ Being fully immersed and actively engaging in the data to gain a comprehensive understanding of the data

2/ Identifying preliminary codes that appear interesting and meaningful

3/ Identifying relationships between codes and themes through interpretive analysis

4/ Checking for meaning in the themes, including thematically mapping these

5/ Continuing to analyse the themes to capture an overarching image of the data

6/ Relaying the results of the interpretive analysis in a meaningful and valid report.

The first phase of analysis required multiple readings of each interview transcript often while listening to the audio recording, a practice also supported by Thorne (2016), as new insights maybe revealed with each review, thus deepening the researcher's relationship with the data. The first reading was to check the transcripts once they had been typed and to reconnect with the participants' narratives.

Walking while listening to the audio recordings was also key to immersing myself within the data. The pairing of physical movement and listening created a sense of being activated by the conversations. I walked armed with a notebook and pencil (see **Figure 6** on the following page) to capture "interpretive thoughts, questions and hunches" (Thorne, 2016, p. 167) without these derailing the act of embodied listening (Pettman, 2017).

Figure 6.

Reflecting on the Go

In the second reading, the transcripts were printed and annotated. Notes were also kept separately in a research journal which was used to capture my activity each day, key reflections, reminders of cross-references to check, content to add, and questions to raise with supervisors. The transcripts held the notes that demonstrated the interaction between the text and my thinking, whereas my research journal described the evolution of my thinking from a single transcript into the data as a set. This process was also key to becoming fully immersed in the data and engaged in the narratives to develop a comprehensive understanding of the data (Braun & Clarke, 2006). In this process, the following questions were used to guide my thinking:

- What's going on here?
- How did the interview feel?
- What did I note at the time?
- What matched my assumptions?
- What excited me?

It was important to talk with my supervisors about what impressions I had recorded listening to and reading the transcripts. This discussion centred on words and ideas that I noticed in my initial reading/listening. Through these discussions, provisional analytic ideas and questions emerged which generated rich conversations. Each of us offered different world views, professional and personal lenses and assumptions, which helped my confidence build in working with the data. The first two phases of "familiarisation" and "coding" from Braun and Clarke (2006) fit well with the iterative process of working the data that Interpretive Description requires, creating a flow through the data sets.

Thorne (2016, p. 156) describes a stage of "sorting and organising", which is when we allow ourselves to react to the data while they are still fresh and organised only within the order that the sentences were spoken by our participants. It gives us an opportunity to become excited by what we notice is there and missing, and for some words or phrases to stick in our minds like a thread to follow (Thorne, 2016). My sorting and organising stage was also the first step in coding, which I did manually. I did this by highlighting and annotating directly onto printed copies of the transcripts. This process felt really tactile and creative, as I moved ideas from my head to the page with various styles and coloured pens, highlighters, and pencils. I also employed a shorthand of a type; developed over years of taking notes in lectures, meetings and when on the go. This self-developed style of noting was familiar, and I was therefore able to fully attend to capturing what seemed interesting or meaningful.

Once I had captured all of the early analytic observations, and started to identify preliminary codes from the visual maps made by my annotations, I imported electronic copies of the transcripts into NVivo™ (Lumivero, 2022). NVivo is a software tool, developed by QSR International Pty Ltd for qualitative data analysis (QSR International, 2023). NVivo allows researchers to organise, analyse and visualise data and is described in more detail below (see Section 6.8.1.1).

In NVivo, I worked my way through the transcript content, leaving my notes on the printed version aside initially. This allowed me to notice what I was seeing in the data without previous prompts. It

was only once I had done that, that I began to use the NVivo functionality to identify and label codes, both from my impressions of the text on screen and the printed and annotated copies.

Once I had completed a round of coding with my first transcript, I moved onto the second using the same approach. Taking note of any new codes identified in this transcript as I worked, I then returned to the first transcript to check for the presence of those codes, in a recursive process. I returned repeatedly to the earlier transcripts as I coded each subsequent transcript in turn, to check my thinking and be mindful of potential patterns between transcripts. This iterative process of coding and analysing in a cycle is aligned with the analytic process described by Thorne and her colleagues (Thorne et al., 2016).

Throughout the phases of coding, I kept a small whiteboard with my research questions in view. This was particularly useful as I moved from identifying individual codes, to clustering codes and proposing themes. This strategy acknowledges Thorne's (2016) recommendation of *Knowing Your Purpose*, whereby clinical researchers are called to remember why someone of our profession would study this specific topic or phenomenon. When I started to consider which codes seemed similar, or might go together, it was from the perspective of the research questions and purpose that I had as an AHP leader in a rural setting; to understand how to create employment conditions that would attract and retain AHPs.

Once the codes were clustered, and I began to feel a deepening of understanding of my dataset, I was able to construct themes (Terry et al., 2017). I did this by moving codes and clusters around to identify meaningful patterns. This is the third phase of Braun and Clarke's analysis process (2006), where the relationships between codes and themes are identified through interpretive analysis.

Supervision was also key to interpreting the data, as the conversations allowed me to articulate my thinking and hear the perspectives my supervisors gained from both the data and my developing analysis. Note-taking during supervision discussions was also very useful, to not only capture their thoughts but also the wonderings and connections between ideas that arose during our sessions.

Supervision also provided a container to continue to analyse the themes, as Braun & Clarke suggest in phase 4 “to capture an overarching image of the data” (Terry et al., 2017, p. 30).

The fifth phase included continuing to analyse the themes to capture an overarching image of the data, and served as a constant reminder that engaging strategically and constructively with the data throughout the analysis process is essential. Becoming wedded to themes too early is as detrimental to the quality of the research as is holding on too tightly to codes, something Thorne (2016) cautions against. It was really helpful to have this reminder, to counteract the desire to move the research process forward. One component that assisted in this regard was the use of technology, which allowed me to repeatedly capture and observe the data from a range of perspectives and viewpoints.

6.8.1.1 Use of technology

Having used NVivo to transfer the initial codes from the hard copy transcripts which I had annotated by hand during the data familiarisation phase, I then continued to code the data within NVivo, before using it as a tool to consider which codes were related to each other. NVivo functionality provided ways to look at the data by organising them in ways that supported me to visualise and map relationships and possible themes. It is important to note that the use of software was a mechanism for reducing and managing the data and getting first impressions; the software did not “do” the analysis. While there are several software options available, NVivo was chosen as the tool due to it being available to researchers via AUT, and because of the core features that were available in terms of data management, for which NVivo is comparable with other options.

NVivo software was used to display the data in a variety of ways to examine and interpret them. Using the various functions within NVivo, such as queries and visualisations, allowed me to further explore relationships between codes and then between themes as the codes were transformed. This complemented the coding process that had already been undertaken through reading the printed transcripts, listening to the audio recordings of the interviews, handwritten note-taking and using the coding functionality within NVivo to label sections of the data. Visualisations such as the “word cloud” (**Figure 7**) below did not in themselves

replace a more in-depth analysis process, but rather offered different ways to look at the data to spark new thinking.

Figure 7.

"Rural As Home" Code Visualisation

A key feature of the sixth phase of Braun and Clarke's model (2006), as it relates to this research, is how the findings will contribute to the design of a workforce strategy for rural health settings. Understanding how to apply what is learned in a practice setting is key to honouring the participation of interview participants, as well as the time of the research team and others who have been involved or supported the research. These supporters of the research included the West Coast DHB, the South Island Alliance (SIA) Directors of Allied Health and the SIA Rural Workforce Group, the wider allied health professions, educators, and Health Workforce New Zealand at Manatū Hauora (the Ministry of Health); all seeking to understand how to build the resilience of the rural and remote AHP workforce.

6.8.1.2 Notes and Research Journalling

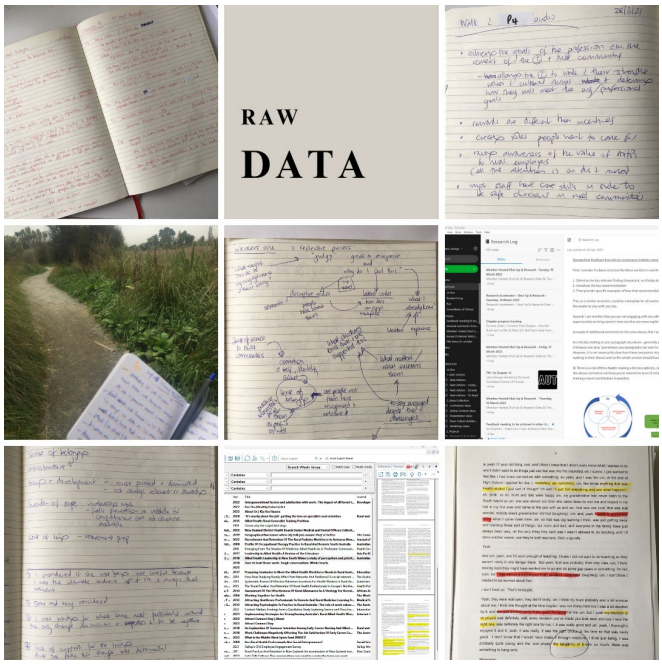
During each reading, analytical notes were taken of the thoughts and ideas that came to mind. This was recorded in the form of memos that tracked reflections on the data and my responses to the

narratives, as well as my thoughts about participants, and how each interview had unfolded. These notes did not become data in themselves but were a critical record of my understanding of self and the themes as they evolved (Thorne, 2016).

The notes included questions which arose as I reviewed the transcripts, allowing me to capture the wonderings I had in one transcript, to trigger my thinking as I worked across others. These analytic insights were captured in a fresh document each session, as Thorne advises (2016), so that I could start each session in whichever format made most sense that day, whether it be word lists, bubbles and arrows or the possibility of a pattern. These notes were recorded by hand in a notebook, starting a new blank page for each activity. Over time, software programmes like Evernote and Endnote were also used for memos; however, these were more commonly places for lists, daily research logs and notes on literature, respectively (see **Figure 8** below).

Figure 8.

Raw Data



6.9 ETHICALLY ORIENTED RESEARCH PROCESSES

6.9.1 Voluntary participation

Participation was voluntary, via a Qualtrix™ survey online, and potential participants could also use this to contact the research team with questions. Participants were reminded regularly of their rights to withdraw from the research at any time, throughout the interview process and via all correspondence.

6.9.2 Informed Consent

Written information about the study was provided as part of the recruitment process, and a two-phased consent process was undertaken. Given the remote nature of the research and the geographical dispersion of the participants, consent could not be collected in person. Therefore, as noted above, participants' first contact occurred via a Qualtrix™ survey and this is where the initial consent to be contacted was gained. The survey reiterated the study information provided via the various advertisement channels, gathered data relevant to participant eligibility and invited the respondent to indicate if they would like to speak to a member of the research team for further information (see Appendix I: Qualtrics Recruitment Survey). Those seeking further information were asked to provide their contact details so I could contact them via email or telephone to answer their questions. Where consent was given at the survey stage, it was to allow contact to be made with the potential participant, to make arrangements for an interview.

The second phase of the consent process was undertaken at the start of the interview. As noted above, all interviews were carried out via Zoom™ technology. At the commencement of the interview, the interviewer reiterated the information about the study, the consent process and ethics oversight, and then asked the following specific question: "As we are not in the same room, and I can't hand you a consent form to sign, can you please, for the purpose of the recording, let me know in your own words if you are happy to proceed." This dialogue and the participant's affirmative response are captured in each interview transcript. This two-phased consent process ensured that participants were well-informed and ensured they would have more than one opportunity to consider their participation before proceeding. It also acknowledged that informed consent is not a one-time transaction. By

ensuring there was an ongoing commitment to the participants that they could ask questions, raise concerns, or withdraw from the process at any time, I was able to demonstrate that I respected their contribution and their rights, and prioritised integrity over the potential research outcomes.

6.9.3 Relational Power

The allied health network is small. Rural health networks are also small. Ensuring participants felt safe to share their personal information and experiences was a key consideration from the outset of this research. Several strategies were put in place to support this process.

At the initial recruitment phase, when people activated the Qualtrix™ survey link, they were given the study information before they were invited to enter any of their identifying information. The study information included the details of the research team members. Providing this information early in the survey and ensuring potential participants had plenty of options to exit the survey without disclosure meant that the research team would not know who had considered taking part and chose not to do so.

Once a potential participant decided they would like to learn more, through a one-on-one conversation with a member of the research team (via email or phone), the information they were asked to provide was only what was required for someone to get in contact with them. This allowed the participant to control how much of themselves they revealed to the research team before they were ready. For those potential participants known to a member of the research team, the option was available for them to ask to speak with another research team member before deciding to proceed. Even at the stage where potential participants had e-signed at the first consent phase, they could choose whether they shared information about where they lived or worked. By choosing which email address they provided (work or personal) and whether they gave broad or specific information on where in Aotearoa they lived, the context of their workplace and geographical context were controlled. It is important to acknowledge here that once the participant had declared enough information in identifiable ways, there was a reasonable probability that they would have a level of connection with a member of the research team (such as where they studied, their profession, their line manager's professional network, and so forth).

Given this, an important part of the consent process was being clear and giving regular assurances about the processes I had in place to ensure their privacy and confidentiality would be maintained.

For those people wishing to participate who worked in the West Coast or Canterbury health systems, relational power was particularly significant, given my senior role in the West Coast leadership team, and in the transalpine allied health network. As previously noted, I committed to providing an independent interviewer, rather than conducting those interviews myself. I recognised that using an independent interviewer only goes some way to managing that conflict, as I would still be undertaking the data analysis and I was very aware that I needed to keep the participants safe in this process. Strategies included making sure that participants were made fully aware of how and why I would access data, in both the consenting process and as a scripted part of the interview, and again when the transcript was returned to them for checking.

6.9.4 Respect for rights of privacy and confidentiality

Each participant was informed of their rights, including how to contact the ethics committee, in information provided in the Qualtrix™ survey and by the researcher before commencing the interview. Details of the ethics committee were also provided in written literature such as the recruitment advertisement (see Appendix F: Study Advertisement).

Upholding the rights of privacy and confidentiality of each participant at all times was paramount, and therefore overtly stated in all participant documentation, and when engaging a transcriber and during supervision. All transcripts were de-identified by removing personal details and other contextual detail that would risk identification and then allocated a unique identifier.

The interview recordings and transcripts were stored online in AUT's secure cloud server and were accessible by the research team only. Recordings were provided to the transcriber with a file number rather than participant names. This file number was also used to identify each recording and transcript, on the server. Once typed and checked, transcripts were emailed out to participants, password protected. Passwords were emailed separately.

To maintain confidentiality for participants and their workplace and colleagues, I have used the following conventions:

- When a participant has mentioned the name of a town where they deliver health services, or the city where their base hospital is, I have replaced all town names with [town] and all city or hospital names with [base hospital] so that the context is not lost.
- Where pronouns are required, I have used they/them/their to ensure gender neutral language. Any use of other pronouns contained in direct quotes that are otherwise unidentifiable for the person mentioned reflect the usage of the participant from the transcript. My priority here is to ensure that anonymity and confidentiality are paramount, and I recognise that this use of pronouns may differ from its use to identify non-binary persons (Te Kawa Mataaho Public Service Commission, 2023).

6.9.5 Use of Pseudonyms

Pseudonyms have not been used in the reporting of findings. This is primarily because I did not consider asking my participants to choose a pseudonym at the time of their interview. As I began to write up the findings of this research, my supervisors challenged my use of Participant # when attributing specific data or quotes. They highlighted the concern that it may be more difficult for readers to engage with the findings, because of the way the participants were identified or labelled. As I reflected on this, I became very aware of my discomfort ascribing pseudonyms to participants without their consent. Due to the significant timespan between interviews and the write-up of the findings, I was no longer in contact with all of the participants to be able to go back to them to nominate their own pseudonym. Choosing pseudonyms for anyone risks mis-gendering, cultural appropriation and other assumptions I could make from my position of multiple privileges (Allen & Wiles, 2016). Given this, I made the decision to not use pseudonyms. I extend apologies for any impact this has on your engagement with my participants through their data and quotes.

6.10 CONCLUSION

This chapter has outlined the methods I used to prepare for, undertake and analyse interview data for this research study. It has described each step in the process, from design, to recruitment and selection of participants. Use of Interpretive Descriptive methodology and RTA have been demonstrated through the comprehensive process to transform the interview data gathered from my 18 participants into the themes and reflections discussed in the following chapters.

7 FINDINGS

7.1 INTRODUCTION

This chapter will introduce the data gathered and share my analysis of participants' contributions. Through in-depth engagement with the stories shared by participants, I have constructed three key themes. These themes capture what really matters for health leaders and health organisations to get right, if they want to support rural and remote communities to have stable, engaged health providers in their health services, according to what the participants said.

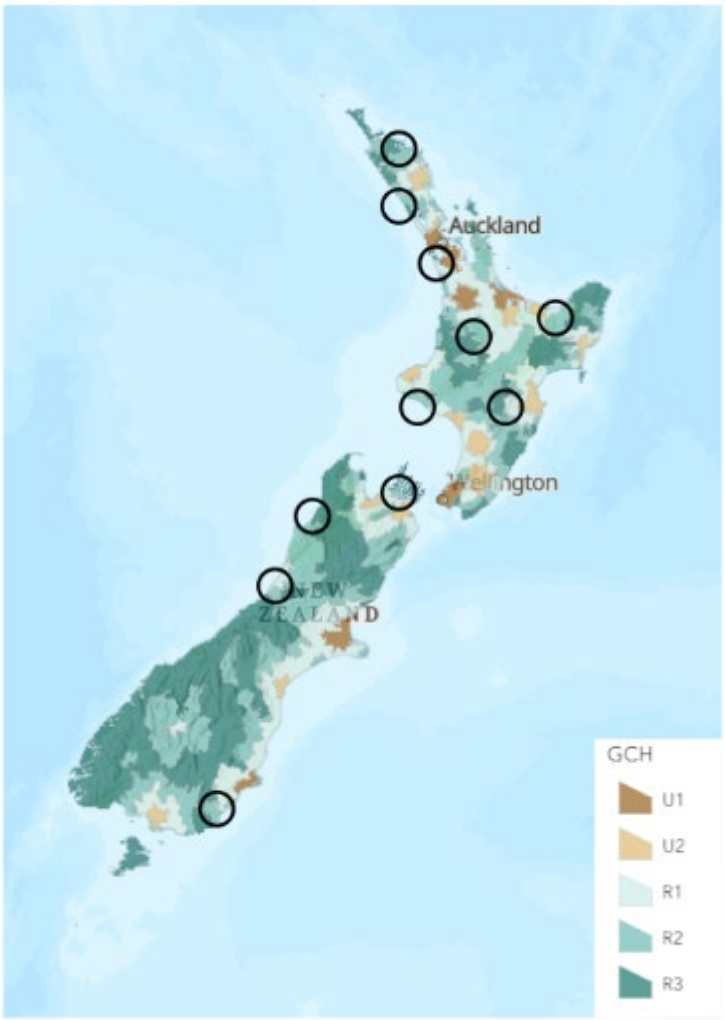
7.2 PARTICIPANTS

7.2.1 The Participants

Eighteen AHPs who identified as working rurally currently or in the recent past were interviewed between July 2019 and December 2021. These participants shared their experiences of choosing to work in rural and remote health systems. As described in Chapter Six, Section 6.7, the interview guide (see Appendix C: Interview Guide) was designed to allow the participants to share what mattered most to them, as they spoke about day-to-day experiences of working in and for rural and remote communities. Participants were from a range of allied health professions, and geographically spread throughout Aotearoa. As illustrated in **Figure 9** (on the following page) the participants were located in areas of differing rurality as defined by the Geographic Classification for Health (Whitehead et al., 2022), and with differing proximity to urban centres.

Figure 9.

Participant location (adapted from the GCH website)



Seventeen participants reported their age (ranging from 23 to 63 years), with the majority of participants aged either 20 to 30 years (n = 6) or over 50 years (n = 6). All of the participants identified as female. The sample was ethnically diverse with participants identifying as: Pākehā/New Zealand European (n = 11), Māori (n = 4), Samoan (n = 1) and from beyond the Pacific (n = 2). They also represented a range of professions, as illustrated in **Table 8**, on the following page:

Table 8.

Participants' Professions

Profession	Number of Participants
Psychologist	1
Music Therapist	2
Social Worker	7
Physiotherapist	4
Dietitian	1
Occupational Therapist	2
Pharmacist	1

7.2.2 Sharing Participants' Stories

As discussed in the Methods Chapter (see Chapter Six, Section 6.9.5), names of people and places and pronouns have been removed for the purpose of reporting in this chapter. This acknowledges the commitment to confidentiality made to participants as a component of undertaking ethical research and acknowledges how small rural and remote health systems are, and therefore the importance of taking steps to protect their identity.

7.3 How this Chapter is Structured and Why

This research set out to understand the complexities of recruitment and retention of allied health professionals in rural health settings. I explored this with two key questions in mind: **What do AHPs identify as the attractive aspects of living and working rurally?** and **How could this inform how we recruit and retain AHPs in rural and/or remote health settings?**

I have structured this chapter to step the reader through the themes and their significance in this findings chapter to address the first of these questions. I have then provided insights into how the findings could be practically applied in a subsequent chapter (see Chapter Eight) to address the second

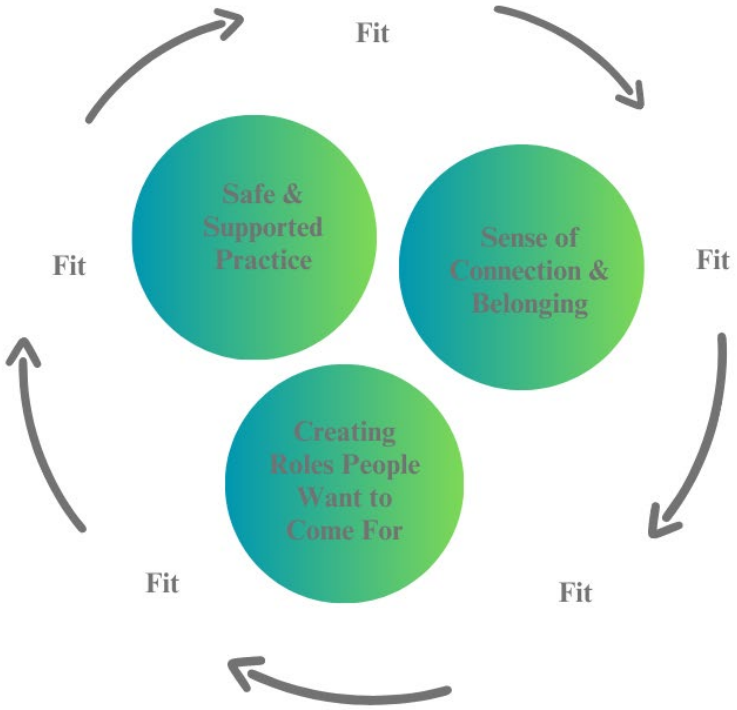
question. This approach aims to honour the intention of the research to provide practical, actionable ways that health providers and systems can use the findings to recruit and retain AHPs in rural and remote settings in Aotearoa.

7.4 Key Themes

Three key themes were constructed during analysis, including **Sense of Connection and Belonging**, **Safe and Supported Practice** and **Creating Roles People Want to Come For**. While presented sequentially here, the three key themes interrelate as demonstrated in **Figure 10** below. As the figure illustrates, these themes are all infused with an element of **Fit**.

Figure 10.

The Interconnected Themes



Fit refers to a felt sense that participants described, both as a feature of a theme and as a broader concept woven through their narrative. Some examples of this within a given theme are where a role might feel like a good **Fit** for where they are in their career (in **Creating Roles People Want to Come For**), how they are supported by their colleagues to feel they **Fit** within the team (in **Sense of Connection and Belonging**), or how their interactions with their manager or senior leadership **Fit** the espoused values of the organisation (in **Safe and Supported Practice**).

As a broader concept, the sense of **Fit** described by participants was also relevant across themes. This broad sense of **Fit** was more akin to an inner sense of being in relationship with their purpose, place, or values. A comment from Participant 2 illustrates this point: *"I'm thankful to be here you know, it's good to know you're where you're supposed to be, yeah, absolutely"*. **Fit** infuses both the collection of practical tools and ideas offered in the next chapter (Chapter Eight), as well as connections to theories found within employment, wellbeing, and social justice literature, discussed in Chapter Nine.

When Participant 16 described their role as "*it's like my dream job"*, they were conveying their sense that the role was right for them. The role allowed them to use their professional skills and knowledge in ways that felt fulfilling. This aligned with their values. Their lifestyle beyond work also made them happy; *"there's greater life satisfaction"* as Participant 13 noted, and they could envisage their future from where they were, physically and psychologically. These examples illustrate the essence of **Fit**.

Interestingly, having an overall sense of **Fit** appeared to outweigh the more particular ideas presented in each individual theme. In some cases, participants reported experiencing a lack of fit, even if they were unable to name what was missing. Once the sense of **Fit** was lost, participants then chose to seek a new role in a new location. For example, one participant reflected on a conversation with a former colleague:

> *I said to her the other day, "would you come back to the hospital?" And she was like, "way too white" (laugh), so and she was just absolutely up front, like, "No, there's no fit for me there". (p18)*

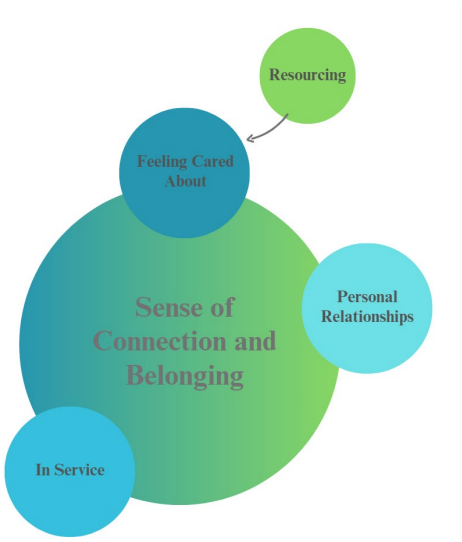
While many participants did not specifically talk about **Fit**, it was apparent from their broader narrative that working rurally resonated with their family history or culture. For example, Participant 1 shared: *"My parents were rural schoolteachers, so being public servants in a rural area feels very familiar"(p1)*. This participant and others had indicated they did not consider themselves to be rural, because they had not been born in a rural community or raised in one. Yet, there was a clear sense of connection and a feeling of **Fit** with their rural clients, communities, and environment. While there are not enough data to conclude an either/or relationship between rural/urban settings, Participant 16 suggested: *"I think you're either a city person or you're not*". Indeed, the stories participants told illustrated a strong preference for rural or city life that motivated them and their colleagues in the choices they made about where to work.

7.4.1 Theme 1: Sense of Connection and Belonging

The first theme conveys the importance of having a **Sense of Connection and Belonging** as employees, colleagues, and community members, for people to remain in rural roles. **Figure 11** provides an illustration of this theme and three related sub-themes. Each of these is discussed in more depth below, with reference to supporting data.

Figure 11.

Theme 1 with sub-themes



Participants all spoke about experiences and values that demonstrated to them that they were in a place that offered them space to belong and where connection was available. For most, this was a felt sense of being in relationship with others; whether that be with their own whānau, their families, their ancestors, peers, the organisation, community or through their engagement with the natural environment.

Participants also spoke about their connection to rurality. This included whether they had a rural heritage, or they had discovered a previously unknown visceral connection to rural spaces or a connection to who they were as practitioners when they are working rurally. For example, Participant 6 shared: *"I want to stay rural, and that's because of all the unique things that makes rural practice what it is"*.

As the three key sub-themes outline below, gaining and building a **Sense of Connection and Belonging** appeared to relate to a range of internal and external factors which weave a metaphorical hammock that supports AHPs in their rural and/or remote roles.

7.4.1.1 Feeling Cared About

The first of the sub-themes is Feeling Cared About. This sub-theme covers a myriad of relationships for the AHP, whether familial, collegial or with community members, clients or those in leadership. Participants described a range of experiences within their work life that were underpinned by a sense of how much they were cared about as individuals. For some, this was about how their personal circumstances were recognised by others, such as "*balancing work and farm life" (p15)*, "*being far from home culturally" (p18)* or "*when dealing with loss" (p1)*.

One participant described feeling they were part of the community because of the shared interests they had with community members, some of whom were also clients. They said, "*I can talk to them about you know, how there is no grass growth and have they had to sell off their stock, and it's um, it's a world I am interested in" (p1)*. This shared interest led them to a belief that they were able to show they authentically cared about their community and the people in that community and felt cared for in return.

Feeling cared about was often linked to the ways participants were also then able to show their colleagues they were cared about too, often leading to a reciprocity across their team. This was essential for teams that were often understaffed, or under-resourced. From "*someone bringing in a crockpot of soup on a chilly day for everyone to enjoy" (p1)* over lunch, to "*loaning bicycles to new graduates and students" (p18)* so they could make the best of the local environment, caring for each other was a characteristic of the rural teams that participants wanted to remain part of.

This connected caring extended into how teams supported each other through changes in life circumstances; "*swapping clinical work with my colleague nearing retirement age who doesn't feel able to manage the long drive to reach the most remote clients" (p1)*, "*granting special leave on the loss of a beloved farm dog" (p1)* or arranging a team dinner to celebrate cuisine from the home country of a team member. Participant 18 spoke about a new graduate colleague settling in "*from Singapore and so I've been doing lots of, you know, 'When shall we get together and cook?', so we got together with all the Allied Health people and made dumplings one night".*

One aspect of feeling cared about that was of particular note was the extent to which participants felt resourced in their roles. This resourcing ranged from having access to a mobile phone assigned to them, "*having vehicles that were fit for country roads"* or *"could fit the number of passengers" (p1)* needed, or sufficient resources to carry with them when working in the community. Some participants spoke of needing to drive to their base hospital to access diagnostic equipment or tools, often creating a multi-hour round trip to meet the expectations of a referrer or funder. Others described the level of appreciation they had for electronic health records which enabled them to stay connected to the clinical care of their patients when their care was delivered in other places.

Most participants were proud of what they and their rural colleagues could achieve, despite their lack of resourcing. And they were acutely aware of what they and their communities did not have when interacting with their city or base hospital colleagues, or other referrers. Participant 1 described a time when "*we got a referral from [base] and we all just sat and, tears of, I don't know, desperation, at the list of inputs they have sent us of agencies involved, and we didn't have any of them".*

So, too, was the range of resources different for activities outside of work. Participants spoke about their need to adjust to the types of social activities available in their rural community. This included making a choice to go without participating in a favoured sport, as it was not available in that town and instead tapping into what was on offer locally that might not have been accessible in an urban setting.

> *But at the same time, [there's] an abundance of resource in terms of beaches and walking tracks, and places you can take your dog and not meet anybody else if you want to. So, yeah, a different sort of resource than you would have in a city. (p18)*

Participants described the ways in which their organisations did, or could, support them to access personal life resources. For example, at one workplace, there was a monthly dinner club for new staff, co-ordinated by the education team; at another, agreement was given for a 3km detour in the pool car to attend a fitness class when traveling to the city for work. These low to no cost options for the organisation were seen as big wins by the participants and their colleagues; a way for the organisation to demonstrate to their workforce that they were appreciated, and that the practicalities and complexities of living and working in a rural community were recognised.

7.4.1.2 Personal Relationships

Being able to form and deepen friendships in a new role or a new location was important. Participants who were new to a rural community talked about the ways that personal relationships had helped them feel connected to the community and their roles. Communities and organisations that facilitated social connections for incoming staff were appreciated. When recruitment allowed, onboarding a number of people at once created opportunities for social groups to form, providing a jumping off point for potential friendships. For one participant who had left their previous role because of a growing lack of connection, the timing of their onboarding worked well:

> *In [my previous rural role] I didn't really experience that, it was a lot harder to make friends. So I definitely think that the timing of when you come in, and also having, just the fact that the other people or, the only thing we had in common was that we didn't know the town … we ended up all*

getting together coz we were all new to town, and I think there was a volleyball team that we were in, and we'd go to a pub quiz, and it was really neat to have this group of people. (p16)

These relationships provided a counterbalance to the realities of living in the communities they worked in, where running into clients at the supermarket was the norm. The relationships also provided some level of protection from being seen as only "the health worker". This was particularly useful as they sought out activities aligned with their interests outside of work, such as joining a sports team.

Being deliberate about how you show up in communities, and how you respond to those who feel connected to you, or care about you in the community, also featured in conversations with participants. This highlighted the flip side to personal relationships, how the closeness of rural communities pushes against professional boundaries and patient confidentiality. Participant 5 described how they navigated this when they returned home for their first rural hospital role:

My grandmother would call up and be like, "Oh, so-and-so is on the ward, how are they doing?" and I'm like, "Grandma, I can't", and she's like, "Oh well, I'll just call them, then" and I was like, "Well, do it" (laughing), "Oh well, I didn't want to disturb them", and I'm like, "I am not a source of information about all your mates in the hospital." (p5)

7.4.1.3 In Service

One way that participants expressed their **Sense of Connection and Belonging** was through their commitment to being of service to their community. While there was a wide variety of ways the participants contributed beyond their work roles, acts of service were common across the participant group. For some, this was a strategic part of how they integrated into the community and met people. For example, Participant 17 reflected:

I made a decision, I, I was going to start getting involved in stuff that was here, so my life increasingly became [locally] focused rather than [back in the city], and I started doing voluntary ambulance work and I also met, met my husband through a flatmate I had at the time, so increased, suddenly my, my, my world was over here rather than in [the city]. (p17)

Others had a sense of commitment to their whānau or family who had supported them to go to university, or a goal to bring as much knowledge as they could home so that they could improve health services for their own community. Participant 5, who was working in a different rural community than their own at the time of our interview, describes their sense of this:

> *I feel like I owe people at home something and that's quite a, a motivating factor. I also feel like I fit there, so um, or that I'm more useful because I understand people there, whereas working in the community down here sometimes I find that I don't, sometimes I'm the right person, but not as often as I am that right person at home. (p5)*

Gaining the skills and knowledge to return home well-equipped was perceived as important to ensure they would be able to meet the expectations of their community when they returned there to practise, as Participant 4 explains:

> *So there's a whole lot of pressure, particularly for, for us who are moving home, to work with our own communities, because there is the pressure to come home as soon as you can, but also pressure to know that you should know your stuff if you are going to be coming home because our whānau are going to be relying on you to be the advocate or be that person that we can go to. (p4)*

Being upfront about this at the beginning of their career had had a positive response for Participant 4, who explained:

> *All my colleagues and my managers knew the plan was to move home so they would send me to different courses or help me to become accredited in different positions just so that I knew I could take home a full basket when I came back so I wasn't quiet about my plans to move home, it was always "This is exactly where I'm going to end up" and they were really helpful at making sure that those things happened. (p4)*

Some of the participants connected their commitment to being of service to the same aspects of their personalities that drew them to their profession, such as one of the social work participants:

Here you can, you can literally go to the Mayor's sit-in chat that he has once a month, and talk about the things that interest you. You can write stern letters to the council, you know, so, I think that if you are interested in social justice, which presumably there's something of that in all social workers, it's a great chance to lobby, living in small communities, a great chance to be part of being solution-focused. (p18)

They also wove their perspectives on civic responsibility into the conversations they had with new colleagues and students. Whether volunteering by coaching a sports team, attending local political events, or participating in community theatre, being of service also created a focus separate from work. Participant 18 describes:

I always would encourage new grads, and new people to a region, to get involved in those things because that's how you meet people outside of work who can help you when work feels oppressive and hideous, just going to a talk about penguins can be a, can be a helpful thing. (p18)

The aspirations participants had for the communities they saw as their homes, and the ways they took personal action to pursue those aspirations were a hallmark of their sense of belonging. The participants demonstrated that commitment to building personal relationships, showing others they were cared about and volunteering in their communities were as important to their **Sense of Connection and Belonging**, as were receiving those things from their rural/remote communities.

7.4.2 Theme 2: Safe and Supported Practice

Figure 12 provides an overview of theme 2, along with three related sub-themes from which it was constructed. These sub-themes are quite different from each other, and yet they each play a crucial role in providing an environment where clinicians can flourish, regardless of their physical or geographical location.

Figure 12.

Theme 2 with sub-themes

Providing health care has inherent risks, as every service does, and then more so due to the health status of the people we serve, and how our interventions can impact on their health status. Each profession is trained in risk mitigation, through ongoing acquisition of knowledge and skills, with supervision from seniors and with peers, and by utilising tools and frameworks designed to reduce or eliminate specific risk. For allied health professions, there are varying approaches to learning, supervision and a wide array of tools and frameworks available to support their individual clinical activity.

When looking for new roles, or hearing about other peoples' workplaces that sounded appealing, knowing that the workplace or team culture can offer support and appropriate protections was important for participants. Participant 11 told me they *"feel attracted to areas where, when people talk about their jobs, they enjoy the people that they're working with and they feel safe and supported"(p11).* Gathering a sense of the reputation and culture of a workplace was a strategy employed when choosing a job. This was also true when participants were considering a move from one area of clinical practice to another. Participants sought this information in a number of ways, including through their interactions with senior leaders during the recruitment process: *"[The senior and I] clicked really well, and I thought 'Ah, yep, that feels good'" (p5).* It was through this sense of

connection with the leader, when they first met, that the participant felt confident that it would be a safe space to work in.

A culture that emphasised provision of support and safety for team members was particularly important for participants, given the size of the workforce. Many teams were made up of just one or two of each profession, and this meant working in a much more collaborative way with colleagues of other disciplines, both within the team and in the wider community. Sharing risk with colleagues through mechanisms such as multidisciplinary case review meetings and service quality plans were valued by participants and were perceived to support the development of a safe practice environment in broader terms. One participant considered their team as being functional in that *"we look after each other. Everything is not sweetness and light, but when it is not it's out there in the open, it happens in the team room and not niggling behind people's backs" (p1).* This sense of open and transparent collaborative working was fundamental as it increased participants' confidence that their colleagues would have their best interests in mind even when delivering constructive criticism. This, in turn, strengthened the clinical care that was delivered.

Conversely, participants described features of work environments that they identified as risks to providing safe and supportive work experiences. A number of participants described their first role as a new graduate, peppered with instances of lone community work in areas without cell phone coverage, lack of breaks, supporting clients whose level of physical or mental ill-health would have found them hospitalised in an urban setting, or lack of appropriate supervision. As one participant reflected:

> *I'm coming across situations, you know I've been a [health] worker for 15 years and I'm coming across situations where, where I think, "Oh gosh, a new grad, you know, it would be, this would be out of their scope". (p10)*

For some, this level of risk was unacceptable, and the role was vacated. Yet for others "*they get huge experience that they may not get otherwise, in other places, just simply because of the work that that's going on um, they get exposed to lots of stuff"(p17).*

For many rural AHPs, they might be the only member of their profession in that town, or even in that organisation. This impacted on their ability to gain on-the-spot clinical advice, was very isolating, particularly for new graduates lacking someone to learn from by virtue of being in the same environment, and also meant it was "*harder to shine a light on the episodes of exceptional practice they delivered" (p7)*.

Being one of few also created a sense of psychological distance clinicians experienced when they felt that their urban counterparts treated them as having less experience or being less competent. Participant 10 described an incident where they received advice from the urban-based legal team, following a concerning report from a community colleague. As a clinician, they knew they had a statutory responsibility to assess risk:

> *The lawyer said we really shouldn't get involved and, "You're not to relay any stories, that are only stories, we need this to be evidence based". Um, and so there's this idea that the people who work in the countryside are a bit dim-witted in going by a story, as opposed to actually having a referral from [an NGO] because they've had a witness. (p10)*

The participant went on to describe the tension they felt between seeking advice, as was the expectation of their organisation, and then having to navigate this apparent bias held by the advice-giver about the level of competence the participant, or perhaps any rural practitioner, does or does not have. At the time of the interview, they were still grappling with how to address their concerns about how they felt judged by this urban colleague; directly, through supervision and/or continued reflective practice. Underpinning their concerns was the realisation that a less experienced clinician could have followed the advice of the lawyer, and not met their obligations to safeguard this client, by making the appropriate notifications.

The sub-themes within the theme of **Safe and Supported Practice** are quite diverse, and yet all contribute to creating a safe experience. Each of these sub-themes is explored in detail next.

7.4.2.1 Connectivity & Technology

Connectivity and the technology with which to access it are key components of safe community practice. Within our personal lives, it is easy to feel a need for technology in so many parts of ordinary life, and there is an abundance of technology available. The experiences reported by our participants about the technologies they do or do not have access to may well surprise many, particularly people in private sector or technology dependent industries. For example, Participant 1 said that, *"We don't really have any other technology, this has only just started, we have got one laptop for the whole team to share".*

Additionally, the amount of time that participants did not have access to mobile coverage or internet, whether out on the road or in off-base work locations was anecdotally substantial. While central government has committed to ensuring that all highways have cell phone reception, and a scheme to plug rural blackspots (Crown Infrastructure Partners, 2023), the focus has been on settlements and tourist attractions rather than the countryside in which health and social care providers travel to deliver services.

Lack of connectivity is a current reality of rural life, and this came up regularly in our conversations. Although pragmatic about the need to walk uphill in a particular paddock and stand on a tree stump to get "bars" on the cell phone and the like, participants described a wish for the security of knowing your phone will work when you are heading into the home of someone you have not met before, or "*dealing with a crisis situation" (p1)*. While most recognised that improving connectivity in rural areas is not an easy fix, the risks of being out of range combined with often times needing to do home visits without a colleague, due to competing priorities in small and understaffed teams, made many uneasy.

Having the tools for when there is connectivity, and being able to tap into the networks, was appreciated. This was particularly important where their city-based colleagues reportedly relied on electronic patient record systems or secure loop messaging applications to share information. Rural clients also expected AHPs to be able to access clients' health records from anywhere, easily, just as

one would their online banking or bill payment apps. Participant 1 shared that they had a "proper" cell phone for the first time in all their years working rurally, as well as that *"one laptop for the whole team to share" (p1)*, noted above, though they were in the process of moving to online notes as part of a district-wide initiative. This calls into question how decisions are made, such as about the use of electronic records to improve health care access for rural dwellers, if those AHPs in rural communities do not have the technology to upload their clinical activity into such records.

Other participants also shared their successes in gaining a laptop or cell phone to support their work. Every additional tool helped them to feel they were being supported to deliver quality patient care, even if this was often only part of what was required. One participant described, for example, "*how much more responsive they could be to requests for diagnostic assessments if their organisation owned licenses for the online versions rather than hard copies" (p1)*, which were often held at the base hospital. Having rural needs recognised, even if they could not be immediately met by managers or supervisors was appreciated by participants, who also recognised the balance required by organisations to spend their budgets as equitably as possible.

7.4.2.2 Valuing Learning

Working in an environment where learning was celebrated and supported was something that most of the participants identified as attractive to them. Knowing what an organisation's professional development culture was before joining was something that participants identified as useful to their decision about taking the role, particularly where salary was seen as fixed by collective bargaining mechanisms such as a multi-employer collective agreement (MECA). For one experienced clinician, the motivation to choose a rural role was increased by opportunities over and above standard training, such as "*sabbatical or external courses being supported for staff"(p7)*. A newly graduated AHP more broadly wanted to know *"what they do to help and support you, what funding they do for courses" (p12)*.

Participants described choosing roles that specifically offered supported professional development as part of their employment package. Participant 11 described their *"move from [previous role] to here*

was more pay, um, it meant more study as well, so I actually did some post grad at [a university]" (p11). Securing knowledge and commitment around professional development was a way for participants to gain a sense of how the organisation would support them as employees to develop their competencies and clinical interests.

Some participants explained their organisations had a rule of "*no training outside of New Zealand" (p14)* for AHPs. For those at the beginning of their careers, this had not been significant. For more experienced clinicians, it was hard to see how these restrictive learning policies were supporting people to grow to better meet community needs. They found the specialised courses were increasingly hard to find in New Zealand. *"I don't want to go to the same entry level talk every year,"* Participant 14 explained, *"just to count them in my CPD folder, like I want it to actually be clinically significant" (p14)*. Another participant echoed this when describing the move to more online learning which to their way of thinking missed the mark for AHPs; "*They've got an e-learn site which has a million kinda nursing type courses on it that is s'posed to be compulsory learning and you're s'posed to do that before you go to any external course" (p7).*

With time spent negotiating to attend valuable training, applying for scholarships and grants, and the willingness to share the costs of training with the organisation, it felt to some participants as if the value the organisation gained came at a significant personal cost. Participant 5 facetiously described discovering one way to access specialist training without the usual wrangling of permissions, grants, and self-funding. This was by offering to train in a clinical assessment or intervention that a doctor was currently performing in clinic; "*Of course, the minute you're freeing somebody from being in a clinic when they could be doing some theatre time, the DHB turns out to be quite happy to pay for you to go to a course" (p5).*

Looking across the aisle to what was on offer for nursing and medical colleagues left participants feeling undervalued and lacking support to develop their clinical skills for the benefit of their clients. Participants perceived there to be a hierarchy in the ways that professional development funding was allocated, meaning it looked easier to come by for medical staff. Participant 5's example (above)

described a way they tapped into that hierarchy to create space for their own learning needs; by demonstrating how the AHP's learning was in the interests of medical staff.

Participants made comparisons between development opportunities available to AHPs and that of the rural nurse specialist pipeline. Nurses were perceived as better funded, and the postgraduate training and role specialties were considered to intrude on areas of clinical practice which AHPs considered theirs, such as respiratory physiotherapy or rehabilitation. Participant 7 explained, "*The nurses take that, become geriatrician nurse specialists, pulmonary nurse specialists, rehab nurse specialists, stroke nurse specialists. [We] aren't sought for those roles at all."* This approach of supporting nurses to attain specialist roles linked to medical modalities was recognised as a way to create more attractive roles in rural areas for nursing. Still, it left participants feeling their skills were less valued, despite often being qualified to do the same work as the specialist nurses from the time they finished their degrees. The investment in nursing in this way was also interpreted by AHPs as their own professional development being less important and, in some cases, that their scope of practice was at risk of being eroded, as a by-product of these strategies to improve recruitment and retention of other professions in rural and remote locations.

7.4.2.3 Relationship with Leader(ship)

As I have already highlighted, the quality of the relationships AHPs have with others in their work environment appeared to enhance their **Sense of Connection and Belonging** in that environment. The quality of the relationships participants had with their line managers, supervisors and other leaders or managers in the organisation also contributed to how safe they felt and the extent to which their professional identity and practice were supported.

Where the working location of participants was different to where their manager was based, the quality of the relationship—particularly how trusting and respectful it was—went a long way to making participants feel their practice was supported, and they could rely on their manager. This, in turn, allowed participants to focus on doing the best they could for the people they were working with and feeling empowered to manage their time and resources independently. Participant 16 told me, *"I*

feel like I've got that freedom. She does, she definitely trusts me that I'll do the work" (p16). This gave them the sense of being their own boss day to day, while also having someone just a phone call away when advice was needed.

Having leaders who were willing to be available on remote sites regularly also provided participants with a sense that their work circumstances were understood and appreciated. Participants gave examples of when their leaders had worked alongside the team for a day. Many leaders were surprised by the differences in how the workday flowed, compared to the teams in the main centre. This included the ways that referral patterns affected the team, which leaders had not anticipated. By being present, they were able to acknowledge and work with the team to find solutions. Participant 1 described what happened when their manager worked on-site not long after crisis response services were devolved to rural teams:

> *Within 45 minutes of being here, she had two assessments to do in [a neighbouring town] and we needed a third one to do here in [town]. And she was just like, "So what do you guys normally do when you have got this?" (p1)*

Participant 1 went on to explain that the manager went home after a 10-hour day enlightened and better connected to her rural workforce. They, in turn, felt she would be better able to advocate for them and support their safe practice into the future.

When decisions were made to change the way a service was run, or to introduce a new tool or practice, knowing leaders recognised the implications this would have on those working remotely was key. Not only are those changes more likely to be trialled and/or accepted, but staff would also be more willing to stick with the changed role circumstances rather than moving on to another role. Equally, good leadership in an environment that was short on tangible resources, or short of staff, was more likely to see staff retained. Again, Participant 1 offered this view, illustrative of the general perspective of participants: "*I would rather have pen and paper and no resources and work my arse off for somebody who gives a damn"(p1).*

7.4.3 Theme 3: Creating Roles People Want to Come For

This theme, **Creating Roles People Want to Come For,** offers practical insights into recruitment and retention strategies from the valuable data woven throughout participants' narratives. As an employer as well as a researcher, I know that the desire to find ways to "win" the fierce competition for the scarce AHP workforce across Aotearoa is high. Understanding what types of roles are "worth it" is key for employers to put their best foot forward. **Figure 13** provides a visualisation of how theme 3 is made up, with the six related sub-themes from which it was constructed. Each of these is discussed in more depth below, with reference to supporting data.

Figure 13.

Theme 3 with sub-themes

As **Figure 13** shows, there are a number of aspects that could contribute to creating a role that is attractive to an AHP, whether outside the organisation or already on staff. Some of the aspects that appeared important may, arguably, be important wherever the role is located. However, there were aspects that have the potential to be accentuated by the rurality of the role. In other cases, they may need to be addressed differently by virtue of being rurally based.

Contrary to contemporary literature, participants did not identify pay or salary being a significant issue. There are likely to be a few reasons for this. First, most participants interviewed worked within the DHB structure and their salary was largely determined by a MECA. Additionally, where participants talked about remuneration, they were doing so in terms of training budgets, bonding, and the costs of commuting rather than pay itself. That said, an increase in salary would not have been turned down. As Participant 4 said, *"You do have to work for love rather than the money so, I think that's quite a challenge for some people but if you really enjoy the work then you do end up um, taking the role" (p4).*

7.4.3.1 Recruitment Experiences

A team's culture or reputation is a key consideration for many jobseekers, and therefore a crucial factor to consider when creating roles that people will want to apply for. When participants do not know anyone who has worked in an organisation before, their first exposure to the organisation is through their interactions with recruitment facilitators. Therefore, how these recruiters behave is seen as indicative of the organisation's culture.

Participants reported a range of recruitment experiences, their own or ones they had heard about, which contributed to their impression of the role, the organisation, or the area. Participant 7 reported receiving mixed messages, such as determining whether the role could be less than full time or how quickly referees would need to be contacted, when they were deciding whether or not to apply for a role. This left them with a sense of disorder: "*There are some things that seem to be really clumsy, you know, processes that are theoretically in place" (p7)*. Response times also seemed slow, contradicting the message that rural areas are understaffed and desperate to fill vacancies. Conversely, participants spoke of recruitment experiences where offers of support and connection for family members were made, such as links to employment opportunities in the area, even if they were not health staff. These kinds of practices were "*pivotal to sustaining the employment" (p18)* and gave the sense that, as a candidate, you were not just one CV in the pile.

This finding affirms the philosophy that it is the small, regular acts of connection that build and maintain reputation and relationships. Disingenuous recruitment campaigns were noted, like the one described by Participant 3 which promoted proximity to ski fields as a key attraction of the role—despite them actually being three or more hours drive away—and suggested a lifestyle to candidates that could not be delivered. Additionally, these "big bang" style measures to attract staff needed to have a responsive recruitment team at the ready to respond quickly to those who express an interest, as candidates were likely be connecting with several potential employers at the same time.

A number of participants were living in a rural location due to the work of their spouse. Being able to build relationships with the local recruiters created a "win-win" as they would hear about roles when they first became available, and organisations could move quickly to fill positions. This also meant that participants who could afford to wait for the right role felt better connected while they were out of the workforce.

Once people were employed into an organisation, their recruitment experience was much less of a reason to stay or leave. As I will outline next, the remaining sub-themes focus on not just what is seen from outside the organisation, but also what is experienced by AHPs who are already employed. Participant 17 pointed out:

> *Recruitment is one thing but it's better to retain the ones you've got and maybe if the ones who are here feel that they're doing really useful work or the work is better, more interesting, more varied, and they're using their skills more than they would elsewhere, that's a reason to stay. (p17)*

7.4.3.2 Variety of Work

One of the most frequently discussed aspects of life as a rural and/or remote AHP was how varied the work is. For many, this offers the attraction of being able to pull on a wide range of skills and support a broader section of their community. Participant 4's description of a typical day was echoed by all the participants providing a mix of inpatient and community therapy services:

> *I'm able to sort of branch out and see a lot more people, and people who really need our service, not the ones who want the service. Um, and that's the thing that I really enjoy - able to help*

people, kaumātua and kuia, older people, which I find I see a lot in the ward and helping with discharge type of thing, things like that is what I really love. (p4)

Being able to work with one person to explore all their needs was also rewarding. Participant 12 described, "*I think where rural is quite nice is that ah, sometimes I'll go see them for like mobility at home, and then they'll have like a continence issue but because I'm not specialised I can address that as well" (p12)*. This ability to apply what they know, rather than being restricted by a position defined by medical speciality, allowed participants to feel they were making a significant difference in a person's health journey. *"It requires good boundaries"* as Participant 18 pointed out, *"but you can follow a thing from birth to end, you know …. so, an INCREDIBLE width of things you have access to" (p18).*

Participants reported that needing such a variety of practice knowledge made their patient interactions really rewarding, and motivated participants to engage in ongoing, diverse learning. Participant 6 told me they *"like the variety, so that keeps my head engaged. It means I know a little about a lot, instead of a lot about a little."* This provided job satisfaction and, furthermore, runs counter to the urban model of learning towards specialism and sub-specialism, which appears to dominate the thinking of those training and regulating professions, an attitude that participants found unsupportive.

7.4.3.3 Growth Pathways

Knowing that there is a pathway available for the rural AHP to continue to learn and grow is key, as I have touched on when discussing findings on valuing learning. While it is important that AHPs have access to transparent and equitably funded professional development, that development also needs to be aligned to the work they are doing and work they can grow into. Our participants provided a wealth of suggestions from rotational new graduate positions exposing people to a variety of rural locations, to mentorship into prescribing roles or leadership development pathways. What underlies these suggestions is a common thread for organisations to create space within clinical practice for AHPs to develop, and that they can see the pathway before they begin to work towards that goal. This could be modelled on the work already undertaken for our nursing colleagues, coupling post-graduate study

opportunities with clinical nurse speciality areas or using a version of the rural generalist pathway established by our Australian counterparts (Allied Health Professions' Office of Queensland, 2015). Participants also suggested that training providers needed to find ways to ensure students can meet their learning objectives with minimal time away from their community. The apparent void in clear pathways was particularly frustrating for those participants who were ready to progress beyond what they can see is available locally. Participant 10 expressed their disappointment that *"if I wanted to progress in terms of my career I would need to leave [this town], definitely" (p10)*. Equally, they acknowledged they have the privilege of choosing to do so, where many other rural-dwelling AHPs might not.

Participants offered a range of examples of ways it is possible to develop "on the job" ranging from being the only one of their profession in a location, through to being asked to step up or into a different role at short notice. It was clear that, just as discussed with variety of work, when seen as opportunities these are welcomed. Participant 3, who works in mental health services, noted that, *"You get the opportunity to train not only with adults but also with young people"* which they described as:

> *A great incentive for some people, um, or you've come in and you get the opportunity to do leadership if that's what you want to do. Being able to have different roles within the team, I think helps keep it interesting but also challenging for people. (p3)*

It is important, however, to not move people to fill gaps under the guise of it being part of a pathway to seniority or specialism. The key message communicated by participants was that having development pathways was great, if they were legitimate, fit the needs of the organisation and could practically be achieved. Creating a pathway in an ad hoc way to solve an immediate service delivery challenge was not seen so positively by participants. Instead, as Participant 17 suggested:

> *If you could do more by being here, so it's a more interesting job on the ground, but as part of that you were supported to maybe get a couple of papers towards a post-grad diploma or you ended up with a post-grad certificate that you could then use towards something else.(p17)*

In order for growth pathways to contribute to recruitment and retention of rural AHPs, it is important that the pathways are visible to the workforce, and those considering joining it.

7.4.3.4 Freedom and Scope

As previously highlighted, the freedom that participants value as part of their roles, such as having the freedom to plan their day or to determine what work gets prioritised, is an important feature of a job they want to be in. Being a sole practitioner in one rural outpost, Participant 10 described freedom and scope as having *"a lot of autonomy, my manager has given me, I suppose a lot of trust to do what I think is right and plan my day, and do whatever I want" (p10).* They described an approach of trust which could arguably be as important to colleagues working anywhere, not even just in health, but one that is a core component for those working in isolation and with the responsibility of supporting community members of all ages, stages, and circumstances. As Participant 8 highlighted, *"I get to work with them in such a diverse way"*. The inherent freedom and autonomy perceived to be a feature of rural practice was one of the characteristics that drew participants to these roles.

Participants provided several examples of how having the freedom to choose whether to see their clients or patients in the community or at the office was important. When the choice could be made to see someone at home, the impact for the clinician was in being able to get a real sense of what was going on for a person. They could get this sense through seeing how someone was living; whether they had enough heating, kai[13], or what issues the layout of their home might present. There was also a positive impact for the clients through not having to travel, or for those who might otherwise miss out because they could not travel, as well as the ways their assessment or treatment was enhanced by the clinician seeing their home circumstances. This flexibility to choose where to deliver their clinical intervention presented the AHP with a chance to get a better picture of how they could support a person's wellbeing, and be responsive to the client, including where to deliver their care.

For rural clinicians, a broad scope requires them to hold some knowledge in lots of areas, and an ability to adapt to the circumstances, to *"more 'out of the box' stuff"* as Participant 6 put it. This

[13] *Kai* is an umbrella term for food (Ryan, 2012)

adaptability could include skipping the stairs assessment but "*making sure a person could navigate their tidal access on foot prior to discharge" (p5)*. Or instead of referring someone to an exercise class in the closest town, you needed to work with them one-to-one to understand their geographical and medical context and identify ways to meet their rehabilitation needs, without that difficult-to-access exercise class. Utilising the environmental knowledge of rural communities and pairing it with clinical knowledge of a person's situation or condition was commonplace. Yet, while the environmental knowledge was fairly predictable, every person's clinical needs could be as varied as the people themselves. Being challenged in this way so often required the clinician to work to the edges of their scope of practice; this was both a difficult and attractive aspect of a rural role.

There were three specific ways that the sub-theme of **Freedom and Scope** really stood out in the data, which relate to the uniquely rural context, including: 1) the importance of recognising the value that AHPs can offer for rural settings; 2) that rural AHPs are required to go beyond the point that their urban counterparts would; and 3) the expanded scope of Rural Generalism as it applies to the array of professions within allied health.

As I have already described, participants found the co-opting of clinical areas into nursing specialist roles disappointing and frustrating. In many rural communities, organisations had taken the adage of "one car up the driveway" to mean that the district or rural nursing workforce would be in the car and appeared to assume they can cover off the other aspects of the multidisciplinary assessment. This approach was not, however, afforded to the AHPs in return, despite their clinical training equipping them to undertake comprehensive assessments, or to make use of skill sharing across professions. They felt marginalised or restricted in their practice by such operational decisions, and this was echoed when participants talked about how their professional and registering bodies determined what was in or out of scope, or a specialist area of practice. These organisations were seen as hindering AHPs from using their clinical knowledge to improve rural health provision beyond their usual scope when they are the only health provider in an area. Participant 17, who was an advocate within their profession for their role in supporting rural communities, said, *"To me it seemed an injustice, and I thought there needs to be a way where we can actually use our knowledge better"(p17).* When

communities are crying out for better access to health care, and general practices are stretched beyond capacity, neither acknowledging nor tapping into the diverse and highly skilled professions that make up allied health felt like a blow to participants.

Participants also described how their skills were not recognised by their AHP counterparts in urban settings, with the urban narcissism previously described (see Chapter One, Section 1.5) contributing to a perspective that rural clinicians are less competent. Participants provided examples of ways that they need to be able to go beyond what AHPs in a city practice do, particularly for those patients or clients who need hospitalisation (be that physical, mental, or rehabilitative health or hospice), when that is not a local option, or when diagnostic tools or community services are not available. The opportunities created by the gap in service included delivery of assessments and interventions that probably would not have been available in a city. Participant 7 told the following story:

> *One of my first early clients had been, been seen by medical people, you know, the GP practice and various people, but I think she'd always been wheeled in to the, to the GP practice, so they didn't see her walk or anything like that, they just dealt with the medical things and she was sent home. And when I went to see her for the falls prevention it was quite clear that she had a foot drop and there was something neurological going on and there, you know, there were a number of people, so that kind of wasn't that they're not being seen, but there were so many things perhaps and doctors had limited time and neurological things are in the background almost and evolve very slowly. (p7)*

Even once this was identified, Participant 7 was able to continue to provide intervention, as they were the clinician most specialised to do so locally. They recognised this would not have been the case had there been more specialist services available.

Throughout the interviews, participants spoke about how they were required to have some knowledge to treat most ages, stages, and circumstances, as they were often the only AHP of their profession at their location or covering a large geographical area. Examples were offered of how variable days could be, and how participants relished this challenge, such as Participant 6: *"I also like that …., you*

know you see a baby and a 100-year-old in the same day. So I like the variety and the challenge" (p6). The opportunity to specialise was sought less in line with a medical speciality as in larger centres. For some participants, this was due to the lack of access to suitable training, or due to having limited patient numbers to reach proficiency thresholds set by external bodies.

Often when discussing professional development or pathways to grow in their organisations, participants expressed a desire to be able to work towards being recognised as specialised in rural practice, or to demonstrate their proficiency against a rural scope of practice. Whether experienced or newer to practice, participants recognised that their ability to work in such a flexible and broad way demonstrated a high level of skill. Participant 7 proposed that this was a hallmark of satisfying rural practice, saying, *"What was interesting about the job, I think there was an expanded scope that you wouldn't necessarily have to do in a city where there are more options, where more people's eyes or access to specialists [are available]" (p7).*

Parallels were drawn between how all rural AHPs were required to practise, and the clinical activity of those on the rural nursing or rural generalist medical pathways. It was believed that creating something similar, or adopting the Australian AHP Rural Generalist programme, could create a stronger pipeline for AHPs in rural and remote settings. Participant 17 stated:

> *If you could do more by being here, so it's a more interesting job on the ground, but as part of that you were supported to maybe get a couple of papers towards a post-grad diploma or you ended up with a post-grad certificate that you could then use towards something else, so that when the time came for you to move on, or you felt you wanted to move on, you're not leaving empty-handed. (p17)*

Finally, a point made by participants about the risk of having **Freedom & Scope** was that poor performance could fly under the radar of managers, and this appeared to make rural roles attractive to some. As Participant 18 hypothesised:

> *Are rural places the place where people who don't want to work on their professional development and, are pretty lazy in terms of current policy and procedure, just kinda waiting out 'til retirement, are they in big cities as well? But there's always a few of those in every department, um I find in rural places. (p18)*

7.4.3.5 Lifespan of Roles

The next sub-theme identifies that roles are perceived to have lifespans. For those earlier in their careers, being able to try out a number of areas, or saving up and heading off on an overseas experience (OE), defined how long a person would stay in a role. As Participant 17 stated, *"I think at the age and stage they're at it's just that next progression in their careers, they just want to go and do something a bit different somewhere else. That seems to be the norm" (p17)*. Therefore, knowing that they would be able to maximise their learning during their tenure, and not be pressured to stay beyond the natural cycle, made rural roles more attractive to AHPs.

Having leaders who acknowledge that staff will not stay for decades as they once did (unless they marry a local, a common tongue-in-cheek strategy for retaining staff) was welcomed by participants. They expressed wanting to be able to contribute fully for the time they are in post, while also feeling supported to leave when they were ready to head on to their next challenge.

This was also true for those who were part of a farming business as well as an AHP. As a "*reserve army of labour" (p15)*, it was critical that they could work on the farm at various times in the farming calendar as well as continue their health worker role. This compromise requires leaders who can see the value in supporting them to work seasonally and organisations whose policies and procedures are responsive to that unique rural context.

These patterns had been disrupted to a large degree by the coronavirus pandemic "COVID-19" which closed borders, placed many Kiwi "OEs" on hold and slowed up the job market for non-COVID

related roles. While further analysis of the implications of COVID-19 will follow in the Discussion chapter, it is important to acknowledge here that as the borders reopen the lifespan of roles may be different again from the cycles previously familiar to rural AHP managers.

7.4.3.6 **The Right Role**

The final sub-theme in this section relates to the right role for the participant and their circumstances. This arose frequently in terms of the type of work, such as for Participant 3:

> *I think it was about how long I was willing to wait, so, I could have got other [professional] positions but in order to get into Mental Health, I had to choose to wait a while before finding it. (P3)*

For other participants, their family life or partner's employment was a stronger determinant of the right role, than the role itself. Participant 15 returned to a previous rural role after having their family on that basis: *"I was attracted back and to the rural areas coz they could offer me what fitted with my family life, and my husband's occupation."*

These factors are difficult to build a recruitment or retention strategy around, but they are common enough that leaders and recruiters can build this consideration into the recruitment activity, as Participant 18 described a colleague doing: *"[They] always ask you know, what will your partner do?, you know, what does your partner do?, you know, what's the plan there? Because he sees that as pivotal to sustaining the employment."*

7.5 CONCLUSION

This section has introduced the findings from my analysis of participant contributions. Through in-depth engagement with the stories shared by participants, I have transformed the data into three key themes. These themes capture what participants tell us really matter for health leaders and health organisations to get right if they want to have stable, engaged health providers in their health services in rural and remote communities.

The additional component of **Fit**, which is interwoven through the themes, appears to play a greater part than each of the themes individually. The themes: **Sense of Connection and Belonging**, **Safe and Supported Practice** and **Creating Roles People Want to Come For**, all contain elements of **Fit**. Each theme contains rich suggestions of how AHPs can be attracted and retained in rural and remote workplaces. In the following chapter, these rich suggestions are turned into recommendations for changing practice, an essential pillar of the DHSc journey.

8 PRACTICAL IMPLICATIONS | CHANGING PRACTICE

Gathering knowledge that can influence and change practice for the betterment of health systems is the purpose of the DHSc programme, and an explicit goal of Interpretive Description (Thorne, 2016). Consistent with this, this chapter includes recommendations crafted from the findings of this research. Throughout this research process, it has been apparent that it is important to understand the ways people think about whether a role or a work environment is right for them. From this, we can craft tangible actions to make a real difference in the recruitment experiences of rural and remote health systems. Implementing these recommendations has the potential to support improvements to recruitment and retention of rural AHPs and will lead to a more engaged workforce, who feel supported by both their urban peers and their leaders, and a better-served community. This, in turn, has the potential to improve the reputation of the organisation and the community's health services, increasing the likelihood of more candidates applying for future roles. Improving rural and remote health systems for the communities they serve and for the people who serve in them is at the core of this research endeavour.

8.1 HOW THE RECOMMENDATIONS WERE FORMED

The translation of findings into a set of key recommendations for practice followed four key steps:

1. Identifying key target audiences: When I embarked on this research, I had several key audiences in mind, based on my practice experience and system knowledge. During interviews, participants also often referred to key people who had a role and influence in recruitment and retention in their setting. As such, in considering the practical implications of my findings, I considered recommendations with reference to these key audiences to inform change at multiple levels including: line managers, health organisations, professional associations, registering bodies and educators. Each of these entities plays a significant role in supporting, connecting, and protecting those working in rural and/or remote communities to deliver services that are fit for purpose. This chapter is arranged into sections for each of these groups. While each group can offer a unique contribution to improving the experiences of

rural and remote AHPs, they are also interconnected (as illustrated in **Figure 14**) and make up a network capable of significant change.

2. Extracting findings relevant to these audiences: Once these groups were identified, I reviewed the findings to draw out the aspects relevant to those key audiences to ensure the recommendations were grounded in the data. This process of identifying the relevant aspects was scaffolded on my own past experiences and knowledge. The tables at the beginning of each section serve a dual purpose of wayfinding, and connection back to the data.
3. Putting recommendations into context: This phase of the research occurred within the context of Covid-19 and the health system reforms, and therefore any recommendations needed to be designed to be practically actionable within the current context. Utilising Thorne's "thoughtful practitioner test" (Thorne, 2016, p.93) provided a litmus test throughout the development of the recommendations. I opted for this reflexive process rather than pursuing focus groups as originally planned to avoid adding further burden to an already overstretched and understaffed workforce.
4. Considering recommendations in the context of existing theory and evidence: I have drawn on literature as well as data in this chapter to demonstrate how the recommendations relate to work already undertaken in comparable spaces internationally or adjacent spaces more broadly.

Figure 14.

Key Influencers in the Recruitment and Retention Network

Although adopting all of these recommendations would significantly and positively impact on the experiences of AHPs in rural settings, and therefore improve recruitment and retention, they can also be seen as a menu of options to fit the resources available for change-making. With this in mind, each of the following sections begins with a summary table of recommendations, so that this chapter can also serve as a practical resource.

8.2 Recognising Context | An invitation for line managers

Line managers are the most closely connected to AHPs working on the front-line in rural and remote health settings. The recommendations set out in **Table 9** outline opportunities for line managers to engage with team members and communities, and develop their own leadership skills. Each recommendation is discussed further below.

Table 9.

Recommendations for Line Managers

Section	Recommendation	Relevant theme (s)
2.2.1	*Networking and knowing your community* Become a resource about your communities for your people	**Connection & Belonging**: Feeling Cared About *(7.4.1.1)* **Fit** (*7.4)*
2.2.2	*Finding balance, and role modelling boundaries* Creating micro-moments that build a sense of safety and belonging Lean into flexibility and transparency instead of consistency and equality of rule application Support skills building for navigating work and personal community relationships	**Connection & Belonging:** Feeling Cared About *(7.4.1.1)* **Safe & Supported Practice:** Relationship with Leader(ship) *(7.4.2.3)*
2.2.3	*Time spent walking in their shoes* Make a regular practice of spending time in the remote environments where your workforce is based	**Safe & Supported Practice:** Relationship with Leader(ship) *(7.4.2.3)* **Connection & Belonging:** Feeling Cared About *(7.4.1.1)*
2.2.4	*Building trust benefits everyone* Assume good intent from the outset Promote reciprocal relationships (tuakana-teina[14])	**Creating Roles People Want to Come For:** Freedom & Scope *(7.4.3.4)* **Safe & Supported Practice:** Relationship with Leader(ship) *(7.4.2.3)* **Connection & Belonging**: Feeling Cared About *(7.4.1.1)*
2.2.5	*Enhancing management and leadership attributes* Invest in ongoing leadership development	**Safe & Supported Practice:** Relationship with Leader(ship) *(7.4.2.3)* **Connection & Belonging:** Feeling Cared About *(7.4.1.1)* **Creating Roles People Want to Come For:** Growth Pathways *(7.4.3.3)* AND Freedom & Scope *(7.4.3.4)*
2.2.6	*The Reasonableness Test* Check for biases and other habits of thinking	**Fit** *(7.4)*

[14] *Tuakana-teina* is a concept from *te ao Māori* and refers to the relationship between an older (*tuakana*) person and a younger (*teina*) person. Within teaching and learning contexts, this can take a variety of forms such as peer to peer, younger to older, older to younger, or able/expert to less able/expert and is a reciprocal learning relationship (Te Kete Ipurangi, 2023)

8.2.1 Networking & knowing your community

Having a good sense of the beyond-work resources in their team, and in the local area, is one way line managers can support the needs of new staff, which participants identified as important for settling well into a rural community. This provides an avenue to meeting the **Feeling Cared About** aspect of the **Connection & Belonging** theme. By understanding what is available, line managers will be more able to connect incoming staff and their whānau to experiences that enrich their time beyond work, such as one participant did in offering spare bikes to new colleagues and students.

Understanding the beyond-work resources also allows managers to act as conduits for incoming staff who wish to tap into their desire to give to others or exercise their civic responsibility. This could be done by orienting them to volunteer groups that colleagues already belong to, connecting them with colleagues with similar civic interests, or helping them sign up for local community newsletters or social media sites. These activities are features that participants reported enhanced their ability to feel **Connection & Belonging** to the communities they served, which is supported by Thomas and Clark (2007) who linked **Sense of Connection and Belonging** to being of service. This, in turn, has the potential to create opportunities to increase professional and personal skills within the new community's context.

8.2.2 Finding balance, and role modelling boundaries

My findings highlighted that creating a work environment that is inclusive and diverse, and in which everyone has a **Sense of Connection and Belonging**, is essential. From the perspective of leaders, there are two main reasons for this: 1) because we, as leaders, want staff to remain with the organisation, and 2) we want to build a reputation that we are an organisation worth working for. Often strategies to support recruitment and retention are focused on higher level strategic initiatives. Conversely, my participants highlighted there were many micro-moments that contributed to their cumulative sense of being a trusted and valued member of the team. These micro-moments increased their sense of loyalty to the team and their trust in and respect for their managers. In contrast, those moments when there was not a sense of trust or acknowledgement of the time and effort they put in that was over and above what was required, was heavily felt. Examples of this were highlighted in the

Findings chapter, such as not being able to use the work vehicle to do a personal errand when visiting the base hospital town (see Section 7.4.1.1)

It is understandable that a line manager may feel that consistently applying a policy with all staff, such as no personal use of a fleet vehicle, is the only appropriate option. On the other hand, being able to advocate to the organisation for flexibility and associated transparency of decision making, has the potential to provide opportunities to demonstrate trust in and recognition of the unique context of rurally or remotely based staff. This may not only positively impact on the individual who is granted permission to use a fleet car in this way, but also the other team members who see this mana-enhancing[15] treatment. This is treatment that demonstrates an understanding of the context and circumstances of different staff groups, and therefore demonstrates they are cared about as individuals. Being flexible in the ways described above, while not showing favour to one individual over another is complex, and something that people leaders need to carefully balance (Gingerich et al., 2021).

Additionally, allowing for flexibility that enhances the wellbeing of individuals, and role models supporting the importance of having work/life balance, is a vital role that leaders and line managers can play. This is particularly important for those staff who are living and working in communities where boundaries are harder to enforce beyond the working day, such as when they are approached for advice at the supermarket, or phoned up by someone in their personal life who wants to find out about someone in the hospital (Pugh, 2007). Knowing it is okay to create or maintain social connections outside of the immediate community where work is, and how to do so in alignment with professional conduct, is an important part of self-care for rural practitioners.

8.2.3 Time spent walking in their shoes

Line managers spending time in person with members of their team that are based away from the main centre or base hospital was also rated highly by participants. While it might feel challenging to

[15] *Mana*-enhancing is a way of engaging with others that cares for the spiritual, emotional, physical, and intellectual dimensions of a person (Royal, 2006)

schedule travel to another site, not only does the experience of travelling to staff regularly remind line managers of staff realities of travel, but it also places line managers within staff working spaces to be part of the rhythms and demands of a typical working day. In doing so, it demonstrates to staff that their leader is committed to understanding their reality and likely offers up a perspective that may not have been gained otherwise (Stankanas, 2015). As was highlighted in the Findings chapter (see Section 7.4.2.3), this experience was true for a participant whose manager visited when they were short-staffed and discovered not only how the team managed high demand with such a small group of staff, but also the strengths they drew on, which the manager had not seen before.

Line managers are not always available to respond to or have the visibility of situations where pastoral care of team members is needed. It has been argued that spending time working alongside staff will increase the chances they will reach out when needed (Hatton, 2022). This requires a basis of trust which can be built by responding reasonably and thoughtfully to requests, thereby setting a precedent that you will do so again in the future.

Additionally, spending time with remotely or rurally based teams offers opportunities to build the skills of the local interprofessional team leaders to foster connection across team members (Bradd et al., 2017). This can be achieved by empowering and mentoring members of the workforce who are new to leadership, thus equipping them to gain the confidence to recognise when they can offer their leadership skills across the multidisciplinary team. Encouraging the expansion of these multidisciplinary team relationships beyond the client work is another way to build a working environment where people **Feel Cared About**.

Another way line managers can demonstrate they understand the context in which rural and/or remote staff work is in how they respond to requests and advocate for the procurement of equipment, such as diagnostic tools, so that they can be easily accessible. Participants spoke of their departments owning a particular tool or piece of equipment which was stored at the base hospital or main site, requiring hours of travel in order to retrieve and return it when required. What may seem reasonable for clinicians based in large teams or urban centres, in terms of sharing equipment, may seem quite unreasonable from the perspective of rurally based clinicians or indeed patients wanting to access that

service in a timely manner. Budgets will often not allow for multiple purchases for infrequently used items. Balancing the costs against the clinical hours lost to travel and partnering with rural and remote staff to identify what is most important, most often used or available online helps those staff, and their practice realities, feel understood (Rath & Conchie, 2008).

8.2.4 Building trust benefits everyone

One aspect of rural and/or remote practice that was enjoyed by most participants was the sense of freedom and autonomy they had in terms of planning their days or managing their caseloads and waitlists. This is a key feature of the theme **Creating Roles People Want to Come For**. Participants noted that line managers having trust in them enabled them to be self-determining. Rather than wait until staff have earned trust, assuming good intent and valuing team members from the beginning can promote a level of engagement and commitment to the work, the team and the manager (Brown, 2018). Having the opportunity to build a strong, trust-based relationship with a manager or leader was also a critical component of the **Safe & Supported Practice** theme, Relationship with Leader(ship). Trust, therefore, being offered up-front from a basis of assuming good intent will pay dividends for managers with their rural and remote workforce.

This offering of trust and supporting staff to determine the flow of their day also contributes to another aspect of **Creating Roles People Want to Come For**. For those participants who worked in very small teams, having the opportunity to work across the various age spans and clinical needs of patients enriched their practice. Conversely, those who were required to stand aside for visiting clinicians to work with specific patient groups, rather than be supported to develop those skills themselves, were frustrated and disempowered. Participants knew they had as much to offer their visiting colleagues, in terms of knowledge and skills, as the visiting colleagues could offer them.

Identifying ways, as a manager, to balance the learning needs of staff, and the clinical needs of the community, such as by utilising concepts like the tuakana-teina relationship (Te Kete Ipurangi, 2023), will strengthen relationships as well as clinical practice. Applying this concept to practice could entail utilising visiting clinicians' expertise to support the rural workforce's specific clinical practice skills, while the rural workforce can in turn support visiting clinicians to develop a deeper understanding of

the rural context and of whānau strengths, resources and needs. Working in this way offers an additional benefit for the rural healthcare system as well, when whānau see the respect that visiting clinicians hold for their rural counterparts, and the rural workforce as teachers to the "city folk". Line managers can facilitate these types of relationships between the rural and visiting clinicians, by setting clear expectations of the roles each play. In doing so, they demonstrate the trust they have in their workforce and that they, as leaders, will advocate for what is best for their people (Bradd et al., 2018).

8.2.5 Enhancing management & leadership attributes

For these suggestions to be implemented well requires a level of skill and confidence on the part of the manager. Therefore, investing in learning and developing leadership skills with support such as mentoring or coaching is a fundamental requirement for leaders who wish to build teams that people want to stay in. Understanding how people construct a **Sense of Connection and Belonging** has grown as an area of research within the genre of workforce wellbeing and resilience in the last 10 years. Popularised by researchers such as Dr Denise Quinlan and Dr Lucy Hone (New Zealand Institute of Wellbeing & Resilience, 2023), and Dr Brené Brown (2023), there is plenty of literature and resources that leaders and those who support them can tap into. These include developing "Real Time Resilience" (New Zealand Institute of Wellbeing & Resilience, 2023), embracing and role modelling vulnerability (Brown, 2018), and fostering accountability and clear communication (Hatton, 2022).

Additionally, developing skills to influence the health system, with the view to promoting the utilisation of AHPs to drive service improvement and innovation, positions a manager or leader as someone who will advocate for and support AHPs (Bradd et al., 2018). This increases the likelihood that AHPs will be able to access opportunities to grow into speciality areas often only open to nursing or medical colleagues, as well as broader leadership roles (Mak et al., 2019).

8.2.6 The Reasonableness Test

One final note to line managers is to maintain a practice of ensuring that the way you are looking at the issues, challenges and requests of your rural and remote staff is reasonable. Within the context of

busy, complex, high stress work environments, it is common to need to focus very narrowly on specific issues, at the risk of becoming disconnected from the day-to-day realities of staff based further afield (O'Toole et al., 2010). When the voices of the urban or geographical narcissists (Baker & Hess, 2019), a concept introduced in the Findings chapter (see Section 7.4.3.4), become particularly prevalent, this can also skew perspectives. This could be narratives from senior leaders based in city locations, urban specialist clinicians or the finance team who advocate for economies of scale. So by using the "Is this reasonable?" test from the perspective of those working most rurally, line managers have the opportunity to counter the influences beyond the rural setting and engage with their workforce, building stronger connections and developing their reasonableness testing abilities along the way. To do this, line managers first need to recognise the perspectives they are most wedded to and ways their own biases might inform our decision making. It has been argued that when we actively hold a practice of reflexivity and mindfulness to our own limitations of thinking, we strengthen our ability to execute the reasonableness test comprehensively (Jana, 2016).

8.3 START WITH EQUAL (IF YOU MUST), AIM FOR EQUITABLE | AN INVITATION FOR ORGANISATIONS

The next section offers a range of recommendations for organisations who employ AHPs and organisations who set policy and direction. (See **Table 10** for an overview of recommendations for organisations.)

Table 10.

Recommendations for Organisations

Section	Recommendation	Theme(s)
2.3.1	*Apportioning resource* Matching investment to each of the workforces equitably and with population benefits in mind	**Safe & Supported Practice:** Valuing Learning *(7.4.2.2)*
2.3.2	*Demonstrating AHPs' learning needs are valued* Create, brand, and promote learning with each workforce in mind	**Safe & Supported Practice:** Valuing Learning *(7.4.2.2)*
2.3.3	*Fit for purpose policies and procedures* Visible, transparent, accessible, and fair	**Safe & Supported Practice:** Valuing Learning *(7.4.2.2)* **Connection & Belonging:** Feeling Cared About *(7.4.1.1)* **Creating Roles People Want to Come For:** Growth Pathways *(7.4.3.3)*
2.3.4	*Are you an ally for rural and remote AHPs?* How you represent your rural colleagues and services to others matters	**Safe & Supported Practice:** Relationship with Leader(ship) *(7.4.2.3)* **Connection & Belonging:** Feeling Cared About *(7.4.1.1)*
2.3.5	*Who is missing from this process?* Assumptions limit progress, and affect quality	**Connection & Belonging** *(7.4.1)* **Safe & Supported Practice** *(7.4.2)*
2.3.6	*Are they safe?* aka The Reasonableness Test (see 2.2.6)	**Fit** *(7.4)*
2.3.7	*The human impact* Impacts on identity, and wellbeing	**Connection & Belonging:** Feeling Cared About *(7.4.1.1)*

8.3.1 Apportioning resource

When we think of equal or equitable rights within the Aotearoa context, it is common for our first thoughts to rightly turn to tangata whenua Māori. Organisations across the motu, the country, are building strategies to improve how they build their workforce to better reflect the population demographics, to "mirror the people they serve" (Chen et al., 2006; Wyatt et al., 2016). Some of these strategies include programmes like Kia Ora Hauora (*About Us | Kia Ora Hauora*, 2023) and Te Huka Mātauraka (University of Otago, 2023), shortlisting criteria to prioritise interviewing Māori, internships, ringfencing funding for training and development, and mentorship programmes. Some of these strategies offer a specifically Te Ao Māori approach, while others have been replicated to build up the medical and nursing pipelines for non-Māori as well as Māori.

Students of AHST programmes have been able to tap into strategies supporting Māori future health professionals, but to date nothing has been replicated to build up these pipelines more broadly. Given AHST professions collectively make up just under 30% of a health system's workforce, and together are often as large in number as those who are doctors, it is disappointing to find that what is available for medical and nursing colleagues has not been afforded to those who identify as AHST. In fact, this significant group of the health workforce often report feeling like an afterthought in workforce planning (McNeil et al., 2013; O'Toole et al., 2010). While my research did not analyse professional development budgets, or government subsidies across the health professions, participants reported a sense of lack of investment, or priority, compared to what they were seeing for other professions in their organisation. This disparity was then exacerbated by the higher costs to access training out of district (Stagnitti et al., 2005). Ensuring that there is sufficient training resource allocation to cover these higher costs, comparative to what urban counterparts would need, is an action that would demonstrate the value of investing in AHP professional development. Committing resource that is equitable to what is allocated for the professional development of nursing, midwifery and medical staff has the potential to powerfully demonstrate the value an organisation sees in AHPs, as well as bolster the gains in service provision that professional development offers.

8.3.2 Demonstrating AHPs' learning needs are valued

In most health settings, our nursing colleagues—whether enrolled nurses, registered nurses, nurse practitioners, or nursing assistants such as healthcare assistants—make up the largest workforce group. Therefore, it is perhaps understandable that the bulk of in-house workforce training programmes are focused on meeting the compulsory requirements of the nursing professions. Participants in this study reported that many of those programmes were also mandated for AHPs but were not always relevant to their profession. This was a source of frustration.

How training is branded or promoted is key. If training that should be mandatory for all professional groups or workforces is labelled as training developed for one professional group, it can raise questions. Some such questions include: "Has this training been developed by someone who understands the scope of practice and requirements of my profession?", "Why hasn't training been developed for my profession?", "Are my learning needs, or the needs of my profession, not as important?" The flow-on effects of this experience speak to whether AHPs feel seen in their organisation, and whether they will buy in to the learning activity that is provided. If we wish to create a sense of **Connection & Belonging** for AHPs, then demonstrating that their training needs can be met alongside the organisation's needs regarding mandatory training is essential. Doing so also demonstrates that the organisation supports and values learning for all groups, a component of **Safe & Supported Practice**.

Having access to e-learning has made a significant positive difference to learning for rurally and remotely based clinicians. This has been particularly important when it is regular and profession-specific, as it is demonstrated to reduce professional isolation (Cosgrave, 2020a). It also saves travel and accommodation costs and makes it easier to release staff for training when there is not a possibility of backfill. Yet, when e-learning is designed as a catch-all or is targeted at the needs of less experienced staff, inequities of access are apparent.

8.3.3 Fit for purpose policies and procedures

In addition to ensuring access to learning opportunities at a workforce level, policies and procedures in the organisation need to demonstrate this commitment at a systems level. By ensuring that the policies and procedures guiding funding and approval processes are consistent, transparent, and equitable, it makes visible the commitment the organisation has to the ongoing development of AHPs as a valuable and valued workforce. This includes offering visibility of the available resources across all of the professional groups including medicine and nursing. It also requires that the criteria to access them are fairly administered. As highlighted by Sabitova et al. (2020), a number of studies have concluded that the level of transparency and consistency directly impact on healthcare professionals' felt sense of job morale, which is in turn tied to retention.

The rules for access to training that participants described were often hard to understand. Sometimes they seemed to work for one part of the organisation at the expense of another, such as requiring all mandatory training be up to date, when the majority of the mandatory training has been designed for a different profession. Or the rule is set regardless of circumstances; such as no training outside Aotearoa being supported, as one participant noted (see Section 7.4.2.2) in relation to a specialist course that was only delivered in Australia but was specific to a condition prevalent in that rural community. With these rules, at some point, the options for training online or within the motu, the country, would no longer meet a participant's professional and clinical development needs, leaving them struggling to continue to grow in their practice. Therefore, it is important for organisations to examine the rules that govern the use of professional development funding. Being able to clearly articulate who those rules serve, and when they stop serving their purpose, as well as being willing to review the policy or procedure that governs them, are essential actions.

Even when funding is specifically targeted via a funding stream such as from Manatū Hauora | Ministry of Health, understanding and being prepared to defend or challenge the purpose of the funding is important. By doing so, organisations can signal how we believe funding should support our workforces and demonstrate to our people that we hold their learning needs at the centre of our thinking.

When we make funding processes visible and link them to organisational or service development strategy, two opportunities are realised. First, it makes clear that professional development will be available to support the goals the organisation has to serve the community. Second, it demonstrates how our workforce will be supported to grow, including the process to commence pathways to specialist practice. In doing so, organisations also strengthen the ability to promote career opportunities, to both existing staff and when recruiting (Cable & Turban, 2001; Yu & Davis, 2019).

Participants illustrated how professional development funding rules were bent when it seemed to suit organisations; something that paid off in one participant's favour. In that instance (see Section 7.4.2.2), the participant was able to access funding by demonstrating they could free up a doctor to do more surgery rather than being in a clinic. However, needing to work around policies in that way suggested the rules were designed to serve certain groups over others.

Fairness of distribution of funding should not apply only to professional development. A recent year-long recruitment campaign has caught headlines in Aotearoa for the overseas recruitment of registered nurses to fill the significant workforce shortages in nursing across all sectors. This was a significant organisational strategy across the newly formed Te Whatu Ora national health system. With close to $600,000 being spent on advertising this campaign so far, and only 1% of current vacancies filled as a result, the wisdom of this approach has been challenged robustly (Powell, 2023). One aspect of this challenge has been seeking to understand why one group of professions has been promoted in this way, when there are workforce shortages in many professions. A message this sends to our workforces is that only nursing is worthy of this investment. For organisations embarking on targeted campaigns such as this, there are some approaches to keep in mind. One is to communicate clearly and often with the whole workforce about what your strategy is and why. If you need to choose one or some professions over the rest, do so in a way that transparently demonstrates how the recruitment strategy aligns with the organisation and service delivery goals. Ideally, any strategy would also aim to address any perceived inequities of treatment between workforce groups, recognising that how we treat the people we already have will determine how much future recruitment is needed.

8.3.4 Are you an ally for rural and remote AHPs?

Allyship is a lifelong process of building and nurturing supportive relationships with underrepresented, marginalised, or discriminated individuals or groups with the aim of advancing inclusion (Luthra, 2022). Rural communities in Aotearoa, along with their health systems and workforces, are among the underrepresented, and experience inequity as a result (Te Whatu Ora & Te Aka Whai Ora, 2022). AHPs, whether in rural or urban settings, also experience underrepresentation, and, as participants highlighted, have apparently been marginalised to the benefit of other professions.

Being more responsive to the needs of AHPs, to address this experience of marginalisation, goes beyond equitable provision of professional development. By better understanding and promoting all the workforces needed to create our health systems, organisations can improve the workforce's sense of safety (**Safe and Supported Practice**) and demonstrate that AHPs are key members of the organisation (**Connection & Belonging**).

One way to do this is for anyone who represents the organisation to consider how they represent the rural communities they partner with—be they senior leaders situated at the urban or base hospital, or clinicians providing specialist remote or "fly-in, fly-out" type services. These ambassadors of rural health careers need to be mindful of how they represent their rural colleagues or services to others, and how they promote the unique and effective ways that clinicians work in a rural and/or remote context. Taking time to gather the stories from clinicians on the ground would equip these ambassadors with evidence and understanding that enables them to advocate for or defend rural and/or remote services when they are under threat. If not explicitly seeking to be an ambassador for rural health, urban-based representatives of rural services may risk falling into the trap of urban or geographical narcissism (Baker & Hess, 2019), where they feel confident they are better placed to know what is needed than are colleagues who have *"gone bush"* (p7). It is important that urban representatives of rural and/or remote health systems check their biases if they are to hold the best interests of the rurally or remotely based staff and communities at the centre of their dialogues. This is another opportunity to implement the reasonableness test mentioned earlier (see Section 8.2.6) by questioning, "Who does this serve?". Messaging to communities that rural AHPs are not as qualified,

experienced, or resourced as urban counterparts does not serve anyone, least of all the urban health leaders and clinicians who are reported to be sharing that narrative.

Recognising the contributions that rural and remote health systems are making across the motu, and that are benefiting communities up and down the country, can provide a counterpoint to urban narcissism. From the utilisation of drones (Te Whatu Ora Te Tai o Poutini West Coast, 2022), to Māori maternity wānanga (Hauora Taiwhenua, 2023), there are plenty of examples of innovative and impactful clinical practice being delivered by rural clinicians. Professional bodies of each of the workforces that make up the AHST professions also have a role to play here as they can provide case studies and opportunities for connection with individuals and teams leading the way in rural health settings (also see Section 8.5).

8.3.5 Who is missing from this process?

If our health system is to be truly transformed, all members of the multidisciplinary workforce and clinical leadership teams will need to have a clear understanding of each other's skill sets and scopes of practice. This is also true at the head of organisations, particularly making better use of the collective wisdom of multidisciplinary clinical leadership when developing new roles, services, or pathways into specialist practice. As highlighted in the Findings (see Section 7.4.2.2), creating a service or specialist role for a single profession, often as part of a desire to strengthen the recruitment and retention of that professional group, has a range of consequences. These consequences can include increased employment costs, increased professional development requirements and often unintentionally removing clinical responsibilities and activities from the profession or service already providing that clinical expertise. Furthermore, these actions erode the sense of **Connection & Belonging** professional groups have and place their ability to provide **Safe & Supported Practice** at risk.

If we are committed to ensuring all of our workforces can work to the top of their scope, should we be creating specialist roles for one profession to upskill into, when another profession trains their workforce to undertake the same clinical activity as a new graduate? How do the decision-makers in one profession have access to the knowledge of what other professions may already have in their core

scope of practice and be more proficient to deliver clinically? Ensuring all the professions are represented, when these roles are being considered, is better for the organisation; clinically, financially and operationally, as well as better for our workforce (Nancarrow et al., 2013). This can be achieved by consistency of representation of the entire workforce at an executive level for all specialist role development (Boyce, 2006; Bradd et al., 2018), removing the risk that role reviews occur in silos, or without a clear understanding of the potential impacts on the wider workforce. Recognising the consequences of side-lining one profession's scope of practice to provide advanced skill opportunities for another profession is essential if organisations are going to be able to meet their obligations to communities in an era of workforce shortages, and international competition for staff (Iedema et al., 2006; McNeil et al., 2013).

8.3.6 Are they safe?

As well as line managers, (see Section 8.2.6) it is important for organisations to also use the reasonableness test when considering tools that aid the safety of those staff working most rurally or remotely. Participants spoke of having limited access to cell phones, vehicles ill-equipped for farm roads or long-distance travel, lack of staff, and lone working in geographically remote environments, that also had communication blackspots. Ensuring there are practices that keep AHPs safe and well generally, and that those processes are honoured and not eroded by workforce shortages or budgetary constraints, is essential for rural and urban workforces. The unique context of rural and remote settings requires that these practices account for the impacts that travel can have on wellbeing and work-life balance, or the practical challenges should vehicles break down in communication blackspots. Safety considerations also need to extend to the enduring impact that higher caseloads or long travel times in rural and remote practice can have on an ageing workforce. Organisations need to understand the lived experiences of AHPs in order to enact safety plans and purchase the most appropriate equipment. There should therefore be regular engagement with AHPs to ensure intel about threats to safety are contemporary and plans to mitigate risks are co-designed and implementable. In this way, they are also meeting their obligations under the "Health and Safety at Work Act" (2015).

8.3.7 The human impact

One last point for organisations to consider is the cumulative impact of being overlooked. Often referred to as "microaggressions" in diversity and inclusion literature (Jana, 2020; Sabin, 2022; Winters, 2023), the assumptions, questions or insensitive statements and actions evident in the stories and experiences of my participants target aspects of identity. For AHPs, having their scopes of practice, contribution and value downplayed or dismissed, either through lack of knowledge or deliberate interprofessional positioning, can negatively impact on their physical and mental health over the course of their career, increase burnout and decrease job satisfaction (Washington, 2022). While this is true regardless of where an AHP is working—remotely, rurally or in an urban setting—when it is overlaid by geographical narcissism as well, it creates a toxic mix.

If we truly want to use all of our workforces at the top and breadth of their scopes, and provide more preventative and population based health, organisations need to work harder to understand, recognise and celebrate the professions that make up our AHST workforce (McNeil et al., 2013). For rural and remote health services, this may be critical to optimise recruitment and retention of this workforce and would set the context for them to flourish in those communities.

8.4 MOVING FASTER AND SCHEDULING | AN INVITATION FOR RECRUITERS

As organisations consolidate their support services, recruiters are often working across a range of portfolios or geographical locations. This creates a complex set of competing priorities, often compounded by elevated expectations and, in some cases, limited recruitment experience of hiring managers. The following recommendations for recruiters (see **Table 11**) may add to an already busy load. In spite of this, I argue the recommendations will pay dividends over time for the organisation, and for the recruiters' workload and job satisfaction.

Table 11.

Recommendations for Recruiters

Section	Recommendation	Theme(s)
2.4.1	*A window into the culture of an organisation* Treat every candidate as though they will solve all of the organisation's recruitment needs	**Connection & Belonging:** Feeling Cared About *(7.4.1.1)* **Creating Roles people want to come for:** Recruitment Experiences *(7.4.3.1)* **Fit** *(7.4)*
2.4.2	*Knowing your audience* Learn about all the professions who come under the Allied Health, Scientific & Technical umbrella; what they do, who they are, what matters to them	**Connection & Belonging:** Feeling Cared About *(7.4.1.1)* **Creating Roles people want to come for:** Recruitment Experiences *(7.4.3.1)*
2.4.3	*Creating opportunities to connect* Line up start dates for multiple new hires	**Connection & Belonging**: Feeling Cared About *(7.4.1.1)* **Creating Roles People Want to Come For:** Recruitment Experiences *(7.4.3.1)* **Connection & Belonging:** Personal Relationships *(7.4.1.2)*
2.4.4	*Identifying patterns* Collect, analyse, and make visible workforce data in meaningful ways	**Creating Roles people want to come for:** Lifespan of Roles *(7.4.3.5)*

8.4.1 A window into the culture of an organisation

While **Creating Roles That People Want to Come For** starts long before an organisation's recruitment team become involved, my findings suggest that how a candidate experiences the recruitment process can create a significant impression. The recruitment processes provide a glimpse of how an organisation is run and offer a view of the organisation's culture (Yu & Davis, 2019). These aspects will strongly influence the decision making of candidates when they have a number of roles to choose from (Buykx et al., 2010). With the impact of gaps in staffing being so much greater in rural and/or remote areas where teams are often very small, recruitment interactions need to offer a high level of customer service. It may also be beneficial to prioritise recruitment activity relating to rural roles over urban or base hospital recruitment activity, where the volume of candidates is often much higher and staffing gaps make up a smaller percentage of the workforce. Giving candidates a sense that they are a priority, and giving preferred candidates an experience of being sought after is of great importance in harder-to-staff rural roles.

8.4.2 Knowing your audience

Many of the workforce groups and professions within AHST are not commonly recognised, nor their scope of practice well understood. It is understandable that recruiters would not necessarily know what skills and attributes an organisation is looking for when recruiting to these positions. It is recommended recruiters should take opportunities to get to know the professions, ask for guidance, check their biases and not be afraid to admit their assumptions. The more recruiters know what they are looking for, the more effective their recruitment drive is likely to be. This may also contribute to stronger relationships with recruiting managers and budget holders; they too are AHPs who want to feel cared about (**Connection & Belonging***)* and whom organisations wish to retain.

8.4.3 Creating opportunities to connect

Another key message that participants shared was that creating friendships in the community was a significant factor to their desire to stay in the role. Where they were recruited at a similar time as other newcomers, they were able to create social groups which allowed them to discover their communities and often extended to sharing flats or other accommodation. This is particularly important for entry

level staff and those in their early to mid-20s who have been found to be most at risk of social disconnection and loneliness (Keane et al., 2012). Even if these people do not have a lot of interests in common, the fact that they are starting out at the same organisation together has been found to be enough to make the transition into their roles and their new community smoother (Kumar et al., 2020). Working with recruiting managers to co-ordinate recruitment, and to build mechanisms which can wrap around groups of new staff to support their entry into community and work life, is a great way to respond to the Feeling Cared About aspect of **Connection & Belonging**, as well as strengthening the Recruitment Experiences component of **Creating Roles People Want to Come For**.

Building networks across organisations' recruitment teams to help spouses find work as part of a package of recruitment is something that some of the organisations our participants worked in did well. Not only does this technique support candidates and their whānau practically as they are being onboarded into the organisations and community (Cosgrave, 2021), it also demonstrates to them that they matter to the organisation beyond their suitability for the role. Linking them with colleagues in the organisation who have similar school-aged children can also help as they prepare to identify schools, or other aspects of life crucial to setting down roots in a new environment (Cosgrave, 2020a).

These strategies are not new to the narrative about recruitment and retention in rural and remote communities (Cleland et al., 2012; Cosgrave, 2021; Hustedde et al., 2018; Quilliam et al., 2022). However, embedding a more deliberate and consistent approach will likely improve the reputation of the organisation as well as build a practice of inviting existing staff to play a role of manaakitanga[16], of hospitality and support, for future colleagues.

8.4.4 Identifying patterns

Finally, recruiters hold the key to supporting managers to recognise and plan for the lifecycle of the distinct roles in their teams. As participants highlighted, there are clear patterns in how people join and leave teams and yet it appears to them that the machinery of recruitment is unable to gear up in a

[16] *Manaakitanga* represents the concept of hospitality, generosity, kindness and support as well as the process of showing respect (Moorfield, 2023)

timely fashion. This often leaves roles unadvertised and then vacant for an unreasonable time. By gathering and communicating the array of data that recruitment teams can access, both internally and from external analytics such as job search engines, recruiters can help managers to recognise the features of a staff member's career journey where role change might be triggered. This in turn allows the manager to pre-emptively plan, with the support of recruiters, when recruitment campaigns might be required.

8.5 Extended Scopes of Practice | An invitation for Professional Associations & Registering Bodies

The role of registering bodies and professional associations to protect the public and develop their profession's standing, scope and safety is paramount to health professionals' ability to practise with legitimacy and agency. Across the AHST professions, these organisations are often small, with limited resources, and it is therefore understandable that most of the focus, energy and attention is directed at those aspects of clinical activity affecting the greater part of the professional group. **Table 12** offers a key recommendation for registering bodies and professional associations, and the themes that demonstrate why it matters.

Table 12.

Recommendation for Professional Associations and Registering Bodies

Section	Recommendation	Theme(s)
2.5	*Recognise and Endorse a Rural Scope of Practice* Establish mechanisms to recognise rural practice as an extended/specialist scope of practice and a pathway for endorsement	**Connection & Belonging:** Feeling Cared About *(7.4.1.1)* **Creating Roles people want to come for:** Growth Pathways *(7.4.3.3)* AND Freedom and Scope *(7.4.3.4)*

In 2019, a national hui was hosted by Manatū Hauora | Ministry of Health to consider ways to strengthen the rural and remote health workforce pipeline. Attendees representing the health sector, a variety of professions, and education providers heard from thought leaders and workshopped ways to improve the pathways into rural clinical practice. Recognising and endorsing a rural scope of practice

for each profession was a key message that came out of that workshop, and one that participants in this study also recommended. For participants, the ability to have their rurally focused practice endorsed as an extended scope of practice would be a significant step towards having their roles valued. This would also connect with participants' perspectives that growth pathways towards extended scopes, and the freedom and scope that would come with it, would be an attractive reason to join the team and/or to stay (**Creating Roles People Want to Come For**).

Thanks to the great work already undertaken in Australia, scopes of rural practice for some of the AHST professions are already defined, with work underway by others. This creates the opportunity for the AHST professional associations and registering bodies to take up those definitions and scopes, and work with rural and remote AHPs across Aotearoa to bring to life and endorse an Aotearoa New Zealand equivalent. While the rural workforce is small, and the membership of each profession that work rurally is even smaller, investing in the adoption of suitable scopes of practice will enhance the mana[17] and integrity of highly skilled clinicians working in rural and remote settings, as well as enhancing the mana of those career pathways, as it has done for rural medicine.

If the focus of registering bodies and professional associations remains on those specialisms aligned to narrow medical scopes of practice, which best serve professionals in tertiary hospitals, they run the risk of becoming irrelevant as we progress towards a more preventative and population health approach to health and wellbeing provision (Department of the Prime Minister and Cabinet, 2021; Health and Disability System Review, 2020). Rural scopes of practice offer a new paradigm to consider how extended scopes are developed, proposing a move away from medically aligned scopes into a more "whole-of-person" approach.

Professional bodies also have an opportunity to support rural communities and organisations to better understand the contributions that AHPs can make by developing resources that help professions better articulate their skills and scope; most prominently, those that are being eroded by the development of specialist roles in other professions. As noted earlier (see Section 8.3.4), by gathering stories of the

[17] *Mana* translates as integrity, standing or prestige (Ryan, 2012)

successes occurring in rural and remote settings, professional bodies will have ample evidence to provide to policymakers, organisations and universities when advocating for their profession(s) to stand fully within the breadth and depth of their clinical scope.

8.6 ALIGNING WITH THEIR CONTEXT | AN INVITATION FOR TERTIARY EDUCATION PROVIDERS

Universities and other schools of professional practice are essential to the development of future members of the AHP workforce. My findings point to two key areas of focus for these professional training institutions, if they are to better contribute to the development and growth of rural health systems, and in doing so reduce the inequity of health outcomes facing rural dwellers. **Table 13** provides an overview of recommendations for tertiary education providers and their relationship to the themes.

Table 13.

Recommendations for Tertiary Education Providers

Section	Recommendation	Theme(s)
3.6.1	*Is city-based training the only way?* Develop ways to connect knowledge, skills and qualifications with learners who are rurally located	**Creating Roles people want to come for**: Growth Pathways *(7.4.3.3)*
3.6.2	*Rural Generalism* Develop rural generalist pathways for individual professions and transdisciplinary	**Safe & Supported Practice**: Valuing Learning *(7.4.2.2)*

8.6.1 Is city-based training the only way?

Participants described the types of challenges rural rangatahi[18] experience, compared to their urban-raised peers, in accessing a tertiary education. Some participants recalled school mates who simply could not leave home to attend university, whether because they could not be spared from their role of contributing to the family income or because the thought of going to the city was not palatable. As I

[18] *Rangatahi* is a modern translation for youth, or young people (Ryan, 2012)

will explain further in the Discussion (see Chapter Nine), there is ample evidence that a considerable number of rurally born, urban-trained health professionals do not return to rural settings once qualified.

Relying solely on bringing rurally born students back to rural communities through programmes such as the Rural Immersion Programme is not sufficient, as one participant highlighted. Instead, universities have an opportunity to embrace the power of online learning, to create more opportunities to learn in rural areas or, where only a city campus can deliver specific learning, to bring students to the city purposefully for short blocks of time, such as through a residential programme model. Social work training has led the way in this regard, as has midwifery, with fully online education models and targeted city-based block courses, so there is plenty to draw from by way of inspiration and practical application. The integrated training pipelines found in Australia also provide a useful exemplar (Cosgrave, 2020a; Humphreys et al., 2006). Collectively, there are plenty of examples for Aotearoa's tertiary training providers to develop local models.

8.6.2 Rural Generalism

One of the most straightforward approaches to creating growth pathways for AHPs in rural areas has been modelled by our medical colleagues in Aotearoa and abroad, as well as Australian AHPs; namely, the Rural Generalist pathway. While straightforward, in that it is a well-formed model with solid outcomes in the other settings, it requires the expertise of tertiary education providers to weave it into post-graduate models and ensure it is grounded in the principles of Te Tiriti[19].

The development of the Medical Rural Generalist model in Aotearoa, with its initial slow growth and emphasis on helping the public and health colleagues understand and have confidence in its value, has been hard won. Adopted from the educational model used by our Canadian and Australian counterparts (McGirr et al., 2019; Rourke et al., 2018), it offers a ready-made solution to training

[19] *Te Tiriti* (the treaty) is an abbreviated reference to *Te Tiriti o Waitangi*, the Treaty of Waitangi, the founding document of *Aotearoa* signed by representatives of *Iwi Māori* (tribal groups) and the British Crown in February 1840 (Ministry for Culture and Heritage, 2017).

medical professionals as they step into Senior Medical roles to carry multiple scopes of practice complementary to rural health needs.

Australia has also undertaken the significant task of developing an educational model that supports both newly qualified and more experienced AHPs to develop the skills required to become rural generalists and have this recognised through a post-graduate qualification (Allied Health Professions' Office of Queensland, 2015). Their model is delivered remotely and in conjunction with the Regional Universities Network, so does not require participants to travel away from their communities to take part in the programme. This is an important feature to sustain clinical activity as well as in respect of participants being able to learn in place. NHS Scotland also offers a framework (The Remote and Rural Healthcare Education Alliance, 2021), which is multidisciplinary in nature, and oriented to advanced practitioners who can extend their generalist scopes through online and on-the-job learning (The Remote and Rural Healthcare Education Alliance, 2023).

In Aotearoa, we have seen the Rural Immersion Programmes drive collaboration between the different tertiary providers responsible for the health students that take part in interprofessional rural placement programmes. Whether by utilising a university network such as Australia's model or through the National Interprofessional School of Rural Health that continues to be lobbied for here in Aotearoa (Nixon et al., 2018), the principle of connecting AHPs working in a variety of rural and remote health settings to continue their professional development in ways that serve their rural communities, as well as their career goals, is valuable.

Partnering with the programmes already on offer via James Cook University (2017) in Australia, or the NHS Scotland RRHEAL Learn programme (The Remote and Rural Healthcare Education Alliance, 2023), adding cultural components suited for working with tangata whenua, or creating a micro-credentialing style approach are options worth exploring. These offerings could be woven within the rural interprofessional education programmes available in multiple rural locations around Aotearoa, as part of a longer, more dedicated pathway that captures the attention and interest of student health practitioners and guides them through the various stages of their rurally focused careers.

8.7 CONCLUSION

This chapter has set out to provide some tangible actions that can be taken by health leaders, organisations, recruiters, professional associations and registering bodies, and tertiary education providers. Each idea links back to the findings of this research; from the thoughts and experiences of our participants as well as the core themes, **Sense of Connection and Belonging**, **Safe and Supported Practice** and **Creating Roles People Want to Come For**. It has also made visible some of the practices that continue to harm the efforts to improve recruitment and retention for rural areas, presenting opportunities for us all to examine whether our actions match our intentions.

9 DISCUSSION

9.1 INTRODUCTION

In this chapter, I will discuss the key findings, offering connections to existing literature, and considering how the findings challenge or build on current thinking. I will then offer some critical reflections on my findings with reference to the specific context in which this research was carried out and the health contexts in which the findings will be implemented, including how the current contexts of the coronavirus pandemic, and the Aotearoa New Zealand Health System reforms impact on and influence the analysis. Throughout, I will consider in more depth the specificity of the findings to a rural health context and how these themes stack up against previous research. Finally, this chapter concludes with the strengths and limitations of the research, including key methodological considerations and opportunities for further research.

9.2 SUMMARY OF KEY FINDINGS

This doctoral research was the first of its kind in Aotearoa; exploring factors perceived to influence recruitment and retention of AHPs in rural and remote health settings. Specifically, the primary objective of this research was to explore attractive aspects of living and working rurally, to inform recruitment and retention strategies. As already acknowledged, this inquiry originated due to my own experiences as a health leader across rural and remote communities, struggling to maintain consistent staffing and service levels. The research also grew out of the desire to respond to the gaps in the literature and be able to offer meaningful knowledge specific to AHPs in Aotearoa's rural and remote communities.

The findings from this research have added to the growing literature exploring ways to recruit and retain health professionals in rural and remote communities. As outlined in the Findings chapter (see Chapter Seven), three key themes were constructed through analysis of participants' stories. These are **Sense of Connection and Belonging**, **Safe and Supported Practice** and **Creating Roles People Want to Come For** with an infused concept of **Fit** woven throughout. Aspects of these themes can be found in existing literature (Kim et al., 2023; Subramanian et al., 2022; Treviño et al., 2020), although

the conclusions reached by those authors and mine differ in some instances. I will discuss each in more depth below.

9.2.1 Sense of Connection and Belonging

Sense of Connection and Belonging captured the importance for AHPs to feel they are valued as people, as well as in their professional context, and can value others in return. It highlighted that whether they were joining a service in their own rural community, or moving their life to a new geographical location, AHPs wanted to be part of their communities. Personal Relationships was a key aspect of this theme, and a critical factor for successful transition into and retention within a workforce, a finding echoed in other research (Cosgrave, 2020a). Feeling Cared About, which was key to a **Sense of Connection and Belonging** included how supportive and welcoming teams are. Existing literature echoes this finding, arguing supportive teams to be an important aspect of AHPs deciding to stay in a role (Cosgrave, 2020a; Kumar et al., 2020).

The third key sub-set of this theme was being In Service, to the communities that participants had joined as rural AHPs, and to their whānau and rural communities of origin. Once AHPs have established their own network connections, they are well placed to contribute to their communities in ways that utilise their skills and knowledge, advance community members' social outcomes and strengthen their ongoing connection to their role and home (Farmer & Kilpatrick, 2009).

9.2.2 Safe and Supported Practice

Safe and Supported Practice captures aspects of a thriving environment, through the provision of support and safety for team members, mechanisms to share risk, and resources to receive supervision and mentoring. This theme includes the quality of relationships with those in leadership, how learning is valued by the organisation or the practical tools of work such as connectivity and technology. Where theme one highlighted that having the necessary tools and resources enables people to feel cared about, this theme recognises the power that feeling connected brings to being safe and supported in practice. The key concept Connectivity and Technology covers this aspect, by both emphasising the need for people to feel connected to each other and requiring access to technology to

enable this connection to occur. It also acknowledges that addressing the challenges of mobile phone and data availability in rural and remote areas are often beyond the control of employers (Crown Infrastructure Partners, 2023).

Another key component of the **Safe and Supported Practice** theme was Valuing Learning. This may be demonstrated through organisational policies, equitable allocation of professional development budgets between professions (by employers and government ministries) or how access to learning is prioritised and operationalised. Experiencing the ways that organisations and leaders demonstrate they value learning has a significant impact on AHPs' decision making about joining or staying in a role (Keane et al., 2012). A weight of literature supports this key component of recruitment and retention, where access to continuing professional development and mentorship is recognised as being essential (Cosgrave et al., 2018a; Keane et al., 2011; Kumar et al., 2020; O'Toole et al., 2010).

Relationships with Leader(ship) is the final aspect of **Safe and Supported Practice**. This involves the ways that participants felt that organisational leadership interacted with them generally, their relationships with their line managers and how much autonomy or oversight participants had when working remotely from leadership.

9.2.3 Creating Roles People Want to Come For

The third theme, **Creating Roles People Want to Come For**, offers the building blocks for roles that are "worth it"; roles that offer a variety of work, growth pathways, freedom and scope and feel like the right role for the candidate's stage of practice and goals. This theme also captures the power of recruitment experiences and how roles have a lifespan that can be predicted and leveraged off.

Variety of Work, one aspect of the third theme, relates to the opportunity to develop and utilise a wider range of clinical skills and therefore support a broader section of the community. While some of the literature reviewed described rural teams using skill sharing (Smith & Duffy, 2010), this appeared to be primarily focused on covering the breadth of patient needs (Boshoff & Hartshorne, 2008) rather than a deliberate strategy to increase the clinicians' enjoyment of their work through positive challenge and learning. My findings highlighted that variety of work increased participants'

satisfaction with work and provided opportunities for them to extend their skills and knowledge, and that these experiences were sought after when considering changing roles.

The importance of appropriate professional development has already been discussed, within the context of how learning is valued by the organisation. It bears mention again here, that having professional development programmes which specifically target AHPs wherever they are in their growth is important (Cosgrave, 2020a; Kumar et al., 2020). Matching them to available and emerging Growth Pathways is key to **Creating Roles People Want to Come For**. Recruitment Experiences offer another aspect of this theme, and the findings align with overseas literature recommending practices such as systems and processes to support faster recruitment (Cosgrave, 2020a), and onboarding new staff in clusters to provide a social network (Keane et al., 2011; Kumar et al., 2020).

9.2.4 Fit

The concept of **Fit** is an element that weaves through each of the three themes, as well as standing alone. It captures the importance for AHPs to feel their context is a match to their values, their interests, their needs, and goals. Existing literature has split professional and personal or social factors when analysing reasons clinicians join, stay in or leave rural and remote settings (Allen et al., 2020). However, my findings demonstrated that **Fit** encompasses aspects of all of these factors and, as suggested by person-environment fit theories, a person's values are more likely to play a key role in decision making (Conomos et al., 2013; Deschênes, 2021).

9.3 Significant Points for Consideration

The key themes may feel familiar, or common sense, in that they are ways we should treat others and are therefore appropriate regardless of the physical environment, location of employment or workforce type. This is because the ideas of **Creating Roles That People Want to Come For**, providing **Safe and Supported Practice**, and a **Sense of Connection and Belonging** are all fundamental to the principles of inclusion and belonging, which apply to all human beings (Brown, 2017; Hatton, 2022).

Through my analysis and development of the findings (see Chapter Seven) and practice change recommendations (see Chapter Eight), a number of ideas came through repeatedly. This section will explore these ideas more fully, including considering to what extent each idea is particularly relevant to rural and remote AHPs, and how my findings support, challenge, or extend existing literature.

9.3.1 Fit: who has it, and how do we develop it?

As I have highlighted, when **Fit** has been examined as a component of successful recruitment and retention in rural and remote health settings, it has been described in terms of professional fit OR personal fit OR social fit and so forth. A person's rural identity—if they were born rurally, or if they were trained rurally—was also seen as a measure of their fit. These are all components of fit; however, when looking across my findings as a collective, **fit** reflects something much more nuanced. In simple terms, I would describe this as the difference between fit as something you are, versus fit as something you feel.

Within my study, some urban-born participants hypothesised that the easiest way to grow people who would fit a particular community should be to educate people from those communities. This is also a common perspective reflected in existing literature (Lee & Mackenzie, 2003; Manahan et al., 2009). However, a large number of participants in my study either were not born rurally or felt their decision to work rurally was specific to their home community rather than rural communities more generally. When they thought of rurally born students who they had trained with, they recalled many of them going on to work in urban environments. This finding is consistent with Carson et al. (2015) who found that the impact of urban training on rurally born AHPs is substantial, in that AHPs are less likely to return to rural settings once they have lived in an urban environment.

Other studies have noted the importance of targeting rural rangatahi to train as health professionals because of the increased likelihood of them returning to rural communities for work (Brown et al., 2017; Keane et al., 2011; Kent et al., 2018). Brown et al. (2017) noted rural-born health professionals to be 2.35 times more likely than urban-born health professionals to work rurally. With evidence that rurally born is not actually a guaranteed future workforce and given the barriers for some rural people

to participate in extended urban training (as highlighted in Section 8.6.1), relying on rural rangatahi alone is unlikely to be sufficient as a future workforce strategy.

As mentioned in the literature review (see Chapter Three), the opportunity to be immersed in rural communities as part of health career training increases the likelihood that these people will work rurally after they are qualified (Garces-Ozanne et al., 2011; Shelker et al., 2014). Even having this rural exposure through working rurally directly after graduation has some positive effect (Brown et al., 2017), though this effect was not as significantly linked to retention as those rurally trained (Brown et al., 2010; Daniel et al., 2021).

As was also seen in the literature (Pullon et al., 2023), participants in this study who had experienced rural healthcare during their training, whether through Rural Immersion Programmes or traditional placements, were also more likely to consider working rurally. They ascribed the success of rural placements on choosing rural employment to being able to experience the realities of living rurally and distinguish the truths from the myths about rural lifestyles, healthcare and opportunities.

Rural training also offers a benefit that did not appear in the initial literature review but has substantial bearing here. Burgis-Kasthala et al. (2018) note that participating in rurally based training increases overall resilience, compared to those students who undertook all of their learning in the urban environment. This is particularly important given the risk to retention that social isolation plays for AHPs moving to a new rural community for work (Beccaria et al., 2021; Cosgrave et al., 2018a). Furthermore, it offers a possible connection between resilience and choosing rural and/or remote employment (Burgis-Kasthala et al., 2018). My study was not designed to measure resilience; however, the relationship between a person feeling they **Fit**, and the ability that gave them to build networks, and therefore resilience, seems worthy of further exploration.

Not all participants had grown up in rural areas, nor spent time in rural settings (i.e., on placement) during their professional education. The motivation to live and work rurally was specific to each individual and the attributes they ascribed to rural life which they found valuable, such as wide-open spaces, less traffic, or more affordable homes. Therefore, roles that people are drawn to in rural areas

can be promoted in part on their rural context, and not all roles need to be targeted to those who were born or trained rurally. While the right role (**Creating Roles People Want to Come For)** may be desirable because it is situated in a rural and/or remote area, it is also possible that the role itself will act as a drawcard to someone who has not previously considered rural practice.

These ideas of fit, which recognise rural places and spaces as important sources of future health workforce, link to conceptualisations of place and belonging; the utility of which Malatzy et al. (2020) propose is essential to understand in workforce retention and future rural health research. They present three key concepts for consideration drawn from the fields of rural sociology, environmental psychology and human geography. These are *sense of place*, *place attachment* and *belonging-in-place* (Gillespie et al., 2022), defined as the relationships people form with places (Relph, 2007), the bonds people form with places (Hummon, 1992) and experiencing social connection respectively. Each promote a sense of fit. These concepts resonate with and give weight to my findings.

Given the significant workforce shortages, the impacts of workload had been expected to counter the environment and right role components of **Fit** and are a significant feature of existing literature (Cosgrave et al., 2018b; Keane et al., 2012; Kumar et al., 2020). While it was discussed by some participants, workload demands were not described as a barrier to working rurally and did not appear to diminish the overall experience of being in the right role and place. Instead, participants contextualised workload demands with staff shortages. More significantly, the participants expressed a determination to prioritise providing access to service for as many eligible members of their community as possible.

This is likely linked to another characteristic of **Fit**; when rural AHPs have a felt sense of the reciprocity in relationships they have with their communities, something that is also noted in research relating to rural medics (Kenny & Duckett, 2004). This was most commonly represented by participants feeling supported by their community and also feeling they can make a meaningful difference for that community. When participants spoke about their desire to ensure that the community members who needed their services were seen, they couched this in terms of the

responsibility they had to serve their community. This finding does not appear to feature specifically in literature about recruitment and retention of rural and/or remote AHPs, something Gillespie et al (2022) also identify.

One more characteristic is that rural AHPs felt a sense of **Fit** in their role and setting because they felt valued because of their identity as a rural AHP. This feeling of being valued comes from the system, organisation and community recognising and believing in their unique contribution. While demonstrating value by way of ensuring there is professional support for rural and/or remote AHPs is featured in the literature (Steenbergen & Mackenzie, 2004), this study appears to be the first to examine how being valued because of their profession is an important factor. New South Wales Health in Australia recently demonstrated how valued AHPs are with a short video (NSW Health, 2023) reflecting on the various professions and the value they add. Not all gestures need to be as grand, but activity such as this helps to educate the public as to who, beyond medicine and nursing, are critical to the health journey, while also demonstrating to AHPs that they are seen and appreciated.

Those whose opinion of AHPs are valued, and whose actions celebrating them are particularly important, are leaders and managers. The importance of skilled leaders and managers, a finding already well illustrated in the literature (Cosgrave, 2020a; Keane et al., 2012), was key to having relationships that felt safe, positive, and founded on trust. This study also found that the reputation of managers was a factor in choosing to join or stay in a role. This is one of a myriad of ways that organisations' reputations influence the decision making of potential role candidates as to whether they will **Fit** in that setting.

For those rural AHPs who are interested in being involved in and influencing politics, rural and/or remote settings can offer an often-unexpected sense of **Fit** as well. In many rural communities, being politically engaged is seen as a facet of being involved in one's community, with politicians also being neighbours, shopkeepers or other recognisable members of the area. Therefore, it is much easier to directly connect with politicians in rural and/or remote communities for a number of reasons (Woods, 2006). First, local body politicians such as councillors and mayors, are much more

accessible, hosting regular open office events and being highly visible in the community, much like rural health professionals are. This means that civically minded AHPs have opportunities to raise issues of concern and interest directly. Secondly, central government members of parliament (MPs) also tend to be more accessible in rural communities, particularly at key points in the electoral cycle, which provides a fantastic opportunity to lobby for rural solutions. How the opportunities to be civically active can be used to attract and retain AHPs has not yet been examined in the literature.

Yet another characteristic of feeling they **Fit** is when rural AHPs feel supported to continue to grow as professionals, clinicians, and members of the community. This feeling is supported because they have a sense of the possibilities due to the growth pathways available to them into the future, and as a consequence they can see themselves having a future in their community. However, workloads and travel distances impact on an AHP's ability to attend in-person professional development during a working day, wherever they are located (Keane et al., 2012). By comparison, urban-based clinicians have a higher chance of doing so, given the majority of training providers and events which are located in urban settings. Participants were envious of their urban counterparts who appeared to be able to roster their days around their ability to pop out to a class or attend a full day workshop held locally, without needing to arrange travel and accommodation to do so. This is consistent with the findings of a survey conducted by Stagnitti et al. (2005), seeking to understand rural AHPs' access and attitudes to Continuing Professional Development. Even when learning is valued in principle by line managers and organisations, as highlighted in the **Safe and Supported Practice** theme, the practicalities of accessing it can become a barrier, and therefore undermine retention of AHPs with a high drive to learn and grow.

9.3.2 Networks: what are they and how do we build them?

Networks are groups or systems of interconnected people or things (*Cambridge English Dictionary*, 2015). Within my research, numerous examples of networks featured in the literature (Farmer & Kilpatrick, 2009: O'Toole, 2006; Sheppard, 2001) and the data and were apparent within my own rural health and academic contexts. These ranged from formal health system networks, team and professional networks and community networks to the networks AHPs uphold with peers working in

other parts of the health system, or which are made up of the people that work in a particular rural or remote location. Also included in this range of networks are the clusters of staff who start in a rural community at a similar time, or the community groups designed to offer connection and integration for workers new to an area.

My findings highlight there is reciprocal and enduring benefit in building networks for and within rural and/or remote communities. When priority was given to building a **Sense of Connection and Belonging** from the outset for AHPs moving to a new rural environment for work, success at integrating into their roles and communities was enhanced. This finding was echoed in the literature (Boehm et al., 2017; O'Toole et al., 2010). Of particular note is its alignment with research undertaken in Australia concurrent with this research (Cosgrave, 2020a, 2021), which has led to the establishment of a practice framework called "Attract, Connect, Stay"(Cosgrave, 2023a). This "proven, grass roots, bottom up programme" (Cosgrave, 2023b) supports rural and remote communities to establish their own solutions. Cosgrave recommends using community organisations to support this, and has set up the "Attract, Connect, Stay" programme (Cosgrave, 2023a) with this tenet at the fore. The programme uses a whole-of-community approach to fund and lead a Rural Health Recruiter Connector, tasked with attracting health practitioners to the area, helping them settle in, connect and stay (Cosgrave, 2023a).

Whether utilising a "Recruiter Connector" type position, or the knowledge and skills of the line manager or recruiter, providing opportunities for incoming AHPs, as well as their partners and families, to become embedded in the communities is a key component of building their networks. This act of connecting with and embedding into communities means they are more likely to settle in and feel part of the community, as well as giving back through their own contributions to that community. These findings echo those of Cosgrave (2020a) who explored the community-based response to critical health workforce shortages in Marathon, Ontario, Canada and found that the activity undertaken by a Health Workforce Recruiter Connector position was pivotal in strengthening and stabilising their health workforce community (Gillespie et al., 2022a).

Supportive teams featured strongly in my findings, and within existing literature (Campbell et al., 2016; Conomos et al., 2013; Dymmott et al., 2022). The characteristics they describe of supportive and well-functioning teams were consistent, in that members were connected, had each other's backs, were honest, dedicated and shared a common purpose; namely, to serve their rural community. All manner of teams appear to matter, whether they are formal teams, groups of co-located colleagues or people of the same profession. When these teams are inclusive, protective, and supportive, they are likely to be a key factor in someone remaining in their role or choosing to leave (Donaldson et al., 2022). Having these strong networks and support structures means that AHPs are more likely to establish a sense of belonging and overcome the challenges of working rurally that they and their colleagues experience.

Connections with the wider urban or base-hospital team that a rural AHP is part of were welcomed, particularly when their urban counterparts were supportive. Research has found that when urban counterparts value and respect the work that rural AHPs undertake, when they are cognisant of the complexities their rural counterparts face in participating in meetings, travelling into the city or of the reduced community services that patients can be referred to in rural areas, rural AHPs feel supported and seen (Bath et al., 2015). This mirrors the previous discussion about **Fit**, where organisations and managers see and value AHPs as a feature of professional support. Shaping a culture of inclusion and recognition of the strengths and abilities of all team members, regardless of where they are based, or indeed what profession they are, is a key leadership skill and essential to building strong networks (Brown, 2018; Hatton, 2022).

Building connection through professional support is also a component of **Safe and Supported Practice.** Whether delivered through formalised frameworks of clinical supervision, informal mentoring, or relationships with line managers, the existing literature highlights aspects that resonate with the need for a secure and supportive environment for AHPs (Bourke et al., 2014; Cosgrave, 2020b; Ducat et al., 2016). Insights gleaned from studies by Dawson et al. (2012), Germeroth et al. (2023) and Howlett et al. (2022) emphasise the significance of robust structures which promote not only clinical competency but also psychological safety within rural healthcare settings. These

frameworks highlight the critical role of a culture where rural AHPs feel empowered to voice concerns, seek guidance and engage in reflective practices without fear of judgement. Likewise, the work of Martin et al. (2018) and King et al. (2022) underscore the pivotal role of clinical supervision in enhancing professional development, refining decision-making capabilities, and strengthening resilience among AHPs working in geographically dispersed environments.

Another factor relevant to networks and which relates to the Feeling Cared About concept of **Sense of Connection and Belonging** is how networks are resourced. In my findings, resourcing included being able to quickly and easily access the tools required to provide clinical interventions, pragmatic application of policies and procedures so that rurally based staff were not disadvantaged, and equipment that was fit for rural purposes. Where the resourcing was determined as efficient, equitable and consistently applied, job satisfaction was positively impacted.

It is also important to consider the potential role of social capital in small communities. When AHPs and their whānau are well connected and embedded in their communities through the support of health system leadership, social capital is built between the community, the AHP and the system. The communities see the efforts of the system to support AHPs to integrate into the community, and the willingness of the AHP and their whānau to belong and contribute. This engenders community trust in the system, and the AHP, which in turn makes the AHPs more effective in their roles. This cycle continues, as AHPs build enduring relationships and a sense of the community being their home, thereby strengthening and contributing to a more sustainable rural workforce (Cosgrave, 2020a).

9.3.3 Challenging existing structures

The need to challenge existing structures, which continue to privilege medical and nursing professions (Rees, 2023) and urban centres, is a significant point for consideration from this research. Throughout my interviews, and in a range of literature, lie examples of the frustrations felt by AHPs at their inability to break through the dominant narrative of health being a deficit-focused, expert-centric and curative or reactive model, which values the opinions of doctors and nurses as the primary authorities on health (illness) matters (Wade, 2015). These biases drive decision making about service delivery

models, limiting the scope of care, hindering preventative measures, perpetuating inequalities, and underutilising the expertise of non-medical professionals; all of which can have adverse effects on the health and wellbeing of rural communities.

This research found that these biases impact on AHPs in a range of ways, in rural settings. A good example of this, that was discussed in the findings chapter (see Chapter Seven), is about which professions get first option on creating new roles. This occurs when decision-makers may not understand the full scope of each profession that could deliver a new service, and the default is to seek the perspectives of medical or nursing leaders to determine the best profession to deliver the new role (Gauld & Horsburgh, 2015). When these roles also offer a pathway to specialism, which has been demonstrated to be an attractive recruitment strategy (Allen et al., 2020), it can be easy to see this as more valuable to an organisation or profession, than if the same work were undertaken by an equally qualified, newer-to-practice clinician of a different profession.

If we are to improve rural healthcare delivery, by ensuring that we can build health systems that utilise the best skills of all the professions, a factor to consider is who sits at the decision-making table. It is essential to have rural and/or remote AHPs embedded in systems leadership roles and that all health professionals have a role (including non-AHPs and non-rural AHPs) in advocating for and making visible the value of the AHP contribution to rural health (George & Webster, 2021). AHPs cannot and should not be required to solely advocate for their inclusion in conversations, planning and service development. Having an organisational commitment to co-design, and interprofessional ways of working, as most health systems declare they aim to do these days, also requires interprofessional ways of decision making and sharing power.

Being committed to shared decision making and ways of working needs to also be put to the test. We need to examine how the focus on medical and urban models of clinical care has implications for structures that often do not meet the unique needs of rural AHPs, such as in terms of resource allocation and on the roles that AHPs could and should be playing in the health reforms (Health and Disability System Review, 2020). There is, therefore, an urgent need to address (and change) these

structures. Additionally, the importance of sustainable rural health systems to health equity (Doherty et al., 2022), particularly for Māori, is too great to be side-lining the critical role AHPs are explicitly trained to play in preventative and population health provision (Hogan, 2021).

Examples exist within the literature which resonate with my findings about the ways that the power and influence of the medical and, to a lesser degree, nursing workforces impact on the scopes of practice of other professions (Rees, 2023). This is particularly evident in the context of boundary-spanning roles (Rees, 2023) and clinical activities which overlap across professional boundaries, including clinical tasks, procedures or interventions. It seems counter to the Hippocratic Oath to be utilising professional power to restrict the activity of other professions (Rees, 2023). This has consequences for our communities in not being able to access timely, appropriate and clinically competent intervention, particularly in a time of significant workforce shortages and exceptional wait times for appointments.

One aspect identified as aiding recruitment and retention, in the theme **Creating Roles People Want to Come For**, was the diverse ways AHPs were treated when working in their employed role versus in a specific voluntary capacity. It could be argued that rural communities offered more latitude to use clinical knowledge in volunteer roles than in employed roles as AHPs. Rural communities often rely on members of the health workforce to supplement the voluntary membership of St John Ambulance, Land Search and Rescue New Zealand (LandSAR), Coastguard, and Fire and Emergency New Zealand (FENZ). In these roles, volunteers who are also AHPs are authorised to assess and treat beyond the bounds of the scope they have in the workplace, such as being able to administer salbutamol which is otherwise a prescription-only medicine. While these opportunities prompt critical thinking about how restrictions are placed on extending clinical scopes in the workplace, this is unlikely to be a phenomenon specific to rural AHPs, but rather a broader example of when and how control is exercised over the scopes of practice that those in medicine believe are theirs to protect and delegate (Rees, 2023).

The disparities between how urban and rural AHPs are treated, and by association how they perceive and treat each other, is another structure of health systems that requires a rethink. Some of this can be ascribed to urban or geographical narcissism (Baker & Hess, 2019), which was introduced in Chapter One (see Section 1.5) and was supported by findings (see Section 7.4.3.4) related to **Roles People Want to Come For**. These disparities are also created by how professional bodies and organisations elevate clinicians who are specialised in a very narrow scope of practice, usually aligned to a medical condition or specialty. Comparatively, generalists are often considered less skilled or a "jack-of-all-trades and master of none", when the opposite is more on point (Nixon, 2017; Schubert et al., 2018).

For many rural AHPs, they could be the only member of their profession in that town, or even in that organisation. Therefore, their generalist knowledge needs to span all ages, conditions, and abilities. This mismatch between what is valued and what is needed creates a psychological distance for rural AHPs when they feel that their urban counterparts treat them as having less experience or being less competent, or when they believe their work is valued less than urban members of their profession (Bath et al., 2015). My research did not specifically examine the perceptions of rural AHPs towards their urban counterparts, nor whether urban AHPs considered or were impacted by rural AHPs' attitudes towards them. There also did not appear to be any studies in the literature that have considered this possible phenomenon, supporting the idea of urban narcissism being unidirectional (Baker & Hess, 2019).

Related to this is the way that rural and/or remote AHPs have been required to fit into the central team or base hospital environment. Because they are commonly required to travel into the main centre, to participate in professional development, meetings, and loan equipment, they become familiar with, and familiar to the workforce based in the central teams. Conversely, urban AHPs' experiences in rural practice may be disorienting, given they have fewer opportunities to travel and work rurally, and therefore know less of the customs and environment. When this disorientation is overlaid with biases and assumptions about the rural setting, described in the findings chapter as urban narcissism (Baker & Hess, 2019), it can be very difficult to develop a sense of Feeling Cared About (**Sense of Connection and Belonging**).

Where **Sense of Connection and Belonging** particularly resonates as specific to rural and/or remote settings is access to Connectivity and Technology. The risks to the safety of rural and remote practitioners are far greater undertaking home visits or travelling on sub-standard quality rural roads where there is no coverage for kilometres, and the AHPs may therefore be out of range for hours in the normal course of their day in the community. While urban colleagues may argue that they too struggle with mobile blackspots, the context is different and therefore using an urban perspective to determine access to tools and technologies such as cell phones is a perspective that needs to be challenged. Thanks to the lessons learnt in the aftermath of Cyclone Gabrielle, which devastated the north east of Aotearoa's North Island in February 2023, and the advances in satellite technology such as Starlink™, more connectivity is possible (Kitchin, 2023). However, the existing practices of lone working in the community, outdated technology, or limited access to it, or relying on staff using their own devices or vehicles need to be challenged.

Throughout this research, a key consideration in analysing the data was to critically reflect on the extent to which the themes are particular to the rural and/or remote workforce or if they were true of urban experiences as well. It was important to differentiate between these, as the experiences and feelings raised could be claimed by urban AHPs as well. As some participants had not worked in city settings, or not for some years, it was harder for them to gauge if being rurally based influenced their experience. At least a third of the participants had worked in cities at some point in their careers. This provided assurance when analysing the data that some themes or aspects of themes were specific to the rural experience.

9.3.4 The importance of Growth Pathways

The importance of growth pathways which support AHPs to continue to grow and extend their practice in rural and/or remote clinical settings is another significant finding of this research. This includes having access to tailored professional development, the mandate and training to work with an extended scope, and accessible pathways which acknowledge the unique and particular circumstances of rural AHPs, compared to their urban counterparts.

Extended scope roles across the AHST professions are commonplace in large urban and tertiary health environments. These require high levels of specialised expertise, aligned to medical specialities such as neonatal intensive care dietetics (Cormack et al., 2020). For rural and remote settings, specialisation requires the cultivation of comprehensive competencies across a broad spectrum of conditions, patient demographics and complexity. Despite these differences, there are plenty of lessons for developing and formalising rural growth pathways, within the existing literature from Aotearoa's urban allied health practice settings. Ensuring comprehensive structures and built-in governance is built to support the roles and protect the public is one such learning (Naik et al., 2023; South Island Alliance, 2020). Consultation and collaboration with other professional groups who may be impacted is also noted as essential (Naik et al., 2023; Napier et al., 2019) and was echoed by the participants of my study (see 7.4.2.2).

The necessity for high quality access to tailored professional development and accessible pathways into health careers have been a feature of the rural and remote health literature internationally (Strasser et al., 2016) and have led to the establishment of rural health schools such as those across Australia's rural and remote regions and Canada. There is less in the literature, however, about the development of extended scope roles for AHPs, designed to specifically serve rural and remote communities, and what these roles might offer by way of strengthening recruitment and retention of AHPs in these areas. As my findings (Section 7.4.2.3 and 7.4.3.4) and the last section detailed (Section 9.3.3), there is an urgent need to examine how we utilise the core skills of the workforces we have, and how we develop pathways to support them to grow. These efforts should be deliberate, meaningful, and endorsed by the organisation.

Rather than having professions pushing against each other to win the right to deliver the specialist role and creating growth pathways for one workforce, rural communities and their interprofessional clinical leaders have the opportunity to create specialist roles that can be undertaken by all of the professions qualified to do so. This is a concept that has been tested internationally, where advanced practice and leadership roles are scoped as "NMAHP" roles; standing for Nursing, Midwifery and Allied Health Professionals (NHS Education for Scotland, 2023). Scoping roles in this way means

that the best candidate for the role can be appointed, from a range of in-scope professions, allowing for a diversity of thought and theoretical perspectives to enrich the patient experience and broader service delivery. It also demonstrates that the recruiting organisation treats its workforces equitably, and values diversity, and offers pathways for growth and development that are attractive and meaningful. NMAHP roles are not specific to rural settings, but they offer a richer solution in those places where there are few opportunities to become advanced AHPs.

While getting to practise in a generalist way or with a wide variety of age groups also occurs in some urban settings, there appears to be a specific way that variety occurs in rural and/or remote settings. How opportunities to learn are made available is one of these, with rural settings and circumstances delivering a wider scope of learning and learning environments. Participants at the beginning of their career recognised the broad range of skills and knowledge they could gain, and quickly. Learning this way would not be possible in a rotational position at a base or city hospital, where the scope of learning was narrow, such as working on an orthopaedic ward. For more experienced AHPs, knowing that they could be involved in the assessment and/or treatment of patients from "birth to end" was a drawcard. Recent research from Australia has drawn similar conclusions, with the desire to gain competence to serve people in their context, rather than siloed components of ill health and disability (Dymmott et al., 2022). This is a challenge rural AHPs are keen to take on (Hoang et al., 2019; Kumar et al., 2020).

9.4 Is it though? Addressing the Myths

There are a number of other popular hypotheses that permeate the discourse around recruitment and retention strategies for rural and remote locations, which are worth a mention here. The first is that organisations can attract people by emphasising adventure sports, and the great outdoors. A widespread finding within the literature is that rural communities offer a range of lifestyle options which are attractive to health professionals (Keane et al., 2012; Mills & Millsteed, 2002; Morell et al., 2014). These include closer access to adventure sport environments such as bike and running trails, ski fields and mountains for climbing and trekking. Also mentioned in the literature is the lifestyle benefits of reduced cost of living (Brown et al., 2017), better or safer schooling and play

environments for children (Buykx et al., 2010; Keane et al., 2011), and more opportunities to be of service (Conomos et al., 2013). However, choosing rural roles to pursue outdoor sports and adventure was less common for my participants, and usually came up as a secondary benefit for them or their partners. This highlights that relying on potential employees having a desire for a rural lifestyle of adventure and outdoor pursuits is not enough. Even when AHPs with a desire for these activities are attracted to rural roles, the other aspects of experience outlined in my findings are also required to offer AHPs the conditions they need to want to join and remain working in rural and/or remote communities.

Cost of living was also not seen as a benefit of rural life, particularly because of transport-related costs, despite comparatively lower housing costs in rural areas. More commonly, participants' feelings about the land they lived on and how they interacted with it in daily life were the drawcards, a finding consistent with other literature (Wilhelmi et al., 2018). These feelings for the land they lived on were often expressed in ways that aligned with this research's key themes, such as a sense of belonging, because of their own upbringing spending time in nature, or the variety of work afforded to them as clinicians being able to provide services to others who worked in nature, such as farmers, forestry workers or other primary industries.

Another popular hypothesis was about remuneration. Several studies have argued that financially focused recruitment and retention incentives should be considered in rural and/or remote health systems, most notably being paid more to work rurally (Boshoff & Hartshorne, 2008; Smith et al., 2008). This has been argued to be an appropriate lever to improve the size of rural workforces, particularly given the costs to the health system because of delayed diagnosis, or the comparatively higher locum rates. In my study, the majority of participants had a fixed base salary consistent with their relevant collective employment agreement (MECA). In this context, the participants did not challenge the appropriateness of their salary bands. They did, however, note the areas they felt they faced disadvantages, compared to their urban colleagues working in the base hospital. These included the longer distances they travelled in their own vehicles to and from a rural or remote locality, as that was considered their personal responsibility by their employer, thus using more time, petrol, tyres,

higher maintenance, and servicing requirements. Having a means to be recompensed for the personal costs of providing service in a rural area would be welcomed, particularly if it was offered rather than needing to be requested (Buykx et al., 2010). This finding broadly supports the work of other studies, which have demonstrated that additional financial incentives, beyond the core pay agreements, is welcome (Allen et al., 2020; Chelule & Madiba, 2014; Solowiej et al., 2010), although not essential to the decision to work rurally.

9.5 WHERE THESE THEMES OFFER NEW PATHS

It is my hope that readers will find plenty of new paths to take within the practical implications chapter (see Chapter Eight), which outlines a range of options for the broad groups of influencers in rural health recruitment and retention. Some of these are strategies that are echoed in the literature from countries beyond Aotearoa, and some are more nuanced to the context of our country. The findings from this research that have not featured in other literature about the recruitment and retention of AHPs in rural and remote areas, and that are worthy of focused attention, are those related to the Lifespan of Roles and Role Scopes (**Creating Roles People Want to Come For**).

Little was found in the literature on the question of how to balance the objectives of one profession against another when the potential to establish new roles that will attract workforce from outside the district was appealing. When we consider the benefits of being able to offer freedom and scope to AHPs, such that they feel fulfilled in utilising their professional knowledge and skills for the benefit of their patients while experiencing the reward of being stretched, it is helpful to call on the Reasonableness Test offered in Chapter Eight (see Section 8.2.6). When we focus solely on improving the role offerings to AHPs, we run the risk of failing to consider the impacts on other parts of the system, just as participants highlighted had occurred when improving role options for nurses had negatively impacted on AHPs. It is therefore important to consider where else roles might exist that could do the work the new AHP role would do, before embarking on improving role offerings in isolation.

Analysis into the lifespan of rural roles was also not well represented in the literature, and what literature there was did not appear to examine the benefits of proactive recruitment strategies evidenced by role lifespan data. As has already been highlighted (see Section 8.4), the competition for candidates, and the long internal processes for recruitment characteristics of large organisations like health systems, requires a timely, transparent, cyclic model of recruitment based on solid data. Research that analyses lifespan data and tests recruitment planning models that are responsive to them is required to understand the impact and potential of a more data-driven approach to recruitment cycles for all rural and remote health workforces.

9.6 CONSIDERING FINDINGS IN CURRENT CONTEXT (AOTEAROA 2023)

Since the commencement of this research, there have been some significant episodes that have impacted on health systems, services, and life in Aotearoa. The two that most relate to this research are the coronavirus pandemic and the Aotearoa New Zealand Health System reforms. Both add an additional facet to the conversations about rural and remote workforce recruitment and retention and are worthy of consideration alongside the findings of this research.

9.6.1 COVID-19 impacted Health Systems; Implications for interpretation & implementation of findings

The COVID-19 coronavirus pandemic emerged in early 2019 and has been acknowledged to have had a profound impact on communities, health systems and economies, as well as on individuals, health (and other) professionals, whānau and families (Stephens & Breheny, 2022; Venkatachary et al., 2020). How health services are accessed, where assessments can take place, and how much intervention can be offered remotely versus in traditional healthcare settings have all been re-evaluated.

One outcome of the pandemic that has been advantageous to AHPs is that far more training is now available online (Ramsden et al., 2021). As I have already presented, accessing training has added difficulties for rurally based clinicians, costing more in terms of time, travel, and accommodation, any of which can be a barrier to attending (Fitts et al., 2020). As training providers and urban-based

clinical teams have needed to pivot to online service provision during the height of the pandemic, they have developed the skills to deliver fully online and hybrid training to a much higher standard. The outcome for rural AHPs has been a far broader and more comprehensive suite of training opportunities, closer to home.

Another outcome of the pandemic has been the rise in community-led initiatives within rural settings which really made visible the power of communities harnessing their local strengths and resources to meet health need (Jones et al., 2021). Community networks that started out supporting people at home during lockdowns with kai, groceries and other services have developed into ongoing support networks for those who are isolating, sick or impacted in other ways. In turn, these networks are feeding into the development of new health and social care services, and the establishment of Locality Networks and Iwi Māori Partnership boards ("Pae Ora (Healthy Futures) Act," 2022).

The uptake of telerehabilitation and online health services is also a result of the pandemic (Talmage et al., 2020; Werkmeister et al., 2023; Wilson et al., 2021). Increased use of telehealth has brought challenges, risks, and opportunities to rural issues. One of the main challenges has been the expectation by urban service providers that rural communities have access to the same technology and connectivity, which is often not the case, as I have highlighted in my findings (see Section 7.4.2.1). Where technology and connectivity is available, the opportunities to access services that had previously required a long journey for patients to the nearest base or urban hospital have made a significant positive difference, and where workforce shortages have meant lengthy waits for local appointments, telehealth consultations have connected patients and providers in a much timelier way (Fitts et al., 2020; Marshall & Aileone, 2020). Whether there is a risk to existing services, and therefore a reduced ability to retain local staff, due to telehealth services remains to be seen (Jones et al., 2021). However, looking at the scopes of practice that have already been lost to fly-in, fly-out clinicians, or specialist nursing roles (see Section 7.4.2.2), further reducing the ability for AHPs to practise at the top of their scope by outsourcing specialist telerehabilitation will negatively impact on many of the features highlighted in the **Creating Roles People Want to Come For** theme.

Another outcome of the pandemic is the openness to having the parts of the workforce, which are not "on the floor" front-line staff, working anywhere in the motu. Roles that traditionally required their workforce to be based in or travelling regularly to Wellington, or another city centre, can now be undertaken online to a much higher degree. For rural clinicians wishing to extend their skills and influence at regional and national levels, this has opened up opportunities without them needing to move away from their rural homes. This creates a Growth Pathway for AHPs, who wish to settle or remain in rural settings whilst continuing to develop and contribute.

A significant issue pre-pandemic that has worsened through the pandemic worldwide relates to health workforce shortages (Murison, 2022). For rural health systems, this is affecting the ability to recruit overseas candidates, even now the borders have reopened and there is government support to fast-track visa applications for health professionals (New Zealand Immigration, 2023). Additionally, with the borders reopening, those AHPs who were unable to head off on their "OEs" over the last few years are now heading away. These impacts on recruitment are exacerbating the pre-existing challenge of the impending wave of retirement as well, with a bolus of the workforce already at retirement age (Jamieson, 2022; Rees, 2023).

Each of these outcomes or impacts of the pandemic are bringing changes to the ways rural health systems operate and how rural communities seek and receive health services. While some changes are already well embedded, careful consideration needs to be given to the consequences of future changes; to the ways AHPs contribute to health service provision now and into the future, and to the goals of the Health and Disability System Review (2020).

9.6.2 Aotearoa New Zealand Health System Reforms

While the Health System Reforms are still in their infancy, it is apparent that the expectations of communities, professional groups and advocacy groups towards Te Whatu Ora, Te Aka Whai Ora, and Manatū Hauora | Ministry of Health is that they will fix the dire workforce situation. Given the worryingly high levels of staff shortage in all professions, and the immense pressure this is putting on

those delivering healthcare, health leaders and the government, finding solutions to recruitment and retention woes is high on the agenda to achieve Pae Ora ("Pae Ora (Healthy Futures) Act," 2022).

However, the responsibilities of those tasked with leading the reforms go beyond that of sustainable workforces. Te Pae Tata, the interim health plan, prioritises Health Equity, Embedding Te Tiriti, Implementing a Population Health Approach and Ensuring a Sustainable Health Service Delivery System as the foundations of our new health system (Te Whatu Ora & Te Aka Whai Ora, 2022). Rural healthcare is a priority area, along with that of Māori health improvement, in recognition that a greater percentage of Māori live in our rural communities.

What may be a challenge, in terms of the themes and recommendations of this research, is whether the mandate will be there for those who are focused on and leading rural communities to take action. Without a concerted effort to take action that demonstrates to our AHP workforces that they are valued, the rural workforce shortages may become more pronounced before they improve. Demonstrating to AHPs how much they matter is essential, given the role that AHPs working rurally have in realising the aspirations of Te Pae Tata (Te Whatu Ora & Te Aka Whai Ora, 2022).

These reforms require a transformative approach to delivery of health services that moves away from disease-centred and biomedically oriented care, which is built on specialist care being delivered in urban-based health centres and which foregrounds medical workforce. This transformation will be achieved through turning towards a population health approach that produces equitable health outcomes (Doherty et al., 2022; Health and Disability System Review, 2020), by supporting and providing solutions to primary care and emergency services to address demand and by delivering evidence-based, specialised service to improve the health and wellbeing of rural and remote citizens and communities. These are all areas in which AHPs have a significant contribution to make. My findings and recommendations are timely and uniquely placed to contribute to this endeavour.

9.7 Strengths and Limitations of This Research

This research has been a rewarding and valuable project, providing opportunities to connect with AHPs throughout Aotearoa and explore what they identify as the attractive aspects of living and working rurally across the motu.

It has a number of strengths in that it was commenced at a time where there was limited discussion occurring about the conditions of rurally and remotely located AHPs, but when interest was building both within environments where AHPs work, and in academia and government. Therefore, while relevant literature was predominately from beyond Aotearoa when the first literature search was conducted, there is now a growing body of local literature to which this study contributes.

Another strength has been conducting this research as a potential recipient of the findings. My committed curiosity and practical need for solutions has kept me alert to new and developing thinking on the challenges and solutions to recruitment and retention of AHPs in rural and/or remote areas. Paradoxically, finding the balance between reporting the findings of this research in ways that encourage the reader to check for bias and reasonableness and my passion to advance and protect the professions that make up the Allied Health, Scientific and Technical workforces has required constant attention.

Using Interpretive Descriptive methodology and undertaking this research in the context of the DHSc has ensured a focus on the production of applied knowledge, and a constant focus on ensuring the findings offer meaningful insights for practice. This was formative to the decision to include the practical implications chapter (see Chapter Eight) as part of my commitment to produce tangible and actionable findings. My orientation to an appreciative inquiry lens and the focus on attractive aspects of living and working rurally have contributed to producing rich insights that may have been lost with a more transactional focus on what helps or hinders recruitment and retention.

During the course of this research, a new geographic classification system was developed and validated by a collaboration of academics from Aotearoa's Otago and Waikato Universities, and from the Menzies School of Rural Health in Australia (Nixon et al., 2023), with the support of the Health

Research Council. Designed as a "fit-for-purpose rural-urban geographic classification" (Whitehead et al., 2021), the tool provides users with a free, web-based platform which ascribes a classification to any location in Aotearoa. This matters because it offers a straightforward, readily accessible resource to anyone wishing to determine rurality, which is far simpler to apply than previous classification systems. While this classification system is imperfect, as previous classifications have also been (see Section 1.4), its usability makes it the most practical option for studies currently. Being able to provide the website link to this tool for potential participants to my study could have changed the mix of participants, and my own reflections on participant contributions. In doing so, some of the rich data collected may have been lost from people who self-identified as rural practitioners despite living in a less than rural setting. Conversely, further narratives from deeply rural practitioners may have broadened the findings of this research. Regardless, the development of this classification tool offers much in supporting future research seeking to define and access this population.

There have been a number of limitations to the research, with the first one being the impact of COVID-19 on the initial plans to travel to participants and form focus groups to check for resonance of the findings. While participants were comfortable to take part via videoconferencing and the quality of the data was good, there may have been additional benefits offered in terms of data collection if the interviews could have occurred in a shared physical space.

The opportunities to connect in a shared physical space, or lack thereof, also impacted on my hopes to invite rural AHPs to contribute to the generation of recommendations. This practice, identified by Thorne (2016) as the "thoughtful practitioner test" allows researchers to test observations of the data against the perspective of practitioners who have experienced the same phenomenon, often over time. My original research design included this practice in the form of focus groups, which did not occur due to the pandemic, and ongoing pressures on AHPs within the health system. I considered bringing people together virtually instead; however, the pressures, particularly on rural communities, at the time were such that this did not feel ethically appropriate to do so. Recognising this limitation, I have built strategies into my analysis process (as outlined in Section 8.1) to ensure the findings were robust and resonated strongly with participants' stories.

As some of the participants were members of my workforce, their interviews were carried out by one of my supervisors (see Section 6.5), to manage conflicts associated with my dual role as health leader and researcher, and the impact that may have had on data construction and my engagement with that data during analysis. The requirement to move data collection into online settings was advantageous in this regard.

Not being able to interview any male participants is also a limitation of this study. While a number of men volunteered, they were either from already over-represented professions or ultimately could not take part in the interviews. With some existing literature pointing to a gender difference in terms of successful recruitment and lasting retention (Hustedde et al., 2018; Laven & Wilkinson, 2004), this opportunity is worth exploring in future research. Another cohort that I had originally intended to recruit were people who were considering work in a rural or remote setting. My sample did not end up including them, having been unable to recruit anyone with this intention who did not have employment experience in a rural community. I am mindful that only interviewing people who had made the choice to work rurally, and those AHPs who identify as female, may impact on the transferability of my findings for other sub-groups. This has been managed as much as possible by the extent to which the study achieved information power (see Section 4.6).

This research is, to my knowledge, the first of its kind in Aotearoa and offers the sector AHP- and Aotearoa-specific knowledge and recommendations to address the enduring problem of recruitment and retention of AHPs in rural and remote settings. I believe that the findings are transferable across rural and remote settings in Aotearoa, to the other health and auxiliary health workforces such as those who work in human resources, finance, catering and beyond. As the findings appear complementary to those in recent research from Australia (Cosgrave, 2020a; Jones et al., 2021), I believe the findings are transferable beyond Aotearoa as well.

9.8 GROWTH AS RESEARCHER

Around the time that I began analysing the data, I had commenced a programme of professional coaching. The coach had been trained by Nancy Kline (Kline, 2022) and taken Nancy's model of

"Thinking Space" and "Thinking Partnerships" (Kline, 1999) and overlaid this with Appreciative Inquiry (Cooperrider & Whitney, 2005; MacNeill, 2020).

As I began to explore this model of engaging with others, supporting people's thinking, and strengthening their own engagement in the listening process, the realisation hit me that the interviews undertaken during the data collection phase of this study could have been in some ways stronger and richer. When I first listened to the recordings, before I learnt about the Thinking Space methodology, I had experienced a real discomfort at how much I interrupted, and how little space I had allowed for thinking to develop. I was embarrassed because, as social workers, we are trained to listen reflectively and use silence. Intellectually, I knew it was because I was nervous as a researcher, and this played out in the later interviews where I used fewer "yup's" and more silence, though the interruptions continued more than I now think they should have.

There are 10 components of the thinking space methodology – attention, equality, ease, appreciation, encouragement, feelings, information, difference, incisive questions, and place (Kline, 2020). Once I began to learn these components, I began to wonder if I had short-changed the participants, and the research, through a lack of interview technique or self-awareness of needing to develop competence as an interviewer. Being able to come back to the transcript recordings with these developing listening skills was a boon, as it allowed me to recognise what threads I might have missed and to catch any opportunities my privilege might have otherwise skipped across.

Acknowledging what I wished I had done differently is the other side of the coin when recognising how much I have grown through this process of research and academic development. Recognising the presence and influence of privilege and the practice of good listening are essential components of being in conversation with people about what matters to them, components that I am more readily and confidently able to draw on.

The pandemic and its impact on my doctoral journey have meant that there have been two significant periods of activity on either side of the health response. While this is evident to me, when reading earlier

content such as the published literature review, it is reassuring to note that my perspective and commitment to the substantive work has remained steady. The experiences I have had, and what I have seen across the world, in the ways that AHPs were deployed to respond to the pandemic have strengthened my commitment to challenging and providing opportunities for the system to better value, care for and utilise AHPs, particularly in rural and remote health settings.

I am mindful of a statement I made to conclude my published literature review (see Section 3.2.5) where I advocated for all of the professions to work together to find ways to elevate and benefit from the clinical expertise of AHPs. I still firmly believe that we are stronger together. I also believe that it would not have mattered which profession came first or second in the history of health profession development; the ways the system privileges those most established voices would be much the same.

It has been an honour to be the first person to extensively examine the perspectives of AHPs working in rural and remote settings across Aotearoa, and I am excited to continue to use my voice, my leadership, and academic skills to support rural communities to have access to AHPs and the benefits they can provide.

9.9 OPPORTUNITIES FOR FUTURE RESEARCH

This thesis offers a number of recommendations to improve recruitment and retention of AHPs in rural and remote settings (see Chapter Eight). There is significant value in wrapping research and evaluation around any efforts to put these recommendations into practice. In doing so, the impact on recruitment and retention can be monitored and any initiatives can continue to be refined to ensure they are making a meaningful impact.

With multiple training programmes and providers participating in the education of future AHPs, there is the potential to learn a lot from educators across these settings. Labour unions, professional bodies and registration boards also hold information germane to their core business, which would be worthy of exploration (George et al., in press). Research seeking to understand what barriers and enablers exist, from the perspectives of stakeholders, could provide additional areas for exploration and

generate ideas for further sector-wide strategies to support recruitment and retention of the AHP rural workforce.

Funders and political interests are also worthy of consideration, particularly within the Aotearoa context where the Health Workforce Directorate of Manatū Hauora | Ministry of Health enables much of the health workforce training (Ministry of Health, 2018). Exploring what communities understand about the value that each profession brings to their healthcare journey, or how access to an AHP could reduce their need for access to a doctor or a surgeon in future, would also be interesting to explore.

Looking to the health system reforms and the introduction of "locality networks" (touted as being a place-based and people-based approach to improving the health of populations) offer another avenue to connect and engage with communities. The broad-ranging locality network partners and their equally broad remit creates a real opportunity to explore how frameworks such as the Whole-of-Person Retention Improvement Framework (Cosgrave, 2020b), which underpins the Australian "Attract, Connect, Stay" model (Cosgrave, 2023a), could be tailored to, implemented and evaluated in an Aotearoa context.

9.10 Conclusion

This chapter has set out to define and illustrate the themes and possible tools that emerged from my research topic "Understanding the complexities of recruitment and retention in a rural health setting". It concludes a journey of exploration to uncover these complexities, underpinned by a desire to extend insight into practice decisions, and resonate with the clinical instincts of its audience (Thorne, 2016). My doctoral research was borne of my wish to understand the causes of our significant and ongoing workforce shortages in my workplace. I felt that how we—leaders, other professions, the community—treated the AHP workforce was the key; however, I lacked the evidence or the status to broach this within the executive leadership of the organisation.

Through my initial conceptual review of the literature in 2017 (see Section 2.3), I was able to identify what was missing in the Aotearoa literature, as well as the foundations of the international evidence

most commonly cited as solutions to the rural workforce challenges. Further exploration of the literature in 2022 demonstrated a growth in both local studies and a broadening of perspectives on the multifaceted response required to strengthen and retain rural workforces.

The use of Interpretive Descriptive methodology (see Section 4.5) has created the scaffold for a pragmatic, clinically oriented and practice-changing set of findings (see Chapter Seven) to be delivered. These, in turn, have informed a range of recommendations (see Chapter Eight) that can be actioned by individuals and groups who wish to improve AHP workforce recruitment and retention for rural and remote communities across Aotearoa.

This study has captured the voices of rural AHPs, essential members of an effective and population health focused rural health workforce. Their stories are woven throughout and remind us of the dedication and enthusiasm that underpins rural and remote health delivery. How we treat them matters because how we treat all beings matter. It also matters because when we focus on their strengths and the things they appreciate, coming to work becomes a more positive experience. This, in turn, will create a reputation and a legacy that rural health settings are wonderful places to work.

Overall, the insights produced through this research have made a meaningful contribution to the understanding of the needs, hopes and experiences of the Aotearoa rural and remote AHP workforce. These insights will likely translate well into other rural and remote communities around the world. The important nuance that I have uncovered, by unpacking existing beliefs around what drives rural and remote recruitment and retention for AHPs, has highlighted that it is not as simple as where AHPs are born, or where AHPs train, cost of living or a lovely place to live. Instead of approaching the challenge of recruiting and retaining AHPs in rural areas through serendipity, or because people were destined to work there, this research has demonstrated that there are a number of active ways in which health systems can gather to activate a rural health community. Therefore, leaders, organisations, recruiters, training institutions, and registering and professional bodies have a role to play in changing the context, rather than relying on people wanting to come and work rurally.

It is my hope that this research will also encourage our rural AHP workforce to remain engaged in conversations about what matters to them and create a welcoming space for rural AHPs of the future. However, the onus should not be on our rural AHP workforce to solve the wicked challenges of rural recruitment and retention. This responsibility sits squarely on the shoulders of health system leaders, health organisations, ministries and politicians, allied health profession training providers, and those who regulate and advocate for them. Now we know better, we can do better.

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APPENDIX A: WORKFORCE NUMBERS BY PROFESSIONS

Profession	Total Registered	Reference (Year)
Chiropractic	744	(Chiropractic Board of New Zealand, 2022)
Dental and Oral Health Therapists	1,661	(Dental Council, 2022)
Dietetics	777	(Dietitians Board of New Zealand, 2021)
Medical Laboratory Scientists & Technicians, Anaesthetic Technicians	4,775	(Medical Sciences Council of New Zealand, 2022)
Medical Radiation/Imaging Technologists	3,353	(New Zealand Medical Radiation Technologists Board, 2022)
Music Therapy	88	(Howie, 2022)
Naturopaths	unknown	
Occupational Therapists	3,319	(Occupational Therapy Board of New Zealand, 2022)
Osteopaths	565	(Osteopathic Council New Zealand, 2022)
Pharmacists	4,231	(Pharmacy Council, 2022)
Physiotherapists	7,556	(Physiotherapy Board of New Zealand, 2022)
Podiatrists	474	(Podiatrists Board of New Zealand, 2022)
Psychologists	4,532	(New Zealand Psychologists Board, 2022)
Speech-language Therapists	1,175	(New Zealand Speech-language Therapists Association, 2022)
Social Work	10,523	(Social Work Registration Board, 2021)

APPENDIX B: PUBLISHED ARTICLE

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REVIEW ARTICLE

Learning from those who have gone before: strengthening the rural allied health workforce in Aotearoa New Zealand

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ABSTRACT:

Context and issues: The pipeline for the allied health, scientific and technical workforce of Aotearoa New Zealand is under growing pressure, with many health providers finding recruitment and retention increasingly difficult. For health providers in rural settings, the challenges are even greater, with fewer applicants and shorter tenures. As the health needs of rural communities increase, along with expectations of uptake of technologies and the Ministry of Health's strategy to ensure care is provided closer to home, being able to retain and upskill the diminishing workforce requires new ways of thinking.

Lessons learned: Understanding the activity that has been undertaken by medical and nursing workforces in New Zealand and abroad, as well as the work of the Australian allied health workforce provides context and opportunities for New Zealand. The challenge is for educators, professional bodies, the Ministry of Health and health providers to develop new ways of thinking about developing a rural workforce for the allied health scientific and technical professions.

Keywords:

allied health, health workforce, health systems, New Zealand, recruitment, retention.

FULL ARTICLE:

Context and issues

Introduction

Healthcare delivery in rural and remote areas is challenging. It is challenging because the people who live in rural and remote areas are few and far between, providing limited opportunities for efficiencies in service delivery. It is challenging because there are perceptions about rural communities having less: less to offer, less quality, less access. And it is challenging because rural and remote health care looks different than urban health care, and that makes it difficult for urban trained health professionals to imagine themselves working rurally, to understand how they will get access to ongoing professional development, how they could contribute to research and innovation. Because of these types of challenges, it can be difficult to attract health professionals to work in rural areas.

Additionally, patient care has become more complex, due to an increasing ageing population and increasing comorbidities[1]. This has resulted in the increased specialisation of all healthcare professions, and in-depth exploration of issues by each specific profession[2]. Yet in rural settings, this increased specialisation is often unattainable, particularly for allied health professionals, due to constrained resources, recruitment challenges and small numbers of patients requiring input from any given speciality. It can also be unhelpful, with expectations from professional bodies, communities and educators that all clinicians should have the opportunity to specialise – expectations that cannot be met in communities with small populations.

The medical and nursing workforces in Aotearoa New Zealand have also needed to respond to these challenges and take advantage of the opportunities available in rural settings. Working in partnership with professional associations, unions, health boards and training institutions, they have developed pathways and programs that aim to strengthen their workforces within the rural and remote settings[3]. Engagement with the New Zealand Ministry of Health (MoH) and other governance systems, lobbying and influencing legislative processes and working in partnership with internationally renowned think tanks such as the Kings Fund[4] have also given weight to their efforts.

Medical, nursing and allied health professions (AHPs) in Australia have worked to influence and develop a robust network of health professions to serve the vastly distributed rural and remote communities requiring health services[5]. Understanding the activities and impact of these groups provides a lens for developing the AHP rural workforce in New Zealand, in ways that are flexible enough to respond to the different needs of each rural area. As such this article aims to provide an overview of health workforce development in New Zealand, highlighting opportunities and lessons for future workforce development, and look abroad to what our AHP colleagues have already learnt that could be of benefit to New Zealand rural AHP workforce development.

Context

The West Coast District Health Board (DHB) serves the communities of the West Coast of the South Island[6]. This DHB is the most rural of all DHBs as it does not have any urban communities. The West Coast DHB covers over 23 000km^2 and has a population of 32 600 people (about 1% of the New Zealand population), equating to about 1.4 km^2 per person[7]. The West Coast population differs from the national average, being slightly older, with fewer Māori, a very low number of Pacific people, and a higher proportion of population in the lower decile[8].

The West Coast economy has historically relied on the export of raw materials such as gold, coal, timber and dairy products to provide employment within the district. In recent years tourism has increased; however, most overseas visitors spend an average of only one night in the district[9]. The health sector also provides a considerable number of jobs, with the West Coast DHB considered one of the largest employers of the district, with more than 950 staff working across the 13 facilities, and wider community settings, in full- and part-time roles[10].

This district, as with other areas of New Zealand where mining operations have been key contributors to the national economy, has a long history of being supported to recruit and retain health professionals, acknowledging both the risks associated with mining and the contribution made to the national economy. Support has been in the form of additional bonded financial incentives, which were provided to local health services via the various models of statutory health provision[11]. One of the most recent incentive models is the three-year Voluntary Bonding Scheme[8]. This scheme, open to doctors, nurses and a small number of midwives, sonographers and dentists, supports 350 health professionals each year, to work in hard-to-staff areas of the country. This scheme provides student loan repayments or cash payments where no loan is held, set at around $10,000 for doctors, and on average $3000 for other professions each year[12]. The scheme is overseen by Health Workforce New Zealand[13], a unit of the MoH.

New Zealand health workforce development

The establishment of Health Workforce New Zealand[13] in 2009 was the result of a growing need for a coordinated response to the pressures on the New Zealand health and disability workforce[14], across rural and urban settings. Health Workforce New Zealand is the primary provider of funding for post-entry clinical training in New Zealand[14]. Honouring the work of their predecessor, the Clinical Training Agency[15], key priorities remained focused on raising the number of New Zealand trained doctors and lowering the average age of the nursing workforce through support for

entry to practice for nursing graduates[16].

New Zealand has a significantly lower number of people entering medical training than the OECD[17] average: 33.7 New Zealand graduates per 1000 health practitioners compared to 37.5 across the OECD[12]. Of these, only about 1% of medical students indicate a desire to work rurally once qualified[18]. Accordingly, much effort has been focused on supporting the training of the medical profession in New Zealand, increasing overall funded training places as well as specific programs of rural focus[19].

The two medical schools in New Zealand, at University of Otago and University of Auckland, are situated at either end of the country. Both offer pathways to support growth in rural and remote workforce. To date, the strategies employed by medical training programs have been twofold. First is working to identify those students who come from rural areas who meet the academic requirements for medical training and offering them preferential entry into university. The basis for this is that research, both in New Zealand and abroad, has demonstrated that those students from rural areas are much more likely to practise medicine in rural and remote locations than those from urban settings[18,20,21]. Second, programs aim to immerse medical students in rural practice; research has shown that medical students who complete a portion of their training in a rural or remote setting are more likely to return to rural areas to practise medicine[21,22]. Arguably, combining these features should increase the likelihood that students will become rural medical practitioners once qualified[22]. However, despite these efforts, concerns remain that the supply of medical practitioners for rural areas remains weak[23,24].

For the nursing profession, the last decade of the 20th century brought increasing difficulties for the nursing workforce regarding recruitment and retention, alongside a growing realisation that the workforce was rapidly ageing. It was also recognised that, for those seeking to employ new graduates, the workforce shortages created a highly competitive environment between health providers[25,26]. Rural health systems and communities were being hit hardest, with low numbers of graduates taking up rural employment opportunities.

In response to this, in 2006 the Clinical Training Agency commissioned a Nurse Entry to Practice program to provide a sustainable workforce into the future[26]. The program was designed to support graduate nurses to develop into competent nurses, within a safe team nursing environment. This program provides funding to DHBs to supplement the salary for each graduate nurse during their first year of practice, and the bidding process for applicants and potential employees ensures a fair distribution of graduates across the country[16]. Bidding requires new graduates to express their preferences regarding employment placements and employers to register their requirements regarding number and skill mix of graduates[16].

Working alongside the medical and nursing workforces, the professions that make up the allied health, scientific and technical workforce; known as allied health, are many and varied[27]. Most common are the therapy professions of physiotherapy, occupational therapy, dietetics, speech-language therapy and social work; and the medical imaging technologists and those who work in the dental, pharmacy and laboratory settings. For the New Zealand public health system, these professional groups are pivotal to the patient journey as they contribute to the multidisciplinary make-up of healthcare teams[28]. This collective of professions is equivalent to around a quarter of the nursing workforce and is slightly smaller than the medical profession, who are equivalent to one-third of the nursing workforce[29].

In 2009 the Ministerial Review Group was set up to make recommendations to the Minister of Health on the future direction of health and disability services in New Zealand. They identified AHPs amongst the key workforces experiencing consistent and significant gaps in rural and provincial areas[30]. Despite that review, the primary focus of Health Workforce New Zealand activity has remained on the medical and nursing workforce, with no additional funding for AHPs.

There is limited research seeking to understand the social and political factors relevant to the current distribution of funding by Health Workforce New Zealand, and in particular the lack of targeted provision of AHPs inherent in these existing systems. Those who have reviewed the development of the various New Zealand medical associations, and to a lesser degree the New Zealand Nurses Organisation, capture a narrative of collective bargaining power and political influence[25,31], which may at least in part contribute to the medical and nursing professions having more visibility in workforce strategy development.

Specialism and extension of scope

The nursing profession have worked hard to demonstrate their professionalism and capability across the scope of nursing practice, and are now making significant contributions as primary care practice nurses, clinical nurse specialists and nurse practitioners within the general practice and emergency medicine environments[32]. This increased professionalisation by nurses has created opportunities for the substitution of doctors with nurses, and pharmacists in some settings, and supplementation to the medical workforce[33]. In contrast, opportunities to work to a wider scope by other health professional groups are yet to be robustly explored[34-36].

There are many examples of the specialist areas of nursing and medical practice. For doctors, being vocationally registered means having developed a specialist area such as obstetrics, anaesthetics or more than 30 other vocations within New Zealand. This specialist registration allows doctors to work independently, after completing an accredited postgraduate program[37]. Clinical nurse specialists have developed expert knowledge in the medical speciality they are allied to, strengthened by their postgraduate study[38]. These speciality areas include cancer, stroke, gerontology and orthopaedics[39]. Further study can also qualify them to become nurse prescribers in their area of clinical practice; however, both clinical nurse specialists and nurse prescribers require a level of medical oversight and supervision that nurse practitioners are not required to have.

In 2003 New Zealand adopted the *Health Practitioners Competence Assurance Act 2003* in order to have one legislative framework across the health professions that provided protections to the public in relation to health, safety and competency of health professions[40]. This opened the dialogue for many health professions previously without these policy protections and requirements. However, for some professions this was a missed opportunity to create a partnership both across those professions that are allied to each other[27] and with nursing and medicine. This was attributed in part to the inter- and intra-professional rivalries that exist across individual allied health professions as well as between nursing, medicine and allied health, as well as across professions working within and beyond the scope of health. These rivalries are accentuated by each profession's use of different practice languages and jargon, clinical frameworks and views[41]. For each, seeing themselves as autonomous professional groups, with a commitment to demonstrating their profession's unique contribution to the patient journey, appears to have overridden AHPs' desire to exercise more collective power within the health workforce[42].

These rivalries and the desire to be recognised as autonomous professions has also driven an increasing focus on advanced and extended scopes of practice, and the specialisation of professionals within the various professional groups, registration boards and professional bodies[42]. For some AHPs the very nature of their professional training marks them out as specialists: anaesthetic technicians, paramedics, orthoptists for example. For others, such as physiotherapists occupational therapists and dietitians, the path to specialist practice may not commence until after the initial 'core' years of clinical practice. Examples of specialist practice include neurodevelopmental physiotherapy, orthopaedic physiotherapy, paediatric diabetic dietetics, speech pathology and hand therapy[43-51].

Each area of specialisation offers benefit to both the patient journey and to the efficacy of the medical or surgical intervention, such as with musculoskeletal physiotherapy led orthopaedic assessment and treatment programs which identify and offer intervention to those patients who may otherwise require surgical intervention. Certainly, McKimm et al describe these specialised or advanced practitioners as professionals working at the interface between medicine and their own profession[33]. However, the expectations of the specialised or advanced practitioners, special interest groups, registering bodies and the other disciplines they work with are that the specialism and advanced practice is maintained through an exclusive focus of continuing professional development into that specialist area. Yet this level of activity and focus is often out of reach for rurally based practitioners.

Lessons learned

Generalism and delivering health care to rural populations

For rural practitioners, who work within small and vastly spread populations, and who are expected to work across the range of needs and patient types that present to the health service, maintaining competency and specialism in multiple advanced fields of practice is time consuming and costly. Additionally, it is very difficult for practitioners to maintain multiple specialist areas of practice when their opportunities to put their knowledge into practice are far fewer than their urban counterparts.

This suggests that generalism, specifically rural generalist[52], is a better focus for AHPs in rural areas who need to work across a diversity of people. How then do these practitioners achieve the same recognition and standing with their peers that are afforded to their specialist colleagues? Perhaps the tension here is just that: finding a way to recognise rural generalism as an advanced scope in its own right.

Frameworks to support generalist practice

The creation of HealthPathways by the Canterbury District Health Board and wider adoption of localised versions across many health systems in New Zealand, Australia and, more recently, the UK and Canada have provided a framework that can support rural practitioners to maintain their competence in navigating multiple speciality areas[53]. HealthPathways are locally agreed guidelines that are organised as an online manual, and they describe how particular health conditions are managed within the local context to which they are applied[54]. While initially designed for general practices, to aid community management of patients, and activation of specialist advice and intervention, these online manuals have also been designed for pathways within hospital settings[55].

A number of articles have been written about the ability of HealthPathways to create the conditions to guide 'best practice, best use' of the right clinical resource, which can assist in the rural setting[53,56,57]. In contrast Leggat et al[58] raise the debate that HealthPathways is at odds with professions who are trained to employ critical thinking, and see themselves as self-regulating. Regardless, the current development of pathways for AHPs would indicate more support than dissent.

Skill sharing and delegation offer another avenue for guiding the best use of the right clinical resource. The Calderdale Framework[59] is a workforce development tool that has been adopted by the Directors of Allied Health, Scientific and Technical within New Zealand. The framework ensures safe and effective patient-centred care and provides a clear and systematic method for reviewing skill mix, developing new roles, identifying new ways of working and facilitating service redesign[60]. Initially designed in the UK to safely develop the skills of the non-regulated allied health assistant workforce, its success in providing a competency framework with clear clinical task instructions for delegation or skill sharing across the allied health workforce has seen its applicability extend into the regulated and non-regulated nursing workforce in the UK[59].

What can Australia teach us?

Australia, in parts much more rural and remote than the West Coast of New Zealand, has also needed to address the challenges of AHP service delivery. They too have adopted the Calderdale Framework[59] with the state of Queensland having been most

enthusiastic in its implementation, and supportive to other states, and to New Zealand services adopting this model[61]. A considerable amount of quality research and activity occurring across rural and remote Australia can guide the New Zealand AHPs[27,62-71].

One way that the Australian AHP workforce has adapted to meet the needs of those rural and remote communities is through the expansion and extension of scopes of practice. This has been achieved through interprofessional practice, skill sharing and delegation[72]. McKimm et al[33] have described the benefits of expanded/extended scope to include increased productivity, reduced wait and reduced cost. Australia has also been able to implement a number of AHP-led models of care, such as in Queensland, where various professions work as first contact practitioners, in settings such as emergency departments, and ear nose and throat outpatient, orthopaedic and neurosurgical specialist outpatient clinics[73].

Partnering with education providers has also been a key success factor for strengthening the health professions working within rural and remote Australia. Recognising the need for a better connection between education and health, Health Workforce Australia led a nationwide discussion to shift the 'business as usual' approach towards a sustainable integrated program[74]. This resulted in nationally coordinated action between government, industry and education, alongside the various professional bodies that would better meet community need. In turn, universities such as James Cook University and Queensland University of Technology have developed collaborative programs aimed to fill both current and projected future workforce challenges[75].

The Greater Northern Australia Regional Training Network has developed a rural and remote generalist allied health project to 'support the development of clinical training models for allied health professionals'[67] as it recognises that the lack of understanding of the tasks required by these professionals in rural and remote areas was limiting the ability of educators and organisations to provide training and resources, or design effective models of care[67]. The postgraduate program designed for early career AHPs that emerged from this work has created a pathway to develop practical, work-integrated skills that support the needs of rural and remote communities[75].

The future of health workforce education in New Zealand

A not dissimilar theme appears within the MoH literature, where there are references to Health Workforce New Zealand proposing the creation of more generic roles such as rehabilitation practitioners, who would be 'more effective'[30] than specific roles such as in physiotherapy or occupational therapy, particularly in harder-to-staff and smaller workforce areas. The literature proposes streamlining learning across AHPs to allow for members of the allied health, scientific and technical workforce to 'gain new skills or switch disciplines without having to start from scratch'[13,30]. The literature proposes development of a health sciences degree with elective papers for specific therapeutic interventions – something not currently available in the New Zealand education environment – in a form that is within the scope of the *Health Practitioners Competence Assurance Act*.

Taking what has been learnt, from the examples above, and leveraging this learning within the context of the current MoH New Zealand Health Strategy[76], has potential. Certainly, the strategy appears to have some strong preventative and population health aspects, which could be interpreted as advantageous to the advancement of AHPs. Action 24 of the strategy specifically states that we must 'identify ways to best use the skills and expertise of the allied health workforce'[76] as well as work in partnership with other ministries, including education, to ensure that workforce development enhances diversity, capacity, capability, flexibility and sustainability through succession planning[76].

This health strategy is not markedly different from the last, nor from the activity occurring elsewhere in the health system[76]. Given this, and given we have not necessarily seen a parallel shift in allied health roles, some consideration needs to be given to the role of the MoH in bringing this to fruition and strengthening and optimising use of the allied health, scientific and technical workforce. At a recent Health Informatics New Zealand Conference, the Accident Compensation Corporation (ACC)[77] CEO Scott Pickering[78] spoke about the ways that ACC is transforming, including their commitment to working in partnership with physiotherapy education providers, to ensure they are preparing graduates for ACC's activity. While partnerships are key, preparing a workforce for a narrow specialist scope such as that of physiotherapy within the ACC-funded accident and injury space will continue to silo and restrict professions and add to the challenges for rural recruitment.

Conversations with education providers suggest they are also commited to a broadening of professional practice rather than just further specialisation. The University of Otago, for example, is committed to extending and enhancing their Rural Health Plan[79] to reflect the necessity for interprofessionalism, generalism and a breadth of scope, and fluidity within professional partnerships for rural healthcare workers who 'work closely together and often share caseloads'[79]. Together with the Auckland University of Technology and the University of Auckland, they aim to find ways to 'do things differently and better'[80], including exploring the potential to further extend the scopes of practice of nursing and other health professions.

Where to next?

An examination of the strategies that have been utilised by the medical and nursing workforces within New Zealand is useful in helping AHPs to understand the politics and areas of leverage available when strengthening the voice of AHPs at national and district levels. So too does an examination of the development of rural allied health practice in Australia, where rural generalist postgraduate training is creating opportunities for a variety of AHPs[67,75].

The traditional, hierarchical models that continue to exist within health systems have been disrupted, in part, where the necessity of

rural service delivery has required it. Rural medical generalists, rural nurse specialists and rurally focused urban specialists delivering care remotely via telehealth are a testament to how the power is starting to shift[81]. Realising ways for AHPs to meet the needs of rural populations is key to the survival of allied health within the public and private health settings, and indeed the survival of locally based health services. These rural populations, usually small, present limited opportunities for the development of specialist practice and limited funding to provide the higher staffing levels needed to travel significant distances, to see small numbers of patients. Working collaboratively and in interprofessional ways leads to better health outcomes[82], creates efficiencies and enhances the professional development and enjoyment of the clinicians involved[83].

However, unless the various and markedly separate AHPs are willing and able to live within the duality of professional clinical autonomy and collective professional identity, the opportunity to develop cross-disciplinary partnerships, embrace interprofessionalism and build workforce capabilities seems largely unachievable. How then do other professions; whether as a collective, such as the allied health, scientific and technical workforce, or individually, such as physiotherapists developing a rural generalist scope overseen by their registering body, create further shift? What questions do we need to ask next, as a workforce? And who do we need to engage with and work in partnership with to ensure that the allied health workforce of the future will have the skills and knowledge required to support the health and wellbeing of rural and remote communities? And lastly, for now, should this work be for AHPs collectively, or should our focus be on ways that AHPs, nursing and medical staff can share the power, share the clinical activity and truly place ourselves around our patient, who is at the centre of what we do?

With workforce shortages, changing community expectations and new ways of working developing rapidly, AHPs in Aotearoa New Zealand have an opportunity to lead the change required for rural health care. Partnering with our nursing and medical colleagues, and learning from our colleagues in other countries who are working to solve these issues for allied health as well, offers an opportunity to positively influence national strategy as well as targeted development of the rural AHP workforce.

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APPENDIX C: INTERVIEW GUIDE

Understanding the complexities of recruitment and retention in a rural health setting

Interview Guide

WHAKAWHANAUNGATANGA

Introductions, connection making and situating the participant and researcher in the context is key to creating a space for the sharing of authentic perspectives and genuine questions. Offer participants the opportunity to start with karakia or an activity of cultural significance to them.

CONFIRMING PARTICIPANT CRITERIA

Confirm the participant is an Allied Health professional who has worked in rural or remote settings in Aotearoa New Zealand in the last twelve months, or who is currently working in these settings or who is considering working in these settings.
Ask 'where's home?' is it where they live now or where they grew up etc. acknowledge if I don't know that place, and ask a little about it

Explore what being an Allied Health professional means to them, and what they consider rural or remote.

RESTATE THE PURPOSE OF THE RESEARCH

Recruitment and retention of health professionals in rural and remote health settings is very challenging. While research has been undertaken to understand this for medical and nursing staff, very little is known about what is important to Allied Health professionals in this context.
We want to explore the perspectives of Allied Health professions working in, having previously worked or thinking about working in rural or remote settings in Aotearoa New Zealand.
We want to capture a wide range of opinions and perspectives on this topic, from a range of different backgrounds. You have been invited as we believe you can contribute a valuable point of view to this project.

WHAT ARE THE RISKS OF TAKING PART?

There should not be any risk to you from this study. It is important to me to make all possible effort to ensure that your views are respected throughout our discussion. You can choose not to answer any questions you do not feel comfortable answering and can choose to cease your involvement in the interview at any time.

HOW WILL MY PRIVACY BE PROTECTED?

This interview will be recorded. This recording and all other information that you provide will remain strictly confidential. All data is stored in secure password protected files. No material that could personally identify you will be used in any reports from this study.
For participants from the West Coast DHB, the research team recognise the challenge of the primary researcher also being the Associate Director of Allied Health for the West Coast DHB. You have had the opportunity to discuss this with an independent person from the research team and the option of an independent interviewer. The primary researcher will still have access to the data relating to this interview.

RENEWING CONSENT

Explain that it is important that the participant understands that taking part in this research is voluntary (their choice) and that they can withdraw at any stage. Remind them that the views and the experiences that they share will help enhance our understanding of the factors involved when Allied Health professionals make decisions about working in rural and remote settings. We believe that by developing insights into what matters to Allied Health professionals in relation to living and working rurally, we can inform the development and introduction of workforce and recruitment strategies that assist us to ensure people living in rural and remote communities can access more reliable and robust Allied Health services.

Confirm with the participant that they continue to consent to participation. Ensure they state this clearly in their own words for the purpose of the audio recording.

This study has received ethical approval from AUTEC Reference number: #tbc

Once consent has been agreed, the following questions should form the basis for the body of the interview.

PARTICIPANT'S DECISION TO BECOME AN AHP

How did you decide to become a ### (their specific profession)? What attracted you to that type of profession? Where did you train? Have you always been a ###, or did you do something else when you first left school?

PARTICIPANT'S EXPERIENCE OF RURAL/REMOTE HEALTH

Explain and explore (be mindful not to appear to 'test' the participant or present this as a 'trick' question) ie tell me about your current role. Is it based 'at home' or do you travel there, did you move there? If the participant sees it as a rural role, how did they choose it? Was it because it was rural or was there something else about the role that attracted them?

KEY FEATURES

Thinking about jobs you have had that, or that close friends or relatives have had were great, what were things about those jobs that made them appealing, that made you feel most engaged and effective? Describe how that felt, and what made the situation possible. Prompt with employment terms, location, culture – do they remember the process they used to make the choice. Was anything not negotiable?

PEOPLE / ROLES THE PARTICIPANTS USE TO SUPPORT DECISION MAKING

Can you tell me about a person who has helped you make a decision that turned out well? What advice did they offer? What did you value about their contribution?

PROFESSIONAL SATISFACTION

What are the three things you'd most want to see happen during your professional career?

RESEARCH SPECIFIC

As you know, we are really interested in understanding how to overcome the challenges of recruitment and retention in rural and remote areas. What do you think it will take to get us there?

Check out any tangible incentives they think would be worth considering (if this has not already come up).

Talk about the themes in existing literature about Drs particularly; that people need to be born rural or trained rurally to choose to work rurally. Does the participant believe that is true?

Follow the lead of the participant and explore additional narrative that they offer which is related to the research topic.

REVIEWING THE INFORMATION COLLECTED TODAY

You will be provided with a copy of your interview transcript, which you will have an opportunity to review and correct where necessary. It is our aim to provide this to you within 4 weeks of your interview, and it will be sent to you via your chosen email address in a password protected file.

WHAT WILL HAPPEN WITH THE FINDINGS OF THIS STUDY?

We will use your stories to gain understanding about what really matters to Allied Health professions considering working in, or already working in rural areas. These findings will be used to inform workforce and recruitment strategies in Aotearoa New Zealand. Key findings will be submitted for publication in relevant professional journals, used in academic publications, and presented at conferences or in workshops.

WILL I BE ABLE TO HAVE A COPY OF THE FINDINGS?

If you would like to receive a summary of our findings you can indicate this on the consent form and provide your contact details. These will be sent to you at the end of the study.

CONDUCT OF RESEARCHER

If you have concerns regarding the conduct of the research you can contact the executive secretary, AUT Ethics Committee: Kate O'Connor 09 921 9999 ext 6038 kate.oconnor@aut.ac.nz

Thank the participant and offer to close the interview in a manner of their choosing such as karakia.

This study has received ethical approval from AUTEC Reference number: 18/424 December 2018

APPENDIX D: INTERVIEW QUESTIONS SHEET (WITH MARKUP)

Understanding the complexities of recruitment and retention in a rural health setting

Interview Guide

- where's home? acknowledge if I don't know that place

WHAKAWHANAUNGATANGA

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RENEWING CONSENT

Explain that it is important that the participant understands that taking part in this research is voluntary (their choice) and that they can withdraw at any stage. Remind them that the views and the experiences that they share will help enhance our understanding of the factors involved when Allied Health professionals make decisions about working in rural and remote settings. We believe that by developing insights into what matters to Allied Health professionals in relation to living and working rurally, we can inform the development and introduction of workforce and recruitment strategies that assist us to ensure people living in rural and remote communities can access more reliable and robust Allied Health services.

Confirm with the participant that they continue to consent to participation. Ensure they state this clearly in their own words for the purpose of the audio recording.

This study has received ethical approval from AUTEC Reference number: #tbc

Once consent has been agreed, the following questions should form the basis for the body of the interview.

Where did you train?

PARTICIPANT'S DECISION TO BECOME AN AHP

How did you decide to become a ### (their specific profession)? What attracted you to that type of profession?

have you always been an AHP?

tell me about your current role

PARTICIPANT'S EXPERIENCE OF RURAL/REMOTE HEALTH

Explain and explore (be mindful not to appear to 'test' the participant or present this as a 'trick' question)

— is it at "home", if not are you from "rural" — why did you choose rural?

KEY FEATURES

Thinking about jobs you have had that, or that close friends or relatives have had were great, what were things about those jobs that made them appealing, that made you feel most engaged and effective? Describe how that felt, and what made the situation possible. Prompt with employment terms, location, culture

→ do you remember the process you used to choose a rural role? what mattered, what was non-negotiable?

PEOPLE / ROLES THE PARTICIPANTS USE TO SUPPORT DECISION MAKING

Can you tell me about a person who has helped you make a decision that turned out well? What advice did they offer? What did you value about their contribution?

PROFESSIONAL SATISFACTION

What are the three things you'd most want to see happen during your professional career?

RESEARCH SPECIFIC

As you know, we are really interested in understanding how to overcome the challenges of recruitment and retention in rural and remote areas. What do you think it will take to get us there?

Follow the lead of the participant and explore additional narrative that they offer which is related to the research topic.

Incentives offered?

research: born/grown rural true? what else?

Wrap up

REVIEWING THE INFORMATION COLLECTED TODAY

You will be provided with a copy of your interview transcript, which you will have an opportunity to review and correct where necessary. It is our aim to provide this to you within 4 weeks of your interview, and it will be sent to you via your chosen email address in a password protected file.

WHAT WILL HAPPEN WITH THE FINDINGS OF THIS STUDY?

We will use your stories to gain understanding about what really matters to Allied Health professions considering working in, or already working in rural areas. These findings will be used to inform workforce and recruitment strategies in Aotearoa New Zealand. Key findings will be submitted for publication in relevant professional journals, used in academic publications, and presented at conferences or in workshops.

WILL I BE ABLE TO HAVE A COPY OF THE FINDINGS?

If you would like to receive a summary of our findings you can indicate this on the consent form and provide your contact details. These will be sent to you at the end of the study.

CONDUCT OF RESEARCHER

If you have concerns regarding the conduct of the research you can contact the executive secretary, AUT Ethics Committee: Kate O'Connor 09 921 9999 ext 6038 kate.oconnor@aut.ac.nz

Thank the participant and offer to close the interview in a manner of their choosing such as karakia.

This study has received ethical approval from AUTEC Reference number: 18/424 December 2018

APPENDIX E: ETHICS APPROVAL

Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
D-88, Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

30 January 2019

Peter Larmer
Faculty of Health and Environmental Sciences

Dear Peter

Re Ethics Application: → **18/424 Understanding the complexities of recruitment and retention in a rural health setting**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 29 January 2022.

Non-Standard Conditions of Approval

1. → In the Information Sheet disclose researcher's role in the DHB and advise potential participants of the independent interviewer."
2. → Clarify whether the researcher will know which staff in that organisation are taking part or whether transcripts can be attributed to an individual.

Non-standard conditions must be completed before commencing your study. Non-standard conditions do not need to be submitted to or reviewed by AUTEC before commencing your study.

Standard Conditions of Approval

1. → A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through http://www.aut.ac.nz/research/researchethics.
2. → A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through http://www.aut.ac.nz/research/researchethics.
3. → Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: http://www.aut.ac.nz/research/researchethics.
4. → Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. → Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation, then you are responsible for obtaining it. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries, please contact ethics@aut.ac.nz

Yours sincerely,

Kate O'Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: → kpj2659@autuni.ac.nz; jane.george@wdhb.health.nz; Nicola Kayes

APPENDIX F: STUDY ADVERTISEMENT

Research Project

Understanding the complexities of recruitment and retention in a rural health setting : are you an Allied Health professional with a perspective to share?

Recruitment and retention of health professionals in rural and remote health settings is very challenging. While research has been undertaken to understand this for medical and nursing staff, very little is known about what is important to Allied Health professionals in this context.

We want to explore the perspectives of Allied Health professions working in, having previously worked or thinking about working in rural or remote settings in Aotearoa New Zealand.

You are invited

ATTENDEES:

We want to invite Allied Health, Scientific and Technical professions who have worked in rural or remote settings in Aotearoa New Zealand in the last twelve months, who are currently working in these settings or who are considering working in these settings to take part in this important research.

We want to capture a wide range of opinions and perspectives on this topic, from a range of different backgrounds. You have been invited as we believe you can contribute a valuable point of view to this project.

For the purpose of this study Allied Health professionals are those covered by the Health Practitioner Competence Assurance Act (Dental, Dietitians, Medical Scientists, Imaging Technologists, OTs, Pharmacists, Physios, Podiatrists, Psychologists/Psychotherapists), and those therapy professions acknowledged in the Act such as Social Work, Speech Language Therapy, Orthotists/Productionists, Music and other Arts Therapy.

If you are unsure if you could take part, please contact the research team:

Principal Investigator Dr Peter Larmer
plarmer@aut.ac.nz
09 921 9999 ext 7322

Researcher Jane George
kpj7659@autuni.ac.nz
03 769 7400 ext 5014

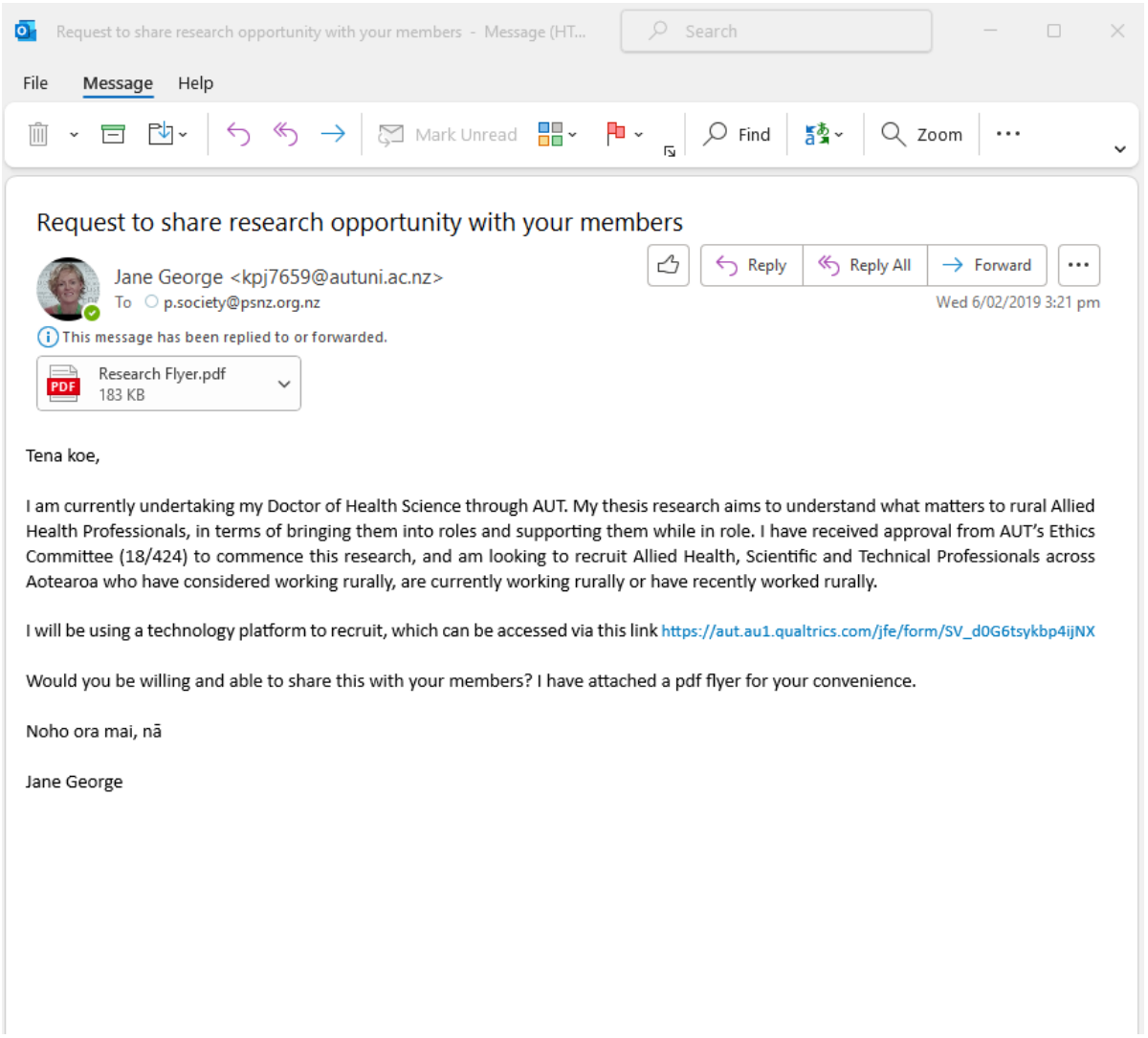
The primary researcher (Jane George) is Associate Director of Allied Health at West Coast District Health Board (DHB). As such, to avoid a conflict of interest and to allow participants to be transparent regarding their perspectives, an independent interviewer will appointed to undertake interviews with employees of West Coast DHB.

To find out more visit
https://aut.au1.qualtrics.com/jfe/form/SV_d0G6tsykbp4ijNX

or use the QR code on your mobile device

This study has received ethical approval from AUTEC. Reference number: 18/424

APPENDIX G: REQUEST TO PROMOTE RESEARCH EMAIL



Request to share research opportunity with your members - Message (HT...

Search

File Message Help

Mark Unread Find Zoom

Request to share research opportunity with your members

Jane George <kpj7659@autuni.ac.nz>

To p.society@psnz.org.nz

Reply Reply All Forward

Wed 6/02/2019 3:21 pm

This message has been replied to or forwarded.

Research Flyer.pdf
183 KB

Tena koe,

I am currently undertaking my Doctor of Health Science through AUT. My thesis research aims to understand what matters to rural Allied Health Professionals, in terms of bringing them into roles and supporting them while in role. I have received approval from AUT's Ethics Committee (18/424) to commence this research, and am looking to recruit Allied Health, Scientific and Technical Professionals across Aotearoa who have considered working rurally, are currently working rurally or have recently worked rurally.

I will be using a technology platform to recruit, which can be accessed via this link https://aut.au1.qualtrics.com/jfe/form/SV_d0G6tsykbp4ijNX

Would you be willing and able to share this with your members? I have attached a pdf flyer for your convenience.

Noho ora mai, nā

Jane George

APPENDIX H: PROFESSIONAL BODIES CONTACTED TO PROMOTE RESEARCH

ORGANISATION	CONTACT DETAILS
Allied Health Aotearoa New Zealand	executivedirector@alliedhealth.org.nz
Aotearoa New Zealand Association of Social Workers	fionas@anzasw.nz
Dietitians New Zealand	admin@dietitians.org.nz
Music Therapy New Zealand	info@musictherapy.org.nz
New Zealand Dental and Oral Health Therapists Association	contact.nzdohta@gmail.com
New Zealand Institute of Medical Radiation Technology	linda@nzimrt.co.nz
New Zealand Psychological Society	office@psychology.org.nz
New Zealand Speech-language Therapists' Association	admin@speechtherapy.org.nz
Nga Pou Mana	contact.ngapoumana@gmail.com
Occupational Therapy New Zealand	otnzexecdirector@otnz.co.nz
Pharmaceutical Society of New Zealand	p.society@psnz.org.nz
Physiotherapy New Zealand	pnz@physiotherapy.org.nz
Podiatry Association	contact@podiatry.org.nz

APPENDIX I: QUALTRICS RECRUITMENT SURVEY

AUT

Participant Information Sheet

Understanding the complexities of recruitment and retention in a rural health setting: are you an Allied Health professional with a perspective to share?

Tēnā koe, talofa lava and hello!

You are invited to take part in research aiming to understand the complexities of recruitment and retention of Allied Health professionals in rural settings. This study is being carried out by researchers based in School of Health Sciences at AUT University.

This information sheet will explain the research study. We appreciate your time reading this material. Your participation in this study is entirely voluntary (your choice).

Please feel free to ask the researchers any questions you might have about the study.

Principal Investigator Dr Peter Larmer
plarmer@aut.ac.nz
09 921 9999 ext 7322

Researcher Jane George
jane.george@wcdhb.health.nz
03 769 7400 ext 5014

WHAT IS THE PURPOSE OF THIS STUDY?

Recruitment and retention of health professionals in rural and remote health settings is very challenging. While research has been undertaken to understand this for medical and nursing staff, very little is known about what is important to Allied Health professionals in this context.

We want to explore the perspectives of Allied Health professions working in, having previously worked or thinking about working in rural or remote settings in Aotearoa New Zealand.

HOW WILL THIS STUDY HELP?

The views and the experiences that you share will help enhance our understanding of the factors involved when Allied Health professionals make decisions about working in rural and remote settings. We believe that by developing insights into what matters to Allied Health professionals in relation to living and working rurally, we can inform the development and introduction of workforce and recruitment strategies that assist us to ensure people living in rural and remote communities can access more reliable and robust Allied Health services.

WHO CAN TAKE PART?

We want to invite Allied Health professions who have worked in rural or remote settings in Aotearoa New Zealand in the last twelve months, who are currently working in these settings or who are considering working in these settings. For the purpose of this study Allied Health professionals are those covered by the Health Practitioner Competence Act, and those therapy professions acknowledged in the Act such as Social Work, Speech Language Therapy, Music Therapy or Arts Therapy. If you are unsure if you could take part, please contact the research team.

HOW ARE PEOPLE CHOSEN TO TAKE PART IN THE STUDY?

We want to capture a wide range of opinions and perspectives on this topic, from a range of different backgrounds. You have been invited as we believe you can contribute a valuable point of view to this project.

WHAT HAPPENS IN THE STUDY?

If you consent to take part you will be invited to either join a focus group with other Allied Health professionals or to take part in an individual interview. Focus groups will take between 60 and 90 minutes. An individual interview is likely to last up to 60 minutes.

The interviews will be held at a time and in a venue that is suitable for those taking part, and for interviews this could include making use of technologies such as DHB VideoConferencing, Zoom or Skype. The questions will focus on your experiences of decision making relating to working in a rural or remote setting in Aotearoa New Zealand, and what you identify as attractive aspects of living and working rurally.

WHAT ARE THE COSTS OF TAKING PART?

There will not be any cost to you except your time. We can provide a contribution to any travel costs you incur.

WHAT ARE THE RISKS OF TAKING PART?

There should not be any risk to you from this study. The researcher will make all possible effort to ensure that your views are respected throughout the discussion. You can choose not to answer any questions you do not feel comfortable answering and can choose to cease your involvement in the interview or focus group at any time.

HOW WILL MY PRIVACY BE PROTECTED?

In a focus group we cannot guarantee confidentiality due to the nature of the group process and not having absolute control over what other members of the group do with the information shared in the group. However, we will remind all group members that what is said in the group stays in the group. At the beginning of the discussion we will set some ground rules to ensure respect for each other's contribution is maintained.

Your interview or focus group will be recorded. This recording and all other information that you provide will remain strictly confidential. All data is stored in secure password protected files. No material that could personally identify you will be used in any reports from this study.

HOW DO I AGREE TO TAKE PART IN THIS RESEARCH?

You can indicate your willingness to take part in an interview or focus group on the next page of this survey tool. You will be asked to complete a consent form to show that you are willing to take part in this study.

Your participation is voluntary and you may withdraw from the study with no negative effects. However, once analysis of the data has begun it may no longer be possible to remove your data.

WHAT WILL HAPPEN WITH THE FINDINGS OF THIS STUDY?

We will use your stories to gain understanding about what really matters to Allied Health professions considering working in, or already working in rural areas. These findings will be used to inform workforce and recruitment strategies in Aotearoa New Zealand. Key findings will be submitted for publication in relevant professional journals, used in academic publications, and presented at conferences or in workshops.

WILL I BE ABLE TO HAVE A COPY OF THE FINDINGS?

If you would like to receive a summary of our findings you can indicate this on the consent form and provide your contact details. These will be sent to you at the end of the study.

MY QUESTION ISN'T ANSWERED HERE, WHO CAN I CONTACT FOR MORE INFORMATION?

If you would like more information about this research, please feel free to contact one of the research team.

If you have concerns regarding the conduct of the research you can contact the executive secretary, AUT Ethics Committee:

Kate O'Connor 09 921 9999 ext 6038 kate.oconnor@aut.ac.nz

Initial consent

Are you interested in contributing your perspective to this research?

- ○ Yes I am interested
- ○ No I am not interested
- ○ I would like to speak to someone before I decide

If you would like one of the research team to get in touch, please provide the best way we can contact you.

Interested? Great!

As we described in the Participant Information Sheet, you could be invited to either join a focus group with other Allied Health professionals or to take part in an individual interview. Focus groups will take between 60 and 90 minutes. An individual interview is likely to last up to 60 minutes. Do you have a preference?

- ○ Interview
- ○ Focus Group
- ○ I do not have a preference

In order for us to contact you about participating, and so that we can ask you some questions in this survey, we now need to gain your consent. Are you happy to proceed?

- ○ Yes, please proceed to the consent page
- ○ No thanks, I am no longer interested in participating

Consent to participate. By selecting the check boxes below I acknowledge that ...

- [ ] I have read and understood the information provided about this research project in the Participant Information Sheet.
- [ ] I understand that taking part in this study is voluntary (my choice) and that I may withdraw at any time without being disadvantaged in any way.
- [ ] I understand that if I withdraw I can ask for data identifiable as belonging to me to be destroyed. However, once the analysis has been completed this may not be possible.
- [ ] I understand that the interview will be audio recorded and transcribed.
- [ ] I know that no material that could identify me will be used in any reports on this study.

I agree to take part in this research (please provide your full name in the box below)

Demographic information

Age

Gender

Which ethnic group, or groups, do you identify with? (choose as many as apply)

- ○ Maori
- ○ NZ European
- ○ Indian
- ○ Samoan
- ○ Cook Island Maori
- ○ Chinese
- ○ Tongan
- ○ Niuean
- ○ British
- ○ Other

If you chose 'Other' ethnicity, please specify

What profession do you work in?

Please list your qualifications

Are you currently working in a rural or remote setting?

- Yes
- No

Have you worked in a rural or remote setting in the last 12 months?

- Yes
- No

Are you, or have you recently considered working in a rural or remote setting?

- Yes
- No

Thank you

This information will be kept separate from any other information you give.

- I would like to receive a copy of the findings

Please provide us with the best email address to contact you

Please provide us with the best telephone number to contact you

Powered by Qualtrics

APPENDIX J: PARTICIPANT INFORMATION SHEET - INTERVIEWS

Understanding the complexities of recruitment and retention in a rural health setting

Participant Information Sheet - Interviews

Tēnā koe, talofa lava and hello!

You are invited to take part in research aiming to understand the complexities of recruitment and retention of Allied Health professionals in rural settings. This study is being carried out by researchers based in School of Health Sciences at AUT University, and will contribute towards a qualification for the researcher (Doctor of Health Science).

This information sheet will explain the research study. We appreciate your time reading this material. Your participation in this study is entirely voluntary (your choice).

Please feel free to ask the researchers any questions you might have about the study.

Principal Investigator	Dr Peter Larmer	plarmer@aut.ac.nz	09 921 9999 ext 7322
Researcher	Jane George	Kpj7659@autuni.ac.nz	03 769 7400 ext 5014

WHAT IS THE PURPOSE OF THIS STUDY?

Recruitment and retention of health professionals in rural and remote health settings is very challenging. While research has been undertaken to understand this for medical and nursing staff, very little is known about what is important to Allied Health professionals in this context.

We want to explore the perspectives of Allied Health professions working in, having previously worked or thinking about working in rural or remote settings in Aotearoa New Zealand.

HOW WILL THIS STUDY HELP?

The views and the experiences that you share will help enhance our understanding of the factors involved when Allied Health professionals make decisions about working in rural and remote settings. We believe that by developing insights into what matters to Allied Health professionals in relation to living and working rurally, we can inform the development and introduction of workforce and recruitment strategies that assist us to ensure people living in rural and remote communities can access more reliable and robust Allied Health services.

WHO CAN TAKE PART?

We want to invite Allied Health professions who have worked in rural or remote settings in Aotearoa New Zealand in the last twelve months, who are currently working in these settings or who are considering working in these settings. For the purpose of this study Allied Health professionals are those covered by the Health Practitioner Competence Assurance Act (Dental, Dietitians, Medical Scientists, Imaging Technologists, OTs, Pharmacists, Physios, Podiatrists, Psychologists/Psychotherapists), and those therapy professions acknowledged in the Act such as Social Work, Speech Language Therapy, Orthotists/Productionists, Music and other Arts Therapy. If you are unsure if you could take part and wish to do so please contact the research team.

HOW ARE PEOPLE CHOSEN TO TAKE PART IN THE STUDY?

We want to capture a wide range of opinions and perspectives on this topic, from a range of different backgrounds. You have been invited as we believe you can contribute a valuable point of view to this project.

WHAT HAPPENS IN THE STUDY?

If you consent to take part you will be invited to either join a focus group with other Allied Health professionals or to take part in an individual interview. Focus groups will take between 60 and 90 minutes. An individual interview is likely to be around 60 minutes.

WHAT ARE THE COSTS OF TAKING PART?

There will not be any cost to you except your time. We can provide a contribution of $20 to any travel costs you incur.

This study has received ethical approval from AUTEC Reference number: 18/424 December 2018

HOW WILL THE INTERVIEWS OCCUR?

They will be held at a time and in a venue that is suitable for those taking part, and for interviews this could include making use of technologies such as DHB VideoConferencing, Zoom or Skype. Scheduling of the interviews can be either in or out of work hours. The questions will focus on your experiences of decision making relating to working in a rural or remote setting in Aotearoa New Zealand, and what you identify as attractive aspects of living and working rurally.

WHAT ARE THE RISKS OF TAKING PART?

There should not be any risk to you from this study. The researcher will make all possible effort to ensure that your views are respected throughout the discussion. You can choose not to answer any questions you do not feel comfortable answering and can choose to cease your involvement in the interview or focus group at any time.

HOW WILL MY PRIVACY BE PROTECTED?

The primary researcher (Jane George) is Associate Director of Allied Health at West Coast District Health Board (DHB). As such, to avoid a conflict of interest and to allow participants to be transparent regarding their perspectives, an independent interviewer will appointed to undertake interviews with employees of West Coast DHB.

Your interview or focus group will be recorded. This recording and all other information that you provide will remain strictly confidential. All data is stored in secure password protected files. No material that could personally identify you will be used in any reports from this study.

While all efforts will be made to de-identify data for participants employed by West Coast DHB, it is possible that the primary research will be able to infer from the transcripts who has taken part, and where the data comes from. Please be assured that the primary researcher is seeking transparent and open accounts of perspectives regarding recruitment and retention in rural settings and your responses will not disadvantage you in any way in your work setting.

WILL I BE ABLE TO REVIEW MY INTERVIEW?

You will be provided with a copy of your interview transcript, which you will have an opportunity to review and correct where necessary. It is our aim to provide this to you within 4 weeks of your interview, and it will be sent to you via your chosen email address in a password protected file.

HOW DO I AGREE TO TAKE PART IN THIS RESEARCH?

You can indicate your willingness to take part in an interview or focus group on the next page of this survey tool. You will be asked to complete a consent form to show that you are willing to take part in this study.

Your participation is voluntary and you may withdraw from the study with no negative effects. However, once analysis of the data has begun it may no longer be possible to remove your data.

WHAT WILL HAPPEN WITH THE FINDINGS OF THIS STUDY?

We will use your stories to gain understanding about what really matters to Allied Health professions considering working in, or already working in rural areas. These findings will be used to inform workforce and recruitment strategies in Aotearoa New Zealand. Key findings will be submitted for publication in relevant professional journals, used in academic publications, and presented at conferences or in workshops.

WILL I BE ABLE TO HAVE A COPY OF THE FINDINGS?

If you would like to receive a summary of our findings you can indicate this on the consent form and provide your contact details. These will be sent to you at the end of the study.

MY QUESTION ISN'T ANSWERED HERE, WHO CAN I CONTACT FOR MORE INFORMATION?

If you would like more information about this research, please feel free to contact one of the research team.

If you have concerns regarding the conduct of the research you can contact the executive secretary, AUT Ethics Committee: Kate O'Connor 09 921 9999 ext 6038

AUT Ethics Committee	Kate O'Connor	kate.oconnor@aut.ac.nz	09 921 9999 ext 6038

This study has received ethical approval from AUTEC Reference number: 18/424 December 2018

APPENDIX K: CONFIDENTIALITY AGREEMENT - TRANSCRIPTION

Confidentiality agreement

Transcription Services

Project title:	***Understanding the complexities of recruitment and retention in a rural health setting***
Project Supervisor:	***Dr Peter Larmer***
Researcher:	***Jane George***

✓ I understand that all the material I will be asked to transcribe is confidential.
✓ I understand that the contents of the tapes or recordings can only be discussed with the researchers.
✓ I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber's signature: .....
Transcriber's name: ANNA HYNES
Transcriber's Contact Details (if appropriate):
121 RUTHERGLEN ROAD
PAROA
.....
.....
Date: 27/08/19

Project Supervisor's Contact Details (if appropriate):
Dr Peter Larmer
plarmer@aut.ac.nz
09 921 9999 ext 7322

Note: The Transcriber should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee December 2018 : Ref 18/424

"I did then what I knew how to do. Now that I know better, I do better."

Maya Angelou (1969, p. 179)