# Tangata Hourua:

# Understanding the workforce for diabetes management with Māori and Pacific peoples

**Tania Mary Mullane**

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# Abstract

This thesis sought to explore the experiences of: 1) Māori and Pacific people living with type 2 diabetes (T2D), and their whanau; and 2) the kai manaaki (KM), community health workers (CHWs) and dieticians who provide care to Māori and Pacific people living with T2D in the community.

The burden of T2D is greatest for Māori, the Indigenous peoples of Aotearoa New Zealand, and for Pacific peoples, who both have higher rates and worse outcomes compared with non-Māori and non-Pacific people. Significantly, for Māori and Pacific people with T2D, the disparity in outcomes (including dependence and quality of life) compared with New Zealand Europeans increases significantly at all touch points including pre-diabetes, diagnosis, assessment, and treatment. The reasons for this are complex, and in some part can be related to gaps in suitable health provision and workforce to appropriately meet the needs of Māori and Pacific peoples.

This PhD thesis project comes under the umbrella of a larger body of research. The National Health Coalition successfully gained Health Research Council (HRC) funding for a research project to test a new initiative, Mana Tū, which is an exploration framework for culturally responsive approaches and strategies implemented by the KM who work alongside Māori and Pacific in their community.

The study’s aim was twofold. The first aim was to gain a better understanding of the roles of three types of health workers who work with Māori and Pacific people in the community as to their views on the deliberate strategies they were employing to support better health outcomes. The second aim was to provide a deeper understanding of Māori and Pacific people with T2D, and their whanau, and their experiences of a preventative diabetes programme offered through Mana Tū by a workforce that was trained to work with Māori and Pacific people with T2D in primary care settings.

A qualitative approach to the research was undertaken in order to gain an understanding of these two groups’ experiences, attitudes and beliefs. As this project involved Māori and Pacific as researchers and researched and sought to make a positive difference for Māori with T2D and their whanau, it was identified there were limited frameworks that support robust research methodologies with both Māori and Pacific peoples. Subsequently, the Tangata Hourua research framework, drawing from Kaupapa Māori (Māori principles) and Pacific methodologies was developed in response to this gap. The Tangata Hourua research framework was used to guide various studies in this research project.

The first study identified five themes from health care workers working with Māori and Pacific with T2D in the community from data collected from three focus groups. Three main themes were identified across the three focus groups: whanaungatanga (actively building relationships), cultural safety (mana enhancing) and cultural alignment. Another two themes were identified only by the KM and CHWs, who both strongly associated a multidisciplinary approach with experiences of feeling valued in their roles, which was different from the dietitians. A focus on supporting community-based, non-clinical workers in building meaningful and culturally safe relationships with Māori and Pacific people has the potential to improve diabetes outcomes and is urgently required.

The second study’s findings were from a component of the Mana Tū research programme looking at the experiences of 1) people living with T2D and their whānau, and 2) KM, CHWs and dieticians who provide care to Māori and Pacific people living with T2D in the community. From this study, seven themes emerged which included the finding that clients and whānau appreciated and better engaged with health care workers who: could culturally meet their needs; spoke their language or spoke in non-clinical terms that could be understood; understood who they were and the communities they came from; provided services that were adaptable and non-clinical in their approach, such as where they were delivered; and provided a multidisciplinary approach. These findings drive a strong call for a diabetes prevention strategy that achieves the aspirations of Māori and Pacific people to take charge.

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# 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 other institution of higher learning."

Signed

Dated

9th September 2022

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# Candidate contribution to co-authored works

As at September 9, 2022.

All co-authors on the chapters/papers indicated in the following table have approved these for inclusion in Tania Mary Mullane's doctoral thesis.

| | *Author %* |
|---|---|
| Chapter 3 – Tangata Hourua: A framework drawing from Kaupapa Māori and Pacific research methodologies | TM = 80<br>MH = 10<br>IW =10 |
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| | | | | | |
|---|---|---|---|---|---|
| Ms Tania Mullane<br>(TM) | Dr. Matire Harwood<br>(MH) | Dr. Isaac Warbrick<br>(IW) | Taria Atria<br>(TT) | Dr Anneka Anderson<br>(AA) | Dr Vanessa Selak<br>(VS) |

# Chapter 1: Introduction

Type 2 diabetes (T2D) is a common condition with an incidence predicted to become more frequent in all populations. As well as the considerable financial costs associated with T2D, there is a significant personal burden carried by those with T2D and their whānau. In Aotearoa, the T2D burden is greatest for Māori, the Indigenous peoples, and for Pacific peoples, who both have higher rates and worse outcomes compared with non-Māori. Importantly, for Māori and Pacific peoples, the disparity in outcomes (including dependence and quality of life) compared with New Zealand Europeans increases significantly from pre-diagnosis to diagnosis, assessment, and treatment (Manatū Hauora, 2022). These ethnic disparities in T2D are inequitable and unacceptable. International declarations, New Zealand Government policy and the Treaty of Waitangi promote the elimination of ethnic disparities for all health outcomes, including T2D; therefore, the reasons for ethnic disparities in T2D should be explored. For Māori and Pacific people with T2D and their whānau, there is a pressing need for targeted research to inform necessary strategies. This thesis seeks to understand disparities in T2D from the perspectives of Māori and Pacific people. It explores the experiences for Māori and Pacific people with T2D and for those close to them, their whānau. The other important aspect to this thesis focuses on the experiences of health care workers who work with Māori and Pacific people to improve T2D outcomes for Māori, Pacific people and their whānau. This chapter introduces the reader to the thesis, starting with the personal context for undertaking the research, followed by a brief overview of issues for Māori and Pacific people with T2D, the methodological approach taken and the aims and objectives of this study. The chapter concludes with an overview of the thesis structure.

## Personal context

When asked my reasons for undertaking a thesis on the topic of Māori and Pacific peoples, and diabetes, I start with my story, including a whakapapa. My connection to Aotearoa draws from the role Te-Moana-nui-a-Kiwa plays in the relationship between Māori and Pacific peoples, whose whakapapa my children and mokopuna now share.

First let me take a moment to share a Fijian proverb:

*Lutu na niu, lutu ki vuna*

*The coconut falls close to it roots*

In essence, this alludes to the idea that the character, attitude, and behaviour of children will depend on how they are raised. For me this recalls the past, present and future and how intergenerational knowledge is passed on. My orthodox European New Zealand family was interrupted by my adoption and was an early influence in my formative years devoid of any culture I resonated with; hence my reckoning that my early exposure to anything concerning te ao Māori was instinctively absorbed, providing me with a connection, identity, and knowledge I was seeking. This connection to te ao Māori, which included many friendships and eventually the father of my children, provided me with a familiarity that was able to bridge me easily to my Fijian whakapapa when, later in my 20s, I connected with my birth mother Pamela Vikoca Makitelana and subsequently visited the island of Venua Levu where I felt instantly at home. This enabled me to learn more about my maternal links to the chiefdom of Cakaudrove, the village of Nacekoro and my connections via my great-grandmother to the chiefly village of Nukubalavu, in the vanua of Savusavu, with her family originally from the Tongan island of Lau.

This research is not only for my children today but sets the course for mokopuna in the future who will identify as Māori and Pacific, and thus will have a far greater chance of diabetes, such as my Fijian maternal grandmother, who died from it, and my children's Māori grandfather who suffered greatly because of it. Therefore, the subject matter of this thesis and the resulting framework holds not only a professional and academic interest, but a highly personal and cultural one too.

## Māori and Pacific people and T2D

Māori and Pacific whānau have significantly higher rates for T2D incidence, hospitalisations, complications, and mortality. Research in Aotearoa (the term New Zealand will also be used intermittently throughout this thesis) has described the epidemiology of T2D and, to a lesser extent, interventions to improve access to care or reduce the onset of the disease and its complications. There is little information or research about the workforce, or workforce development, required to improve diabetes outcomes for Māori and Pacific peoples.

In 2016, the National Hauora Coalition PHO received funding to test an innovative programme for Māori and Pacific peoples with T2D – Mana Tū. A key feature of Mana Tū is the workforce, the kai manaaki (KM) who are trained case managers living in the communities with whom they work. This thesis provides an opportunity to explore this unique workforce from a Māori and Pacific perspective.

This thesis addresses the four key questions presented below using qualitative methods. The research is underpinned by Kaupapa Māori and pan-Pacific research methodologies as this combination supports Māori and Pacific to take control of their own definitions, relationships, and connections. The results have the potential to inform workforce development strategies and improve T2D outcomes.

## Research questions

1. Investigate the roles of various health care workers who work with Māori and Pacific people in the community.

2. Investigate how these health care workers offer their health services when working with Māori and Pacific people in the community.

3. Explore the experiences of Māori and Pacific people, and their whānau, of receiving diabetes prevention health services from health care workers (KM) from a Māori perspective.

4. Contrast the views of Māori and Pacific people, and their whanau, on their experience with their KM in comparison with other health workers (CHW and dieticians)

5. Develop a set of recommendations for workforce development aimed at improving health care services, access, experiences and outcomes journey for Māori and Pacific people.

## Research approach

Careful consideration was given to the most appropriate methodologies and methods to meet the aims, as the experiences of Māori and Pacific people and their whānau to reflect the socially constructed phenomena that are shaped and influenced by everyday societal structures. Gaining a better interpretation and understanding of people‘s experiences, attitudes and beliefs and worlds is best enabled by a qualitative methodology (Seers, 1999, p. 111). As the project involved Māori and Pacific as researcher and researched, it became clear there was a lack of diversity in models and frameworks able to reflect Māori and Pacific when researched together and as a fast-growing multi-ethnic population. This highlighted the increasing challenges of meeting the needs of this cross-cultural, fast-changing demographic which is an expanding proportion of our national population. Also essential was the inclusion of respect, working with communities, and sharing knowledge, aspects of research which sit within the framework of Kaupapa Māori research (L. T. Smith, 1999) and Pacific research methodology which have been combined with the Tangata Hourua Framework that guided the research. Focus groups with three different types of health care workers who deliver diabetes prevention programmes to Māori and Pacific people in the community yielded data (transcripts) which were analysed to develop a better understanding of how they were delivering their programmes, what they thought was working and why. Interviews with Māori and Pacific people with T2D and their whānau about their experiences of working with a Kaupapa Māori preventative diabetes programme were also sought. These interviews were then analysed in order to develop a better understanding of the participants' experiences. Themes from these two groups were then analysed and themes were generated using the Tangata Hourua Framework to develop workforce strategies aimed at improving the experience of Māori and Pacific with T2D and their whānau.

## Personal tension connected with the research approach

Identifying as Pacific person with Fijian and Tongan whakapapa, I have lived, worked, and studied with tangata whenua and tagata Pasifika, in various, health, education, and justice roles. I have also had the privilege to give birth to four children who straddle these worlds with poise, pride, and determination. Throughout my life I have experienced a residual malposition in whatever environment I am in. These experiences were intensified by being adopted and brought up in a Pākehā world, spending 23 years as an in-law to a Māori whānau and eventually meeting and connecting with my birth mother who is of Fijian, white Fijian, and Tongan heritage. I have grown up constantly being questioned about my cultural positioning which co-exists with the malposition and creates its own tensions. Tension, for this purpose, can best be described as a situation that applies force to something, which may cause it to be stretched or strained either physically or emotionally. It seems that learning about my genetics, and biology happened gradually, and included information from my adopted family about my birth parents, meeting my birth mother and then having my DNA tested. At each of these key junctures, I was given distinct information which contributed to and created a 'definite space' for me around my ethnicity. The word 'definite,' I would say, describes something clearly stated or decided; not vague or doubtful, something that is known. In contrast, learning about my cultural, and social side has been an accumulative process since my earliest childhood memories. I imagine it will continue to be added to for the rest of my life and will shift and change with my various connections, experiences, information, and relationships. This I describe as 'indefinite space', which for this purpose is something lasting for an unknown or unstated length of time, but it can move to the definite when the unknown becomes known. When I presented my proposed PhD research project in order to progress forward, I was strongly challenged on the *pan-Pacific* methodological approach I had proposed. The challenge came from my full-blooded Tongan colleague, who asked "what does pan-Pacific mean", in response to which I dutifully quoted the sources, but I also felt a sense of panic and unease. I also commented that I did not have the luxury of being ethnic-specific or having the confidence to pick one of my ethnicities (Fijian or Tongan) as I was not brought up there and did not know the language or culture well enough to feel I could use an ethnic-specific framework from that culture.

Thaman's (2009) view differentiates between ethnicity and culture, asserting that membership of an ethnicity is determined by biology, and membership of a cultural group is determined by behaviour and performance. She contends that people may belong to a particular ethnic (genetic) group but not identify culturally with that group. Cohen (1998) explains that people’s identity and the establishment of their culture is about consciousness and experience as opposed to fact or law. Even though the positionality challenge I faced at my presentation was done with the best of intentions and from an enquiry lens, I immediately felt a deep sense of shame that brought back memories of when I was growing up, not quite fitting in, having to justify and prove myself and living to a degree with an ‘imposter syndrome’. This shame turned to anger and frustration, and as I sat at the kitchen table that night, I started to create in my head and on paper a methodology I thought may best address not only the tension I felt, but also the tension I could foresee in the research project, potentially when Māori and Pacific peoples were being researched and a framework was needed to address those who identify as Māori and Pacific.

Ethnicity and culture are not rigid concepts, just as the definite and indefinite spaces represented in the Tangata Hourua Framework have the ability to move and shift with the individual. The Tangata Hourua Framework proposed here resulted from the need to address and give context to some of the tensions, conflicts, and challenges experienced by multi-ethnic populations in Aotearoa.

## Methodology

As previously mentioned, despite a growing amount of research with Māori and Pacific people in Aotearoa New Zealand, frameworks that support robust research methodologies with these people are limited. This is particularly so for research involving both Māori and Pacific people which acknowledges the connections between the two and the uniqueness of all Pacific peoples. Tangata Hourua (Strength in Combining) is a research framework developed in response to this gap, drawing from

Kaupapa Māori (Māori principles) and Pacific methodologies, seeking to uphold the rights of Māori as Indigenous people of Aotearoa, whilst giving voice to Pacific peoples living here with shared or connected whakapapa (family connections). The framework has the potential to be utilised in research that positively contributes to both Māori and Pacific knowledge and wellbeing.

Utilising a Kaupapa Māori and Pacific paradigm, the experiences of people enrolled in Mana Tū, and their whānau, were gathered and then contrasted with those of other health care workers. This approach has yielded new and rich knowledge, strongly supporting the view that Māori and Pacific health care workers who are based in the community are best positioned to make genuine relationships with Māori and Pacific clients and their whānau.

The following studies were undertaken in succession:

1. A systematic review of T2D and its effects on Indigenous populations, including Māori and Pacific peoples, and the health services and workforce needed to support better health outcomes in Aotearoa.
2. The development of Tangata Hourua an Indigenous framework that draws from Kaupapa Māori (Māori principles) and Pacific methodologies.
3. A qualitative analysis of data from three different focus groups of health professionals who work alongside Māori and Pacific people and their whānau delivering diabetes management programmes in the community.
4. A qualitative analysis of data from interviews and focus groups of Māori and Pacific people and their whānau regarding their experiences in working with KM, and contrasting these experiences with those of two other health professional groups.

## Research significance

This thesis provides a significant opportunity to explore this unique workforce from a Māori and Pacific perspective. The primary and secondary outcomes from the previous research are mostly clinical (i.e., reduction in HbA1c, a marker of diabetes control) and social (i.e., changes in quality-of-life scores). However, there is opportunity to better understand the workforce, or KM, and their professional development; the similarities and differences in comparison with other non-clinical diabetes workers; the whānau experience with KM; and, importantly, the impact they have. The key feature of Mana Tū is the workforce, the KM who have been trained to work specifically with Māori and Pacific people in the communities with whom they work.

A key feature of this research is this unique workforce, the KM. KM are the community health care workers delivering Mana Tū to 200 mostly Māori and Pacific people living with T2D, and their whānau. KM were identified by the clinics serving these high-need communities, situated across 10 localities in Northland and Auckland; they deliver Māori-led and Māori-developed interventions, and receive training in cultural safety and health equity; and their roles are intended to improve outcomes for their clients. There was an opportunity to explore this unique workforce, asking: What are their characteristics compared to the literature? What training did they receive? What are whānau perceptions of them? How do they differ from other community health care workers working alongside people with T2D, in terms of training support/barriers? And what impact have they had on whānau using an outcome measure designed for Māori but validated with Māori and Pacific people living with long-term conditions?

Any examination of the KM of Mana Tū must acknowledge and support Indigenous people’s rights, acknowledge Māori and Pacific cultural values, and be culturally safe. It should also explore these issues using valid and robust methods. Therefore, Māori and

Pacific research methodologies were required to explore these questions. Qualitative methods were used to address each question on its own, but they had to be able to come together to give an overall picture. This study has the potential to inform future Māori and Pacific health workforce development strategies in ways that improve diabetes outcomes for Māori and Pacific whānau.

## Thesis overview

The thesis has seven chapters, as follows.

***Chapter 1 – Introduction.*** This chapter will cover how Māori and Pacific health inequities remain longstanding issues, especially in the context of diabetes, and other Indigenous populations also experience the same health equities. Understanding Māori and Pacific people with T2D and the health inequities they continually experience is complicated as it requires a comprehensive understanding of how social determinants of health negatively impact Māori and Pacific people's health and wellbeing, increasing not only the incidence and prevalence of T2D but also difficulties in accessing health services (including primary and secondary care). Addressing these issues demands a health workforce that is culturally responsive and able to adapt to the often-complex challenges they face.

***Chapter 2 – Background***. This chapter provides background information on issues relevant to this research. It covers why Indigenous peoples, including Māori and Pacific whānau in Aotearoa, experience a significantly higher rate for T2D incidence, hospitalisations, complications, and mortality. The chapter also identifies key contributors relevant to Māori and Pacific people with T2D by focusing on the inequities in rates and outcomes and how Māori and Pacific people navigate this journey. The second part of the chapter presents evidence on strategies currently employed to address diabetes inequities for Indigenous peoples internationally and in

Aotearoa. The third part identifies the gaps in knowledge in relation to the research questions and the approaches currently being taken. There is an explanation of why there have not been more attempts to understand what interventions are deemed to be best practice in improving access to care or reducing the onset of disease and its complications, even though T2D is now at epidemic rates. Additionally, this chapter highlights the lack of research around the workforce, or workforce development, required to improve diabetes outcomes for Māori and Pacific people.

***Chapter 3 – Methodology – Tangata Hourua: A framework drawing from Kaupapa Māori and Pacific research methodologies (Manuscript 1)***. This methodology chapter presents the argument that, despite a growing amount of research with Māori and Pacific people in Aotearoa New Zealand, frameworks that support robust research methodologies with these peoples are limited. This is particularly so for research involving both Māori and Pacific people which acknowledges the connections between the two and the uniqueness of all Pacific peoples. Tangata Hourua (Strength in Combining) is a research framework developed in response to this gap, drawing from Kaupapa Māori (Māori principles) and Pacific methodologies; that seeks to uphold the rights of Māori as Indigenous peoples of Aotearoa, whilst giving voice to Pacific peoples living here with shared or connected whakapapa (family connections). This chapter describes the framework’s origins, its relationship to Kaupapa Māori and Pacific research methodologies, key principles in its application, and its strengths and limitations. The framework has the potential to be utilised in research that positively contributes to both Māori and Pacific knowledge and wellbeing.

***Chapter 4 – Methods***. This thesis proposes it is critical to identify how better to support improved health outcomes for Māori and Pacific people with T2D, not only due to the alarming rate at which these populations are experiencing the disease, but also the inequity in diagnosis, treatment, and access to diabetes prevention programmes. The purpose of this chapter is to explain the methods utilised in the research reported in this thesis to best to explore the experiences of clients, their whānau and three different types of health care workers providing community-based diabetes prevention programmes to Māori and Pacific. Critical aspects of the methods used were defining the positionality of the researcher, choosing data collection methods that were culturally safe for Māori and Pacific, and utilising an Indigenous framework to analyse, thematically interpret and present the data.

***Chapter 5 – Results, part 1 –Understanding the workforce that supports Māori and Pacific peoples with type 2 diabetes to achieve better health outcomes (Manuscript 2)***. This study aimed to understand perspectives and characteristics of KM and other community-based, non-clinical health workers, with a focus on how they supported Māori and Pacific people living with T2D to achieve better outcomes. This qualitative study was underpinned by the Tangata Hourua research framework. Focus groups with dietitians, CHWs and KM took place in South Auckland, New Zealand. Thematic analysis of the transcripts was used to identify important key themes. Analysis of focus group meetings identified three main themes common across the groups: whanaungatanga (actively building relationships), cultural safety (mana enhancing) and cultural alignment. The second and third of these themes included heath workers' role in their work environment and where their work was based. This chapter concludes that supporting community-based, non-clinical health workers to build meaningful and culturally safe relationships with Māori and Pacific people has potential to improve diabetes outcomes.

***Chapter 6 – Results, part 2 – Understanding the workforce for diabetes management with Māori and Pacific peoples: Using Tangata Hourua as the Framework Method for analysis of qualitative research (Manuscript 3)***. This chapter presents the findings of one component of the Mana Tū research programme. The aim of this study was to explore the experiences of 1) people living with T2D and their whānau, and 2) KM, CHWs and dieticians who provide care to Māori and Pacific people living with T2D in the community. A key objective for this research was to inform workforce development strategies that will achieve equity for Māori and Pacific people with T2D and other long-term conditions. Utilising a Kaupapa Māori and Pacific paradigm, the experiences of people enrolled in Mana Tū, and their whānau were gathered and then contrasted with those of health workers. This approach has yielded new and rich knowledge, strongly supporting the view that Māori and Pacific health care workers who are based in the community are best positioned to make genuine relationships with Māori and Pacific peoples and their whānau.

***Chapter 7 – Discussion and Recommendations***. The aim of Chapter 7 is to summarise the thesis by presenting an overview of key findings followed by a discussion of the outcomes achieved during the research, and the limitations and some personal reflections on the research process. The chapter concludes the thesis with recommendations for T2D workforce and service provision, and future research on T2D for Māori and Pacific people.

# Chapter 2: Background

This chapter provides background information on issues relevant to the research. First it discusses concepts relevant to diabetes and Māori and Pacific people in Aotearoa, with a focus on describing inequities in rates and outcomes. The second part of the chapter presents evidence on strategies currently employed to address diabetes inequities for Indigenous peoples internationally and here in Aotearoa. The third part identifies the gaps in knowledge in relation to the research questions of, and approach taken in, the thesis. This research project explored how culturally responsive approaches and strategies in primary health care can support Māori and Pacific with T2D to better self-management and, ultimately, better health outcomes. The objective of this systematic review was to identify culturally relevant approaches and strategies that have supported or could support the wellbeing of Indigenous peoples including, specifically, Māori and Pacific with T2D. The objective of this chapter was also to conduct a systematic review of T2D complications in Indigenous populations worldwide. Maintaining Indigenous identity, promoting independence and delivering culturally safe care were believed to be important for supporting the wellbeing of older Indigenous peoples**.**

The aim was also to set the context for this study, and the findings of the review are arranged into the following sections:

1. How diabetes is defined and conceptualised in national and international literature.
2. Prevalence of diabetes amongst Indigenous populations globally and in New Zealand.
3. Effects of diabetes on individuals, whānau, communities, populations, countries.
4. Approaches and strategies to T2D.
5. Gaps in research and literature.

## Diabetes definition and incidence

Simply put, diabetes is a disease in which the body cannot control blood sugar, due to the body not making enough insulin (Manatū Hauora, 2022). Type 2 diabetes mellitus (T2D) is the most common form of diabetes; usually occurring in adults, it has multifactorial causes such as genetic susceptibility and environmental factors such as diet and obesity, and it is closely linked with heart disease (Diabetes New Zealand, 2019; Young et al., 2000). Importantly, although there is not cure for diabetes, it is preventable and good management can also prevent long-term health issues (Harwood & Tipene-Leach, 2007).

Diabetes is positioned to be one of the largest epidemics in human history; it is currently affecting 8% of the world’s population (Campbell et al., 2019) and becoming one of the major threats to human health in the 21st century (Harris et al., 2017; Knowler et al., 2002; Warin et al., 2016; P. Zimmet et al., 2003). The escalation of diabetes is predicted in almost every nation in the world, with the greatest increases expected in developing countries (Black, 2007; Gracey & King, 2009; Young et al., 1992; P. Zimmet et al., 2001). T2D and its complications are being experienced at alarming rates by Indigenous peoples globally (Catherine & Zinman, 2007; Naqshbandi et al., 2008). This includes two groups this study pertains to: Māori, Indigenous to Aotearoa; and Pacific people, Indigenous to the Pacific Islands (Te Whatu Ora, 2022) from which they originally migrated.

## Defining Māori and Pacific ethnicity and its place in reporting diabetes

Disparities in health between Māori and non-Māori have been evident for all the colonial history of the people of Aotearoa, with Māori as a population group having, on average, the poorest health status of any ethnic group in Aotearoa (I. Anderson et al., 2006; Ministry of Health [MOH], 2014). Since Māori people's first contact with non-Māori, the continuing process of colonisation and government policies have adversely influenced Māori people's health, socio-economic profile, and wellbeing (Dyall et al., 2014). Traditionally, Māori adapted to their natural environment, which promoted extensive Indigenous knowledge and customs and the experience of good health. M. Durie (2003a) explains that a clean environment impacted positively on Māori in terms of healthy growth and development, due to the availability of bountiful food resources and clean water. Agee et al. (2013) also describe people of the South Pacific having a rich consciousness, with deep layers of lived experience where, traditionally, overall good health was experienced. Although there have been significant improvements in the past 140 years, recent evidence indicates that the overall gap in life expectancy between Māori and Pacific people compared with non-Māori, non-Pacific is widening rather than narrowing (Health, Quality and Safety Commission New Zealand, 2020).

Diabetes and heart disease both contribute significantly to this gap in life expectancy between these groups (Manatū Hauora, 2022). Pacific people have the highest prevalence rate for diabetes (15.4%) compared with Māori (9.8%) and New Zealand European (6.1%) (Health, Quality and Safety Commission New Zealand, 2020). Manatū Hauora (2022) draws attention to the disparities in diabetes, with it being most common amongst Māori and Pacific Islanders, who are more than three times as likely to get it as other New Zealanders.

Explanations for these differences involve a complex mix of factors associated with socio-economic and lifestyle characteristics, discrimination, and access to health care (Ellison-Loschmann & Pearce, 2006; Warin et al., 2016). The complexity of causes can be attributed to a multitude of factors such as modern living, familial tendencies, stress, diet, body weight and exercise levels, with consequential increases in diseases such as diabetes (M. Durie, 2003b; Reid & Robson, 2006). These conditions have created ethnic and social disparities, especially for Māori and Pacific populations, adding to New Zealand's largest and fastest-growing health issue (Manatū Hauora, 2022).

Diabetes coupled with heart disease is responsible for the death of more New Zealanders each year than any other condition (Manatū Hauora, 2022). This epidemic will continue to impact increasingly on New Zealand as a whole and on our health system (Joshy & Simmons, 2006). Reid and Robson (2006) agree there is a serious and significant health challenge presented for Māori by T2D, especially as evidence suggests that Māori do not receive the appropriate levels of quality care, from prevention to management through to specialist care. With Māori bearing a disproportionate level of representation in almost every major disease category, including diabetes, the long-term health effects on holistic wellbeing are immense (Reid & Robson, 2006). Disparities in access to and along the care pathway are described by Reid and Robson (2006) and include prevention, early detection, management according to best practice, and referral to specialist care. Māori also have higher complication rates such as blindness from retinal diseases and cataracts, cardiovascular disease, amputations, and renal failure (M. Durie, 2003b). There is evidence that Māori are not being provided with appropriate levels of quality care at all levels of the health system (I. Anderson et al., 2006; Reid & Robson, 2006). M. Durie (2003b) directly states that, for Māori, there is poorer management of the disease resulting in a higher burden of disability. Joshy et al.'s (2010) study found that Māori and Pacific people have far higher rates of mortality from diabetes than other populations in New Zealand.

While the New Zealand Government has become increasingly responsive to Pacific health needs, significant disparities remain between Pacific people and non-Pacific populations (Ryan et al., 2019). There is an urgent call to implement culturally tailored Māori and Pacific-led programmes that promote holistic, small, and sustainable lifestyle changes delivered in socially appropriate contexts (Mack et al., 2022).

## Economic cost

There is agreement that the global emergence of obesity, which is linked closely to diabetes, is as much an economic issue as it is a health issue (Chou et al., 2004). Si et al. (2010) affirm that the diabetes epidemic is associated with huge human and economic costs, especially for Indigenous populations residing in industrialised countries. Kraut et al. (2001) highlight the fact that Indigenous individuals, families, and communities with diabetes are more likely to suffer complications associated with the disease. This is due to the detrimental physical effects of diabetes, potentially reducing the ability to fully earn, affecting access to health care and causing a loss of productivity (P. Zimmet et al., 2003; P. Z. Zimmet et al., 2014). The total annual cost of T2D in New Zealand is estimated to be NZ$2.1 billion, projected to increase to NZ$3.5 billion by 2040 (Hogan & Song, 2022) which is disproportionately attributable to Māori and the Pacific populations (Lal et al., 2012). Due to the high economic and social costs attributed to Māori and Pacific populations with diabetes, more evidence-based research is needed to drive the development of a nationally agreed strategy (Joshy & Simmons, 2006; Warin et al., 2016).

## Indigenous people and knowledge

The term ‘Indigenous’ represents individuals and collective groups who consider themselves “First Peoples”, pre-colonisation, in regions now known as Canada, the United States of America, the Americas, the Pacific Islands, New Zealand, Australia, Asia and Africa (Allan & Smylie, 2015). Hall and Patrinos (2012) quantify this group by citing there are more than 370 million Indigenous people (5% of the global population) belonging to 5,000 different groups occupying more than 90 countries worldwide and living in every region of the world. Indigenous peoples are the inheritors and practitioners of unique cultures who have retained social, cultural, economic, and political characteristics that are distinct from those of the dominant societies in which they live (United Nations [UN], 2009). With rights to exist as distinct people (Morgan, 2016), Indigenous peoples represent a rich diversity of cultures, religions, traditions, languages, and histories. Indigenous peoples continue to be among the world's most marginalised population groups, who share common problems and challenges such as protection of their rights (Battiste, 2005).

Indigenous knowledge can be defined as an adaptable, dynamic system based on skills, abilities, and problem-solving techniques that change over time depending on environmental conditions. Grenier (1998) further describes it as unique, traditional, local knowledge existing within and developed around the specific conditions of women and men who are Indigenous to a particular geographic area. Notably, Indigenous knowledge and ways of viewing health mean that Indigenous people have had their own view of a health care system (Leninger, 1991) which encompasses a holistic view of the harmony that exists between individuals, communities, and the universe, and which Rankoana et al. (2015) explain as a connection between Indigenous knowledge, health, and the application of traditional methods in response to illness. Traditional Indigenous people were careful custodians of the environments that provided them and future generations with sustenance and helped maintain physical health (Gracey & King, 2009; Hindelang, 2006).

## Indigenous rights

Indigenous peoples represent the largest minority group in the world (UN, 2007); they experience lower standards of health when compared to non-Indigenous people (Gracey & King, 2009; Johnson et al., 2015) whilst suffering abuse, discrimination, and marginalisation (UN, 2007). This is despite a United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (Davis, 2007) which affirms that all Indigenous people’s treaties with their country of origin should maintain their self-determination with a minimum standard for survival, dignity and wellbeing including health and social services. Despite this declaration, Indigenous people’s health improvements have progressed only slowly (I. Anderson et al., 2016), resulting in World Health Organization (WHO) Director-General, Dr Tedros Adhanom Ghebreyesus (2018), urging actions that reverse existing health inequities, as gaps will become wider, failing future generations of Indigenous people.

## Māori and Pacific people

According to King (2003), Māori journeyed to New Zealand via the Pacific Ocean approximately 1,000 years ago as people from the various Pacific Islands who I. Anderson et al. (2006) and Haberkorn (2008) describe as coming from thousands of islands spread across an immense expanse of sea. These pre-colonial waves of migration are the origin of the Indigenous rights held by Māori and have a distinctive place in the history and development of contemporary New Zealand society. M. Durie (2004) explains that Māori are a genetically diverse group of people who have a strong history of migration and settlement. Māori now are accorded unique political and cultural status in New Zealand as the tangata whenua or the Indigenous people of Aotearoa, and they currently represent 16.7% of national population of 4.9 million (Statistics NZ–Tatauranga Aotearoa, 2020). This successful migration has contributed to the geographical, cultural, and linguistic diversity providing a framework for the two main populations included in this study.

Māori as tangata whenua and Pacific people share cultural and genealogical similarities. Indigenous knowledge systems from the broader Pacific region, known as Moana Nui a Kiwa, based on cumulative and purposeful life experiences built over generations and passed on (Hau‘ofa, 1994; Huffer & Qalo, 2004). This embedded whanaungatanga relationship is illustrated as a tuakana–teina relationship by the Health Research Council (HRC) of New Zealand (2014), one layered by history, mythology, and cosmological beliefs which have continued into modern Aotearoa New Zealand society (Somerville, 2012). Indigenous peoples from the Pacific Islands have migrated in waves, arriving in the early 1960s, resulting in large Pacific Island diaspora in New Zealand (Bedford, 1994). Aotearoa has become home to approximately 440,100 people of Pacific descent who make up 8.7% of the country's total population (Statistics NZ–Tatauranga Aotearoa, 2021). Although collectively known as Pacific peoples or Peoples of the Pacific, these New Zealanders come from approximately 20 different island groups, and have their own unique identities, languages, cultures, and spiritual beliefs (Talemaitoga, 2019). In this context the Ministry for Pacific Peoples (2018) refers to those from the Pacific Island nations who have made New Zealand their home as 'Pasifika'. Pasifika refers to people of Pacific ancestry who now live in Aotearoa New Zealand (Naepi, 2015), which encompasses many different ethnicities, languages and cultural practices; it is also important to note that the definition of the term is still debated amongst Pacific peoples (Coxon et al., 1994; Kēpa & Manu'atu, 2002). Pacific peoples' diasporic experiences can influence individual perceptions and collective interactions, which highlights the need for health policy and service delivery to address this increasingly diverse population (Wright & Hornblow, 2008).

## Indigenous health status

On average, Indigenous peoples' health status is generally well below national levels in health, social, and economic outcomes worldwide, in developed and developing countries alike, despite widely differing geographic, historical, and cultural contexts (UN, 2009). Gracey and King's (2009) study on Indigenous health further concluded that, regardless of national context, the persistent disparities between Indigenous peoples and non-Indigenous populations are approximations, as local circumstances can differ greatly. Ellison-Loschmann and Pearce (2006) elaborate further by affirming the health status of Indigenous peoples can vary according to their unique historical, political, and social circumstances. Some reasoning for this is explained by Estrada (2018), who believes the disruption to traditional lifestyles due to environmental degradation, and the introduction of processed foods, such as refined fats, oils and simple carbohydrates, has contributed to the worsening health of Indigenous populations.

There are minimal examples of wellness, good health and status amongst Indigenous groups or specific communities, but also very few published examples. Examples able to be sourced include the Organ Asli of Malaysia and Chilean Aymara and Mapuche who continue to experience overall good health, largely due to the continuation of traditional lifestyle patterns (Roglic & Unwin, 2010); and the Tsimane people, Indigenous to the Bolivian Amazon, who demonstrate a low prevalence of obesity and T2D. Likewise, Omma et al. (2013) found Indigenous Sámi youth had a rather good and possibly slightly better health than other Swedish youth due to a strong ethnic identity and connectedness to their own ethnic group. The positive trajectory of Indigenous good health can be attributed to the powerful role of retaining the traditional diet consisting entirely of what their ancestors ate, and lifestyle coupled with high activity; if this prevails then good health, and staying strong and healthy into old age, can be experienced (Estrada, 2018; Hindelang, 2006; Spector, 2017). This has also been demonstrated by Māori and Pacific people who, if able to maintain a traditional lifestyle, experience less ill health and fewer diseases such as diabetes; for Māori this means a pre-European contact lifestyle and, for Pacific populations, a pre-urbanisation lifestyle (Prior et al., 1978; Reid et al., 2017).

An interesting observation that is a country's socio-economic status does not always correlate to the health of the Indigenous population, who universally suffer poorer outcomes compared to other non-Indigenous people in their country, a gap which varied greatly between countries and was not lessened in wealthier countries (Davey, 2016). Indigenous people also experience ongoing challenges due to varying global definitions of 'Indigenous', making comparisons difficult, Indigenous peoples not being properly counted in national population censuses, which perpetuates poor classification and recognition of Indigenous people by governments (Davey, 2016; Mullane-Ronaki, 2017). The current situation of inadequate data and information about Indigenous people's circumstances such as health, employment and education (Stephens et al., 2005; UN, 2006) makes developing policy and health services more difficult (I. Anderson et al., 2006; I. Anderson et al., 2016). WHO advocates for appropriate inclusion and classification of Indigenous people so as to allow policy makers to translate political commitment into policy formulation and implementation that commits to better health for all (Ghebreyesus, 2018).

## Effects of colonisation on health and wellbeing of Indigenous people

There is certainty that colonisation is a deliberate and a continuous process that is not confined to the past, as observed by Reid and Robson (2006) and Voyle and Simmons (1999). These authors also ratify the view that colonisation occurs when there is a transfer of power and resources, in most cases forced, from Indigenous people to colonisers. Matthews' (2017) description of what occurred to Indigenous people includes being 'robbed', 'tricked' and 'pushed out', resulting in the erosion of their own complex systems, and leading to the construction of systems that benefit and promote the privileged colonisers. The detrimental impacts of the colonisation of Indigenous populations and their lands by outsiders results in an alienation from their own ways of life (Gracey & King, 2009) and the endurance of not only the ill health associated with poverty but also the chronic diseases that come with the lifestyle in industrialised countries (Czyzewski, 2011; Gracey & King, 2009). The colonisation of Indigenous people fundamentally underlays large and negative departures from wellbeing in comparison to the status of non-Indigenous populations (Hall & Patrinos, 2012; Voyle & Simmons, 1999), especially in North America, New Zealand and Australia (Hall & Patrinos, 2012).

## Importance of identity

Identity is depicted as a sense of self that is formed over time and is strongly influenced by the social and cultural world, guiding one's behaviours, activities, and sense of purpose in life (Vedder & Phinney, 2014). Paringatai (2014) proposes that identity is a construct commonly used by individuals to describe who they are and how they view themselves to be, and their fit with others in the social world. She implies identity is dynamic, complex and a concept that is constantly changing as a person experiences new things and encounters new people. Insightfully, Lawler (2008) positions personal identity as a construct that does not belong solely to an individual but is a product of relationships with other people and within a social group.

The importance of cultural identity can be related to people's sense of self and how they relate to others. Importantly, identifying with a particular culture can help people feel they belong and give them a sense of security, linked with positive outcomes in areas such as health and education (Ministry of Social Development [MSD], 2016). The link between culture and identity is deemed to be important not only for individuals, but for groups, communities and for our nation (LeVa, n.d.; MSD, 2016).

In a Māori context, cultural practices such as language, customs, kinship obligations and traditions are central to the formation of Māori identities, including tribal structures intertwined with the cultural practices providing a pathway for Māori identities to be formed and developed (Moeke-Pickering, 1996; Rangihau, 1977). Te Huia (2015) promotes the notion that Māori identities continue to evolve and adapt as a result of the social and environmental changes Māori experience. This view promotes cultural efficacy as a critical resilience factor that should improve outcomes for Māori, and as a founding premise of initiatives for Indigenous peoples in many nations (Houkamau & Sibley, 2011).

Similarly, Pacific identity also many facets, such as knowledge of Pacific culture, traditions, genealogy, and ability to speak a Pacific language (MSD, 2020). This can be described as having ‘Polycultural capital’, a term which was coined by Mila-Schaaf and Robinson (2010) as a theoretical construct which describes the potential advantage the Pacific second generation (New Zealand-born) may experience from ongoing exposure to culturally distinctive social spaces.

A clear and well-developed identity and a favourable level of self-esteem are seen by Tsang et al. (2012) as promising positive development throughout adolescence and even across a whole life span. Correspondingly, a sense of belonging or attachment to place is believed to help maintain a sense of identity and wellbeing (Wiles et al., 2009). Specific to Māori, youth who have a strong cultural identity were more likely to experience good mental health outcomes, according to Williams et al. (2018). Additionally, the authors noted that discrimination had a serious negative impact on Māori youth mental health. Their findings suggest that programmes, policies and practice that promote strong cultural identities and eliminate ethnic discrimination are required to improve mental health equity for Māori youth.

Identity matters not only in terms of shaping individual identity but also in understanding inequalities and targeting policy across a wide range of areas such as health, education, and welfare (Carter et al., 2009). Dorling (2019) implies that inequality between income and wealth is one of the greatest social threats of modern times. If this notion is applied to indicators such as health, knowledge and skills, employment, standards of living, cultural identity, and social connectedness between European people on the one hand and Māori and Pacific people on the other, then outcomes are worsening (Marriott & Sim, 2015).

Culture can be defined as “the set of attitudes, values, beliefs, and behaviours shared by a group of people and communicated from one generation to the next” (Matsumoto 1997, 4–5). The nuances of culture and the extent to which ethnocentrism and racism have been woven into the fabric of our health care system are complicated (Egede, 2006) as Mantovani and Cole (2000) pronounce culture to be something that western societies have not clearly understood; in a multicultural world this is difficult to manage but it needs to be universally understood. Wirihana and Smith (2014) further argue that the historical trauma caused by colonisation, combined with discriminatory access to health, imposed development and loss of land, has adversely affect Indigenous populations’ health. Furthermore, this isolation from aspects of culture or identity is widely understood to have had a negative effect on Indigenous health (Gracey & King, 2009) as well as contemporary Māori communities (A. Durie, 1997; M. Durie, 1999a; M. H. Durie, 1998; Hirini, 1997; Mead, 1999; Pere, 1988; Puketapu-Andrews, 1997; Ratima & Ratima, 1997).

Macpherson et al. (2001) propose that for Pacific peoples in Aotearoa there are a variety of evolving identities, some formed in places where ancestral culture is dominant, some forged in societies as a marginalised ethnic minority who routinely face varying levels and types of racism. They propose an accumulation of experiences of being a Pacific person in the many places in which Pacific people live, due to developed diverse identities and homogenised sets of shared social experiences. This again highlights the challenges of creating services to meet the needs of or cater to Pacific peoples, for one type of identity, complicated by the fact that ethnicity for anyone is a product of self-identification which may be independent of ancestry or nationality. This point is further argued by Zhou (2005), who believes ethnicity cannot be simply viewed as either a structural or a cultural measure; rather, it encompasses values and behavioural patterns that are constantly interacting with internal and external structural pressures. Jacklin et al. (2017) concur with these views and believe that, combined with a historical cumulative exposure to culturally unsafe health care, the result is chronic health and equity gaps.

Manuela and Sibley's (2014) Pacific Identity and Wellbeing Scale (PIWBS) noted individuals who identified as multi-ethnic scored lower with cultural connectedness, self-esteem and wellbeing than mono-ethnic Pacific participants. They described this as 'identity tension' and it may mean more experience poorer mental wellbeing because they internalise negative social stereotypes associated with their Pacific identity. Members of this population are also more likely to experience a sense of not belonging, not fitting in, social stereotypes associated with white privilege, discrimination, social exclusion and in-group discrimination (Agee et al., 2013; Ataera-Minster & Trowland, 2018).

Manuela and Sibley (2014) also highlight that multi-ethnic affiliation can create tension in psychological wellbeing, implying the need for more research into this group's wellbeing. Kukutai and Callister (2009) correspondingly promote the notion that research into this area will be valuable for advancing the understanding of ethnic identification dynamics and the purposes for which ethnic data can best be used, and where it may be of interest to policy makers, in part because of the comparative socio-economic disadvantage of those people with multi-ethnic affiliation. By shedding light on future demographic challenges, these reports aim to assist Māori strategic planning efforts both at home and globally (Te Puni Kōkiri, 2018).

Problematically, this fast-growing multi-ethnic population is often not represented in statistics or other research data; its voice is not heard in discussions or consultations, nor is this population seen in services provided by government and non-government agencies. Hence, there is a need to respond to this growing, self-identified multi-ethnic population and acknowledge some of the tensions that they may be experiencing now and will encounter in the future.

With this considerable ethnic diversity, there is a need for diversity in models and frameworks to reflect this fast-growing multi-ethnic population, according to Scott et al. (2000). They further raise the issue of increasing challenges to meet the needs of this cross-cultural, changing demographic which is expanding as a proportion of our national population. Cormack and Robson (2011) note the challenges experienced by systems such as health, and advocate for them to address the inequities experienced by this population which are a hangover from colonial discourses about miscegenation (Cormack & Robson, 2011). These equity discourses are also echoed internationally in regard to other Indigenous peoples, particularly around about the determinants of health outcomes, and warrant further research (Cormack & Robson, 2011).

Understanding the lived experiences of Māori identity has practical implications in New Zealand as Māori continue to feature prominently in many negative social and health statistics (MOH, 2008). The diversity of the Māori population poses a challenge to policy makers seeking to understand Māori identity for the purposes of interventions which support Māori development. Houkamau and Sibley (2010) promote the idea that interventions aimed at improving health outcomes for Māori tend to be founded on a return to one’s *cultural roots* to address a range of social, health and economic problems and improve outcomes for Māori. However, they believe understanding of how reconnecting Māori with their language, beliefs and traditions has a positive influence remains relatively limited as research modelling the outcomes of increased cultural efficacy for Indigenous people, such as Māori, remains limited.

## The changing population of Aotearoa – Māori and Pacific peoples

Ethnicity is often assumed to be a stable construct; however, this is changing. This is explained by Aotearoa’s historically high rates of ethnic intermarriage resulting in the increasing mobility of ethnic definitions. There is agreement that there has been a growing fraction of the Aotearoa population reporting more than one ethnic group in the census since 1991, resulting in changes to ethnic composition which may reflect social changes as well as changes in the construct of ethnicity (Carter et al., 2009; Kukutai & Callister, 2009). Statistics New Zealand–Tatauranga Aotearoa (2018a, 2018b) recently noted it was evident from the 2018 Census that the cultural make of Aotearoa is becoming more diverse, especially among Māori and Pacific people. Kukutai and Callister (2009) concur with this, noting that multi-ethnic identification is especially pronounced among younger people, especially among Māori and Pacific peoples. Not only are Māori and Pacific people more likely to report multiple affiliations, but they are also more likely to change ethnicity over time (Carter et al., 2009).

Te Puni Kōkiri (2018) projects the parental ethnic diversity of the Māori population to continue to make a significant contribution to Māori population growth. For example, in 2013, two-thirds of babies born in New Zealand with Māori ethnicity were also registered with at least one other ethnicity. Significantly, almost 60% of Māori identified as also belonging to a Pacific ethnicity, with just under half of this group being children, aged 0–14 years. Concurrently, the same shift is being experienced with Pacific people, with 62.8% identifying with only one Pacific ethnicity and almost one quarter (24%) of the population identifying with Pacific and one other ethnic group (MPP, 2016). In 2013, 13.2% of Pacific people identified with three or more major ethnic groups, which was more than reported in 2006, increasingly adding to the multi-ethnic look of Aotearoa.

## Health inequalities vs inequities

The terms ‘inequalities’ and ‘inequities’ are widely used when comparing the health status of different groups, and though these terms have slightly different meanings (Reid & Robson, 2006) they are used interchangeably. Inequities are akin to lack of fairness or justice, and are unnecessary and avoidable (Whitehead, 1991). Inequalities means a difference that is not always unexpected or unfair – for example, only women can get cervical cancer (Reid & Robson, 2006). A systemic inequity for any group is unfair, unjust and requires action to respond to the gap (Whitehead & Dahlgren, 2006). Wilkinson (2002) argues that this constant state of inequity is bad for the population’s holistic health, especially with the failure to stem this tide of systemic Indigenous inequities across the globe (Nettleton et al., 2007). Whitehead and Dahlgren (2006) further argue that, notwithstanding progress, health inequities will persist despite changes in the health and life expectancy of populations, and this has led to a strong call for research to further understand factors that contribute to inequities (Marrone, 2007). WHO strongly argues that tackling health inequities is a major challenge facing the global community (Ghebreyesus, 2018), requiring a global movement to address such injustices (WHO, 2011). This view is endorsed in *Hauora: Māori Standards of Health IV* by Robson and Harris (2007), who call for an altered resourcing process to address inequities in Indigenous health and to achieve better health outcomes.

Examples of inequities are the social determinants which Marmot (2017) designates as the conditions in which people are born, grow, live, work and age. Furthermore, these social determinants create inequities in power, money and resources which then give rise to inequities in the conditions of daily life making people sick. These negative equity positions can be attributed to numerous factors including socio-economic factors, lifestyle factors, access to health care, discrimination (including cultural and historical), socio-economic status, geographical place of residence, ethnic identity, and gender (Jansen et al., 2008). Increasingly, they are being recognised for their relationship to the soaring incidence of T2D (J. Hill et al., 2013; K. Hill et al., 2017). Matthews (2017) advances the view that even access to modern industrial health care systems can be a determinant of ill health, especially if it is culturally unsafe. In regard to Māori, inequities are something Reid and Robson (2006) refer to as an expected, accepted, and normalised feature of Māori health which then provides an excuse for government inaction in terms of services and workforce development.

## Understanding and addressing diabetes inequities for Māori and Pacific people: Proposed approach

The WHO’s (1946) constitution declares that health is a human right, which everyone has the right to enjoy to their highest attainable level within their society. Health is a “state of complete physical mental and social wellbeing and not merely the absence of disease or infirmity” (WHO, 1946, “Preamble”, para. 2). Health is seen as one of the ways to promote freedom for individuals and societies (Sen, 2000), therefore highlighting the importance of all having access to equitable health resources (Whitehead & Dahlgren, 2006). Health care is the prevention of disease, infirmity, and disability by means of management or improvement, including through the use of education, medical or health services. UNDRIP (UN, 2007) specifies that Indigenous people have the right to be actively involved in developing and determining their own health programmes. The Declaration also sets out important fundamentals, such as the right to control policies, strategies, and interventions in order to obtain the highest attainable standards of health and health services. Significantly, the UN (2009) also points out that this is necessary as most health systems do not reflect the social and cultural practices and beliefs of Indigenous people.

There is an assumption that the simple answer to eliminating health inequalities is to give everyone access to high-quality health care; unsurprisingly, Marrone’s (2007) study found that, for Indigenous populations, access rates were significantly lower. The importance of health services linking cultural identity and health consciousness are more likely to better support Indigenous people’s health (Bediako et al., 2004). The incorporation of Indigenous cultural values, customs and beliefs, and traditional healing, as well as a focus on the needs of individuals, and the health and wellbeing of their families and communities, into the service model delivery and practice significantly correlated with connectivity (Harfield et al., 2018). Further studies revealed that ensuring local communities were engaged with and in control of Indigenous health services, with embedded culture, and ensuring the delivery of culturally appropriate services made them more acceptable to Indigenous communities (L. M. Anderson et al., 2003; Harfield et al., 2018; Satterfield et al., 2003). Kumpfer et al. (2002) define ‘culturally appropriate/adapted’ health care as any type of health care that is specifically tailored to the cultural needs of a minority group, and/or is delivered by health workers from the same cultural group. Jacklin et al. (2017) also promote health care relationships as being central to addressing the ongoing colonial dynamics in Indigenous health care and as having a role in mitigating past harms.

There are strong calls for health services to implement culturally inclusive systems and practices to address the persisting health inequalities experienced by Indigenous groups. These include: a whole-of-life integrated approach, dealing with the origin of any disease; and, further, a comprehensive programme incorporating treatment, management, prevention and health promotion, as well as addressing the social determinants of health (I. Anderson et al., 2006; Crowshoe et al., 2018; Hartfield et al., 2018; Malatzky et al. 2018; Tabak et al., 2015).

Understanding, challenging and reversing this epidemic requires what Dooris (2009) terms a comprehensive, holistic, and sustained approach that understands and addresses the circumstantial social determinants of health with culturally specific strategies and approaches. This can be better achieved by linking social determinants to community partnerships as a way to address the multiple challenges inside and outside of the health system and to provide strategies to improve the chronic disease management of diabetes and establish much needed health equity (Harris et al., 2017; Johnson et al., 2015; Macaulay et al., 2003; Seegert, 2018; Voyle & Simmons, 1999). This prompts the question as to what cultural capacity and advice is being given to Indigenous people accessing mainstream services in terms of promoting a more holistic approach, focusing on lifestyle changes, and keeping whānau connected (Warbrick, 2018). Ellison-Loschmann and Pearce (2006) endorse a two-fold approach that supports both the development of Māori provider services and the enhancement of mainstream services through the provision of culturally safe education.

The endorsement of Indigenous health workers for specific health disciplines to practice culturally targeted health care delivery with specific cultural capacity is seen as a measure to improve community health care programmes (Barton et al., 2005; Betancourt et al., 2002; Matthews, 2017). For Māori, Warbrick (2018) promotes bringing more integrated cultural knowledge into health provision, to combat urban environments as a driver of cultural displacement, which Mau et al. (2001) encourages and argues can be done by first of all hiring and retaining Indigenous health care professionals, and then ensuring all staff have cultural competency training. The training of culturally competent health care professionals with a client-centred care approach, which enables them to respond to patients' unique identities, is seen as one way of reducing health disparities among the diversity of Indigenous populations (R. A. McDermott et al., 2001; Wakerman & Shannon, 2016).

There is agreement that to empower people to make decisions that will positively influence their health and wellbeing, and for communities to take control over their health and its determinants, there must be healthy lifestyle choices that are available and affordable (Macaulay et al., 2003; Marmot, 2017; Voyle & Simmons, 1999), and culturally tailored interventions (Warbrick et al., 2018).

## Approaches in Aotearoa

M. Durie (2003b) asserts that Māori as Indigenous people of Aotearoa, and as reflected in section 8 of the New Zealand Public Health and Disability Act (2000), require health services to recognise the principles of the Treaty of Waitangi/Te Tiriti o Waitangi. The 1840 Treaty agreement saw sovereignty exchanged for Crown protection, which means Māori occupy a position that is not afforded to other non-Indigenous ethnic minority groups, even where comparable standards of health exist (M. Durie, 2003b). Māori also had input into the drafting of the UNDRIP, supported by the New Zealand Government (Te Puni Kōkiri, 2018) upholding the status of treaties between Indigenous people and their country of origin, allowing Indigenous people self-determination. The recent health reforms are a major reset to provide opportunities to create a transformative, equitable, accessible, cohesive, and people-centred health care system that focuses on working in partnership with Māori and honouring Te Tiriti o Waitangi and improving the wellbeing of all New Zealanders (Manatū Hauora, 2022). This aspirational reform's aim is to positively contribute to the direction of hauora (health) as a holistic focus on whānau, hapū, iwi and community, based on the amassed knowledge of tangata whenua and of people from Moana-nui-a-Kiwa. Here is an optimal chance to centre Indigenous knowledge and leadership in a strength-based, solution-focused way to move Māori and Pacific health from the margins to the centre.

These measures have not only allowed robust alignment and accordance with the Treaty (Human Rights Commission, 2016) but also synergised the interpretation and application of the Treaty principles. The HRC's (2019) *Māori Health Advancement Guidelines* document describes these principles in the following manner: *partnership* entailing good faith cooperation and shared decision making; *protection* of rangatiratanga (self-determination) and taonga such as reo, tikanga, mātauranga, land and resources; and, lastly, *participation* in society on an equal basis to others, and freedom from discrimination. The call is therefore strong for Māori to be engaged in activities such as measurement, monitoring, and maintaining their own health as outlined by the primary premise of the Treaty and its principles, including addressing any disparities in health outcomes between Māori and non-Māori (Reid & Robson, 2006).

If central to improving Māori and Pacific peoples' health and wellbeing is the empowerment of individuals and communities (Marmot, 2017) then, Jansen et al. (2008) argue, organisational, human resource, and patient-community issues in accessing health care must also be addressed. These authors also identify other issues such as timing and availability of services; a western approach to health care; the under-representation of Māori in the health professions; appointment systems; and the lack of appropriate educational and promotional material.

The importance of a culturally responsive health approach reflecting the users of the service is endorsed by M. Durie (2004), who advocates for health promotion for Indigenous peoples that is consistent with their values, attitudes and aspirations as an important vehicle for Indigenous health gains. Hotu et al. (2010) agree and promote an integrated community-based model of care using culturally appropriate health workers. Gamble et al. (2017) also endorse the importance of culturally responsive environments that reflect and meet the unique set of socio-cultural and health care factors within Aotearoa. Tipene-Leach et al. (2012) agree and encourage a self-management model that also tackles the wider determinants of causes, management, and complications. If this were accomplished, they believe, confidence in better self-determined health outcomes and effective quality improvement strategies for diabetes services and support can grow. Specific government approaches seem to be evident in strategies such as the MOH's (2014) *He Korowai Oranga*, which strongly supports whānau, hapū, iwi and Māori communities' aspirations to have more control over their own health and wellbeing. Funding the implementation of these approaches, and supporting them, is viewed optimistically. R. A. McDermott et al. (2001) propose that only simple improvements to process and approaches are needed to achieve significant improvements in diabetes care and reduced hospitalisations. Cram et al. (2003) similarly favour providing holistic health care in a respectful and collaborative way that positively impacts on the health of Māori as a whole.

There is a call for programmes that are culturally informed to address Māori and Pacific individuals' and communities' lived experiences, that are scalable, and effectively adapt and support health outcomes (Verbiest et al., 2018). It is also vital that this approach is adopted by existing mainstream services, as many Māori and Pacific access these health care services (Warin et al., 2016), which calls for mainstream health providers to note the important role cultural influences play in diabetes management. There is a strong push for the eventual devolving of diabetes services to Māori and Pacific providers, ensuring free access, and closing the primary and secondary care (Abdulrehman et al., 2016; Kenealy et al., 2010; Kenealy et al., 2017) which current health reforms aim to do (Manatū Hauora, 2022).

T2D is significant long-term condition (LTC) in Aotearoa, with significant ethnic inequities in incidence, hospitalisation, and mortality (Coppell et al., 2013; MOH, 2015a) with rates highest for Pacific people, followed by Māori (MOH, 2015a). People are being diagnosed at younger ages (Harwood & Tipene-Leach, 2007), with Māori and Pacific people diagnosed at a younger average age than non-Māori (MOH, 2015a; Tomlin et al., 2006). Long-standing and poorly controlled diabetes is associated with an increased risk for other LTCs, including cardiovascular disease, renal disease, depression, and stroke (Constantino et al., 2013; Elley et al., 2008). Māori, Pacific people and people living in deprivation are at increased risk of having poorly controlled T2D (Joshy & Simmons, 2006), have higher hospital admission rates with diabetes complications and have more severe diabetes-related illnesses (Harwood & Tipene-Leach, 2007).

The complex nature of T2D means a comprehensive and sustained approach is required (Harwood & Tipene-Leach, 2007) to ensure we “measure it, understand its risk factors, develop valid and efficient approaches to screening and diagnosis, and develop and implement culturally specific interventions for prevention and treatment” (Herman & Zimmet, 2012, p. 9). Currently, a comprehensive T2D management programme does not exist for Indigenous people or communities of high need in Aotearoa (Cram, 2014). Instead, aggressive medical management is increasingly prioritised and funded in primary (Kenealy et al., 2012) and secondary care. Yet evidence confirms ethnic inequities in access to and outcomes from such care (Health Quality and Safety Commission, 2014; Joshy & Simmons, 2006; Kenealy et al., 2012). Self-management is considered fundamental to supporting people to live well with diabetes, yet it is difficult for people with T2D to sustain unless it is culturally safe and relevant, community-based, and focused on small changes over longer periods of time (Cram, 2014).

## Development of an evidence-based whānau ora approach to diabetes in primary care – Mana Tū

In 2010, the National Hauora Coalition (NHC), a Māori-led primary health organisation (PHO) based in Auckland, convened an expert advisory group including consumers to develop an evidence-based programme for people and their whānau living with complex LTCs – the Oranga ki Tua (OKT) Advisory Roopu. Members included primary and secondary clinicians, rehabilitation and Kaupapa Māori researchers and providers, health literacy experts and people living with LTCs including diabetes. They were asked to design a primary care programme to support Māori and Pacific people, and their whānau, to 'live well' with an LTC.

A whānau ora programme for T2D – Mana Tū – was developed by the group. Mana Tū, meaning 'to stand with authority', is a mana-enhancing programme that supports people with poorly controlled T2D to 'take charge' of it and its associated conditions. The OKT group designed a programme that aligned with recommendations in "Equity of Health Care for Māori: A Framework" (Joshy & Simmons, 2006). Mana Tū was further informed by *He Korowai Oranga*'s aspiration for 'rangatiratanga' or people's right to participate in making decisions about their health and to have meaningful ways to decide how health services might be provided for their benefit (Herman & Zimmet, 2012).

Mana Tū is based in primary care and has three major components: a Network Hub, KM (skilled case managers who work with whānau with poorly controlled diabetes) and a cross-sector network of services to whom whānau can be referred to address the wider determinants of health. The Network Hub supports the delivery of the intervention through training of the KM, referrals management, cross-sector network development and quality improvement of the programme. Individuals and whānau are empowered to ‘mana tū’ by the KM.

Mana Tū’s Network Hub stemmed from previous NHC experience leading and implementing successful large-scale whānau ora programmes and initiatives such as Mana Kidz and the Alliance Diabetes Working Group (Alliance Diabetes Working Group, 2015). In these programmes, care is delivered by a diverse range of providers within a network of contributing stakeholders, and the Hub’s role is to provide equal access to quality clinical care, population health activity and services that address social determinants in a connected way (R. A. McDermott et al., 2015). The Mana Tū Hub has a critical organising function which supports the delivery of the intervention across multiple providers including general practice clinics and DHBs, education, housing, and social programmes. It also operationally supports Mana Tū delivery through the provision of the KM’s workforce training and development, programme design and implementation, clinical leadership, project management, service quality improvement and data management. The Hub is supported by a network lead manager along with information management and analytical support. Mana Tū commenced in early 2018 and has enrolled almost 400 people across 10 clinics in Auckland and Northland.

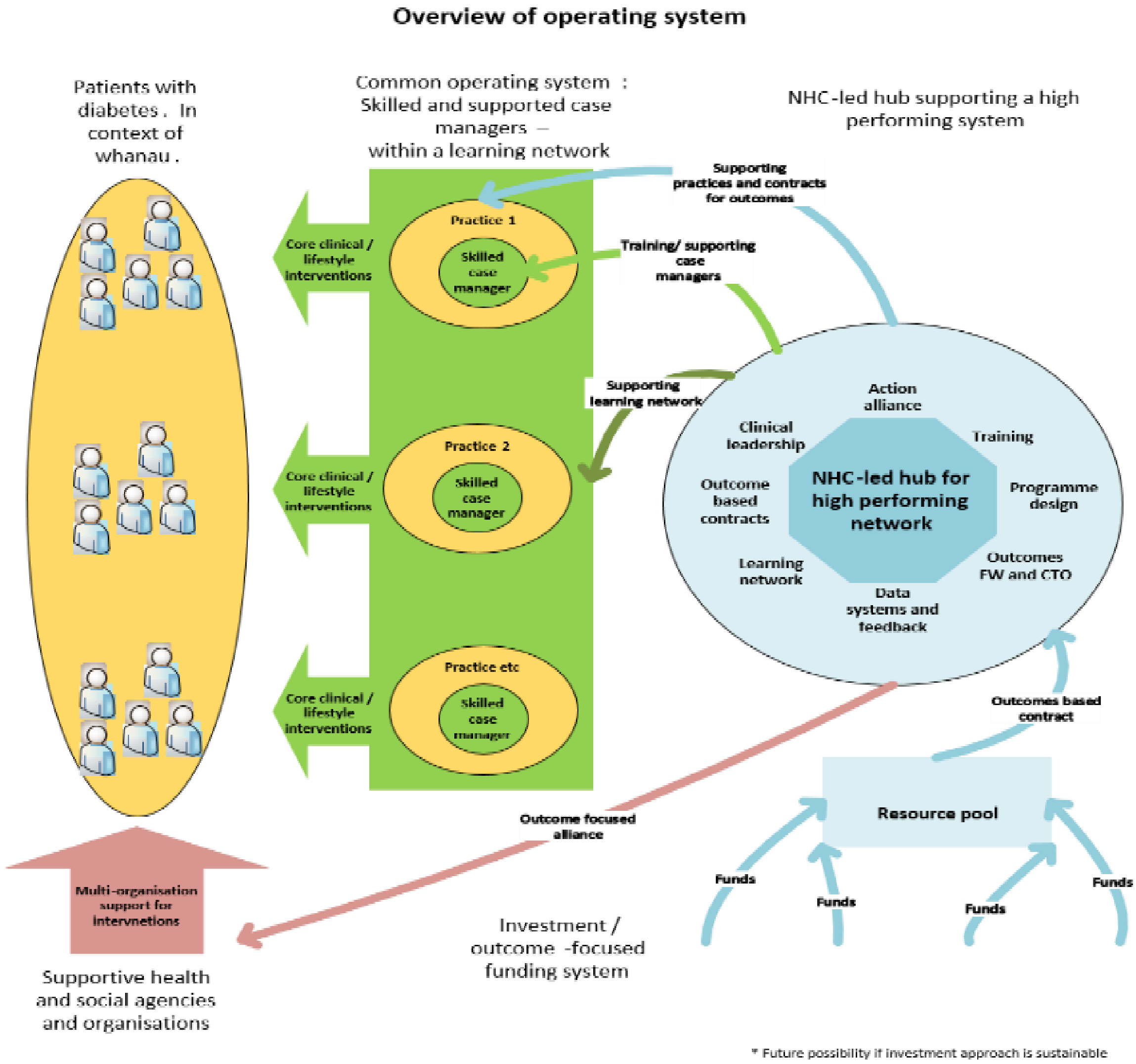

**Figure 2.1.** Mana Tū

## Kai Manaaki

The evidence for case managers or CHWs working with individuals with chronic conditions and in geographically isolated areas is well established (Kim et al., 2016; R. McDermott et al., 2003; Si et al., 2006). KM are case managers but are unique in that they also undertake case management with family/whānau and do so in ways that address both health and social conditions (Askew et al., 2016). The current KM have a range of diabetes-related backgrounds and include nurses, social workers, educators, and community workers. In addition to the 'usual' training about diabetes and its management, KM are trained in motivational interviewing, cultural safety, and health literacy. KM live in and contribute to the local communities with which they are working. Importantly, they meet regularly for peer support and review (Thomas et al., 2014), and quality improvement activities and mentorship with qualified health professionals (I. Anderson et al., 2016; Harwood et al., 2012); and they are provided with other capacity-building opportunities such as conferences and report writing.

Patients receive regular home visits from KM over a period of 12 months. During these visits, patients have time to discuss clinical, social, or psychological issues. This information guides KM to work with the person's primary care clinician or refer onto appropriate services. Askew et al. (2016) suggest that the integration of the KM into GP clinics has the added benefit of ensuring that the relationships between KM and health and social care professionals are maintained and nurtured (Segal et al., 2016).

Self-management is fundamental to supporting people live well with diabetes (Harwood & Tipene-Leach, 2007); it is difficult for people with T2D to sustain, although programmes for Indigenous people can be successful if they are culturally safe, relevant, community-based, and focused on small changes over longer periods of time (Constantino et al., 2013). A 'take charge' approach was highlighted in a study by Askew et al. (2016), and has been incorporated into the Mana Tū approach, including a full initial assessment by KM with the person and their whānau, and prioritised, self-directed goal setting based on the assessment. The assessment includes clinical, social, health literacy and whānau-wellbeing related questions that are validated and reliable, and specifically seek whānau participation (M. H. Durie & Kingi, 1997). KM find that people take ownership and are more engaged about living with diabetes if the person and their whānau identify opportunities take ownership of their condition (Askew et al., 2016). Other aspects of the service that worked were: regular feedback on goals; three-month check-in with doctors around test results; and involving whānau. These features seemed to slow the progression of pre-diabetes to diabetes (Constantino et al., 2013).

A study underpinned by Kaupapa Māori (Māori approaches) conducted interviews with Māori and Pacific participants of the Mana Tū diabetes programme and their whānau and concluded there were consistent themes across Māori and Pacific participants (Tane et al., 2021). The themes were around their experience of T2D, cultural safety in health care interactions, whānau ora (collective family wellbeing) and Kaupapa Māori approaches to health interventions. The study suggests that Māori-led health interventions better support Māori and Pacific people living with T2D and are essential to ensure Māori and Pacific communities receive suitable, receptive, and equitable health care services.

### Gaps in research and literature

Historically, diabetes research has focus on a traditional medical lens, such as doctor-led and nurse-led research (New Zealand Guidelines Group, 2011), and there is now a call for more research to focus on promising strategies for transforming health services and care for Indigenous peoples (Harris et al., 2017) with the intent of shaping efforts to reduce the effect of diabetes (J. Hill et al., 2013). There is much agreement that the published literature has gaps on complications in targeted prevention and disease management strategies for Indigenous peoples with T2D, which may be due to challenges caused by varying operational practices, research methodologies, and definitions of the term ‘Indigenous’. There is evidence that Indigenous health-care performance measurement systems such as those found in New Zealand are underdeveloped locally and hence deficient in their ability to support of local service development. Critics such as Ellison-Loschmann and Pearce (2006), Harfield et al. (2018), Naqshbandi et al. (2008) and Smylie et al. (2006) maintain they are essentially government-driven systems directed by state-defined objectives for Indigenous health. These authors conclude that lapses in measurement interfere with the ability of Indigenous communities to achieve the expression of Indigenous cultural values in health system development and affect the capacity of the system to contribute to the achievement of the highest attainable standard of health for Indigenous peoples. The shortage of relevant literature and the lack of data makes it difficult to obtain a global assessment of Indigenous peoples' health status. Thus there is an inadequate evidence base for making important policy and practice decisions in relation to primary care initiatives for Indigenous people with T2D (Nettleton et al., 2007) and to develop the capacity of Indigenous communities to play a central leadership role in their people's health, so as to expand the base of Indigenous practitioners, professionals and administrators, and improve the opportunities and support for the development of diabetes-related infrastructure and resources (King et al., 2009).

## Gaps in knowledge

Having demonstrated the inequities in diabetes rates for Māori and Pacific people living in Aotearoa, as shown in the published research, possible explanations of the inequities and interventions to address them were sought in New Zealand and international literature. In summary, no one definitive cause of the inequities was identified. As an intervention to improve diabetes outcomes for Māori and Pacific people, Mana Tū looks to be promising. Key aspects include its delivery in primary care settings, and its workforce – KM. There is little information in the literature about these sorts of roles, their impact and whether they are successful, or how to scale them up across other locations and/or conditions. A focus on the factors that support the successful uptake and implementation of such a service is required, as the published research and anecdotal evidence suggest many services are introduced as pilots or for a short term before they fizzle out. A better understanding of factors associated with the successful implementation of Māori- and Pacific-led, equity-focused services would also be useful.

Further, most research to date has used western methodologies and methods in developing and testing the diabetes interventions for Indigenous people, including Māori and Pacific people. Therefore, an Indigenous research model or framework should be identified or developed and used to accommodate, move with, and adapt to the ever-increasing complexities of the growing Māori and Pacific populations in Aotearoa whilst having the potential to positively inform robust research with Māori and Pacific populations (Naepi, 2015). There is potential to introduce a new or at least adapted way of doing research that has multiple advantages which include: being respectful to tangata whenua and open to Pacific principles and diverse Māori and Pacific identities; challenging the tensions in combining Kaupapa Māori with Pacific methodologies; and, lastly, advancing knowledge, wellbeing, and outcomes for future generations of Māori and Pacific people. Such a research framework would allow an Indigenous analysis of quantitative and qualitative data to better understand the view of Māori and Pacific clients, their whānau, and the health care workers who offer diabetes preventative programmes in the community to these populations. Most importantly, such a framework would give a cultural reference to the voices of Māori and Pacific people involved in this study

In order to address these major gaps in knowledge, the research reported in this thesis has aimed to explore how Māori- and Pacific-led, equity-focused approaches and strategies in a primary health care context can support Māori and Pacific people with T2D to achieve better self-management and, ultimately, better health outcomes. Furthermore, the project has explored, and contributed to the field of diabetes management by highlighting best practice principles which are meaningful for, and positively impact on, Māori and Pacific people’s wellbeing. To date, there have been limited studies into this area, justifying a research project such as this to determine what is working and why. Furthermore, in order to understand these issues for both Māori and Pacific peoples living in Aotearoa, a new research framework has been developed and tested in the analysis of qualitative data.

## Rationale for the proposed research based on the research reviewed

The gaps identified in the published literature on targeted prevention and disease management strategies for Indigenous peoples with T2D, Naqshbandi et al. (2008) suggest, may be in part due to the challenges caused by varying operational practices, research methodologies, and definitions of the term ‘Indigenous’. To address these gaps, the authors advocate applying standardised definitions and methodologies to ensure meaningful research occurs, but to also improve and promote community involvement in primary health programmes and services for Indigenous people. In addition, Hurst and Nader (2006) encourage a better understanding of the idea that research methodologies and health interventions must explicitly involve culturally appropriate values and behaviours, implemented by Indigenous people. Added value may also be gained from conducting and publishing reports on well-designed community-based diabetes prevention research and sharing information on the process, results, and lessons learned (Satterfield et al., 2003). Additionally, R. A. McDermott et al. (2001) highlight there is limited research on the nature of the cultural competency education provided to health professionals or if, in turn, this increases cultural worth for Indigenous peoples, such as Māori. Recommendations for future studies of diabetes prevention programmes to employ more quality research approaches with rigorous study designs in investigating the impact of health services for Indigenous peoples, so to contribute to evidence-based, informed decision-making (Gibson & Segal, 2015; Hurst & Nader, 2006).

## Search strategy

Literature for this review was sourced via the following search strategy:

1. Searching Google Scholar and other websites for combinations of the key terms:
    - health workforce, community health workers, navigators, case manager, case management, training, development, family, whānau, educators, primary care, primary health, integrated health services.
    - Indigenous, Māori, Pacific, Pasifika, Pacifica, Samoa, Tonga, Hawaii, Cook Islands, Fiji, Niue, Tuvalu, Aotearoa, Aboriginal, Torres Strait, native, Islanders
    - diabetes, type 2 diabetes, chronic conditions, long term conditions, nutrition, self-management, health literacy, quality of life, outcomes, education, medication.
    - cultural competency / awareness / safety / conscious / knowledge / strategies / education in health workforce.
    - models of care; Māori and Pacific model of care; model of service delivery; service delivery model such as Māori and Pacific community primary health care.
2. Searching sources from key government ministries: Ministry of Health, Ministry for Pacific Peoples, Statistics New Zealand–Tatauranga Aotearoa, academic institutions, Health Research Council.
3. Using information provided by members of the project steering group and other project participants, and bibliographies from relevant publications.
4. Additional literature was sourced via suggestions from the project steering group.
5. Literature was selected for relevance to the project goals and analysed and compiled into a summary to inform the development of Māori and Pacific primary health care in diabetes.

## Summary

T2D is a common condition resulting in significant complications such as cardiovascular, kidney and eye disease. The inequities in diabetes rates and outcomes for Māori and Pacific people in Aotearoa are well recognised. Multiple interventions have been proposed in similar populations, including Indigenous peoples here and internationally. Significantly, studies have failed to highlight an understanding of the workforce working in this area, their experience of what is effective, and the factors associated with implementation and the upscaling of Māori- and Pacific-led, equity-focused diabetes programmes. Such information would contribute not only to improved knowledge but also to achieving equity in ways that respect the rights of Māori and Pacific people living in Aotearoa. Improved understanding of modifiable determinants for people living with poorly controlled T2D (and whānau at risk of other LTCs) is a key objective of this research project, and an additional objective is how to best disseminate what is working within these successful initiatives. An exploration of the findings as they emerge will encourage the translation of research findings into practice; this is vitally important as, historically, many pilots are successful, but challenges are faced in scaling them up or transferring them to other contexts. This is essential, as successful frameworks and models for the development of health promotion programmes are very much needed (M. Durie, 2004a).

# Prelude to Manuscript 1 (Chapter 3): Tangata Hourua: A framework drawing from Kaupapa Māori and Pacific research methodologies

The preparation and planning of this research framework was a result of identified issues or problems relating to addressing the cultural needs of Māori and Pacific people, or those who identify as both Māori and Pacific, when being researched or accessing a service. These issues emerged when existing literature was being reviewed to frame the research process, including the selection of methodology and method, the study design, participant recruitment, and the research questions. Also considered at this stage were the ethical and moral obligations of the research, including its cultural relevance and application. Despite a growing amount of research with Māori and Pacific people in Aotearoa New Zealand, frameworks that support robust research methodologies when working with both Māori and Pacific people together, are limited– it is a challenge to find a framework that acknowledges the connections between the two peoples yet also recognised the rights of tangata whenua and the uniqueness of all Pacific peoples. Tangata Hourua (Strength in Combining) is a research framework developed in response to this gap, drawing from Kaupapa Māori (Māori principles) and Pacific methodologies in ways that both uphold the rights of Māori as the Indigenous peoples of Aotearoa, whilst giving voice to Pacific peoples living here with shared or connected whakapapa (family connections). This paper describes the framework's origins, its relationship to Kaupapa Māori and Pacific research methodologies, key principles in its application, and its strengths and limitations. The framework has the potential to be utilised in research that positively contributes to both Māori and Pacific knowledge and wellbeing.

*Note*. The published version of this chapter can be found in Appendix J.

# Chapter 3: Tangata Hourua: A framework drawing from Kaupapa Māori and Pacific research methodologies

## Introduction

This research explored the role of Kai Manaaki (KM) working with Māori and Pacific people living with type 2 diabetes mellitus (T2D) – their competencies, how they differed from traditional diabetes health roles, such as dietitians, and their impact on health and other outcomes. Māori and Pacific whānau (family), in addition to Māori and Pacific KM and other health care workers, participated in this research project. The inception of this framework was prompted by an invitation to join the Mana Tū (stand with authority) research programme (Harwood et al., 2018), an initiative from the National Hauora Coalition Public Health Organisation which aimed to test an innovative programme for Māori and Pacific people with T2D (Harwood et al., 2018). A key feature of Mana Tū is its trained workforce of KM who were part of the general practice team that identified people with poorly controlled diabetes and assisted them and their whānau to take charge of their long-term condition (Harwood et al., 2018). Even though Māori and Pacific peoples have significantly higher rates for T2D incidence, hospitalisations, complications, and mortality, research has tended to focus on prevention, services, or treatment (Diabetes New Zealand, 2019; Harwood & Tipene-Leach, 2013; Reid & Robson, 2006. To date there has been lack of research focusing on workforce development, or the skills required to improve diabetes outcomes for Māori and Pacific peoples (Reid et al., 2017).

During the study design, the team of experienced Māori and Pacific researchers identified the need for a critical review of Māori and Pacific research methodologies, to better understand potential sites of alignment and contention with the research questions.

## The whakapapa of Tangata Hourua (Strength in Combining): inspired by Māori and Pacific research methodologies

### *Indigenous research methodologies' relationship to Kaupapa Māori (Māori principles) and Pacific research methodologies*

Indigenous methodologies not only recognise Indigenous communities' shared ways of knowing in the context of self and worldview (Kovach, 2010) but also dispel the myth that only western methods are valid and reliable (Amituanai-Toloa, 2009; L. T. Smith, 2012, 2015, 2021). The dichotomy of Indigenous research theories, core principles, concepts, values, and resistance to westernised and colonised thinking has been well discussed in Aotearoa by both Māori (Bishop, 1999; L. T. Smith, 2012, 2015, 2021) and Pacific (Helu-Thaman, 1988, 2003; Nabobo-Baba, 2008; Naepi, 2015; Tupuola, 2004) scholars. Collectively they have expressed discontent with and a resistance to working within these dominant hegemonic and westernised research domains (Bishop, 1998, 2005; A. Jones, 2012; Walker et al., 2006), leading to the development of contemporary Māori and Pacific research models. Māori have led this voyage, such as their travels across the Pacific, and have perhaps gone furthest, to create evolved critical Indigenous decolonised research methodologies (Baker, 2009).

### *Kaupapa Māori research*

When considering an appropriate methodology for Māori research, it is therefore appropriate to reflect on the importance of attaining new knowledge through good research practice, and its impact on wellbeing, which is perhaps best articulated in this Māori whakataukī (proverb):

*Mā te rongo ka mōhio*

*Mā te mōhio, ka mārama*

*Mā te mārama ka mātau*

*Mā te mātau ka ora*

Through sensing comes awareness

Through awareness comes understanding

Through understanding comes knowledge

Through knowledge comes wellbeing

In the same way that this whakataukī places mōhio (thinking), mārama (understanding), mātauranga (knowing) and outcomes at its centre, so does Kaupapa Māori theory (Mead, 2016; G. Smith, 1997; L.T. Smith, 2015). However, Kaupapa Māori theorists have gone further to demand safe or tika practices in research, which Mead (2016) advocates should be underpinned by core Māori principles. Although these principles, outlined in Table 3.1, have a literal definition or meaning, more important are their applications to research. For example, whanaungatanga literally means *relationship* but in research it could be used to describe the connection between the research collective – researchers, participants, end users – in ways that serve to strengthen each member of the group (Hudson et al., 2010).

**Table 3.1**
*Core Māori principles, definitions, and association with research*

| **Principle** | **English translation** following Moorfield (2005) | **Association with Research** |
|---|---|---|
| Tikanga | Correct procedure, custom, practice | Research process, design, accountability, and credibility (L. T. Smith, 2015). |
| Tika | To be correct, right, just or fair | What is right or good for the situation (Hudson et al., 2010). |
| Whanaungatanga | Whakapapa, relationships, reciprocal | Gives the project a sense of belonging and purpose (Hudson et al, 2010). |

| | | |
|---|---|---|
| Manaakitanga | Showing respect and care for others | Ensuring mana of both parties is upheld (Hudson et al., 2010). |
| Mana | Authoritative, valid, respect | Informing participants of their rights and power (Hudson et al., 2010).<br>Acknowledging issues of power and authority in relation to considering best outcomes for Māori (Hudson et al., 2010). |
| Tapu | Sacredness, restricted | Precise analysis, robust discussion, proceeding with caution (Hudson et al., 2010). |
| Noa | Without restraint or conditions | Recognise and balance the ethical and research guidelines of the project (Hudson et al., 2010). |
| Wairua | Spirit or soul | Incorporation of wairua into the research process should be considered when Māori are involved (H. M. Barnes et al., 2017). |
| Aroha | To love, feel compassion, empathise | Respect people to define their own space and meet on their own terms (Hudson et al., 2010). |
| Kaitiakitanga | Guardianship | Empowers Māori to take a role within the research project, and ensures tangible outcomes are realised for Māori (Hudson et al., 2010). |
| Rangatiratanga | Leadership | Ensuring leadership in research (Hudson et al., 2010). |

For Māori, in addition to having research based on Māori principles, there is a strong desire to have methodologies that also critique the systems and structures that oppress Indigenous knowledge and its development. Kaupapa Māori research (KMR) is a direct response to this (R. Jones et al., 2006; G. Smith, 1997; L. T. Smith, 2021; Walker et al., 2006) and has brought these two crucial pieces together (G. Smith, 1997). As presented in Table 3.2, KMR places Māori ways of knowing and doing at the centre of inquiry; it is aspirational in terms of self-determined research goals and outcomes, within a context of concerns about power and colonisation (G. Smith, 1997).

**Table 3.2**
*Kaupapa Māori research principles*

| Kaupapa Māori Research Principles | English translation | In practice (Pihama et al., 2002) |
|---|---|---|
| Tino Rangatiratanga | Self-determination | Māori control |
| Taonga Tuku Iho | Cultural aspiration | Being Māori is both valid and legitimate |
| Ako Māori | Culturally preferred pedagogy | Māori teaching and learning practices |
| Kia piki ake i ngā raruraru o te kainga | Socio-economic mediation | Māori mediation and socio-economic status being recognised and values to well-being |
| Whānau | The extended family | Māori are critical in Māori initiatives |
| Kaupapa | Collective | Critique of power structures with Pākehā (European person) |

Importantly, given the focus of Mana Tū on Māori health in relation to diabetes, it is worth noting Māori health models, as presented in Table 3.3, tend to be holistic, inclusive of whānau, with the collective rather than individualistic focus based on core Māori concepts.

**Table 3.3**
*Hauora Māori (Māori health) Frameworks and Models*

| Frameworks | Descriptions |
|---|---|
| Te Whare Tapa Whā<br>(M. Durie, 1998) | The four walls of a house represent the four dimensions of Māori wellbeing – tinana (physical), hinengaro (mental), wairua (spiritual), whānau (family). |
| Te Wheke<br>(Pere, 1997) | Te Wheke, the octopus, defines whānau (family) health, the eyes as waiora (total wellbeing for the individual and family) |

| | |
|---|---|
| | and each of the eight tentacles are interwoven, representing the close relationships and dimension of health. |
| Te Pounamu (Ruha, 1999) | A visual integrated Māori mental health assessment model. |
| Te Pae Mahutonga (M. Durie, 1999b) | The Southern Cross Star Constellation brings together elements of modern health promotion as applied to Māori health. |
| Meihana model (Pitama et al., 2017) | A model that can be used by medical doctors when consulting Māori patients to extend standard medical history taking. |
| The Hui Process (Lacey et al., 2011) | A process for health professionals to better engage Māori at consultation and discharge. |
| Te Waka Oranga (Elder, 2013) | A framework to use when working with Māori youth with traumatic brain injuries. |
| Powhiri (McClintock et al., 2012) | A process to support engagement, participation, respect, and positive relationships in mental health research involving Māori. |

*Note.* Translation of Māori words and phrases: hinengaro, mental; tinana, physical; waiora, total wellbeing of individual and family; wairua, spirituality; whanau, extended family.

### *Pacific peoples and principles*

The term *Pacific peoples* broadly covers Indigenous peoples from the island nations in the South Pacific and, in its narrowest sense, Pacific peoples in New Zealand. Despite the growing diversity of New Zealand's Pacific communities, differing values, ways of living, and beliefs, there are several enduring cultural values that bind an agreed set of common Pacific values (Ministry for Pacific Peoples [MPP], 2018). These prominent values include love, respect, reciprocity, spirituality, family, community, collectiveness, cultural obligation, kinship, and protocols (Amituanai-Toloa, 2009; Health Research Council [HRC], 2014; Tamasese et al., 2010). Bennett et al. (2013) advises that these values may vary in different communities as well as within respective Pacific groups, and are further informed by living and working in New Zealand.

## Pacific research methodologies

Research models that represent diverse Indigenous Pacific Island epistemologies have been developed by Pacific scholars since the 1980s (Gegeo, 1998) and reflect a response to the changing social environments of Pacific people (Bennett et al., 2013; Naepi, 2019a. Pacific research methodologies (PRMs) aim to represent Indigenous research that challenges philosophical notions of Pacific knowledge being inferior by positioning a clear understanding of Pacific through a Pacific lens (Naepi, 2019a). PRMs are primarily underpinned by cultural values, informed by a range of Pacific and pan-Pacific worldviews (Sanga & Reynolds, 2017) which at times synergises with Indigenous and KMR (Nabobo-Baba, 2008). PMR has an opportunity to revive and empower Pacific people, by positioning, defining, and evaluating Pacific from a Pacific viewpoint, whilst communicating ontological and epistemological differences that address the diverse Pacific communities within Aotearoa (Naepi, 2019b). There is a call for PRMs to engage and reflect broader Pacific communities that reside in Aotearoa rather than emphasising specific Pacific ethnicities (HRC, 2014; Naepi, 2015; Vaioleti, 2006). Agnew et al. (2004) highlight the limitations of using traditional Pacific models, as they tend to privilege Pacific Island-born and adult perspectives, and do not address the increasing number of young Pacific people identifying with two or more Pacific ethnic groups (HRC, 2014; Naepi, 2015; MPP, 2018). For genuine research to happen, it is imperative that a relational connection between the Pacific researcher and the Pacific methodology exists, to promote best data usage, interpretation, analysis, presentation, and purpose (H. Smith & Wolfgramm-Foliaki, 2020). Some of these unique and innovative models have been outlined in Table 3.4.

**Table 3.4**

*Pacific research and health models, country of origin and association to research*

| Country of origin | Frameworks | Descriptions |
|---|---|---|
| Tonga | Fonua Model (Tu'itahi, 2018) | Wellbeing based on relationship between land and people. |
| Tonga | The Kakala Model (Helu-Thaman, 1988) | Represents the processes of research as a garland made of flowers and leaves to be worn on special occasions. |
| Tongan | The Tā and Vā (Okusitino Māhina, 2010) | Theory of time-space relativity that enters all fields of inquiry, within and across nature, mind, and society. |
| Cook Islands | Tivaevae framework (Maua-Hodges, 2001) | Framework for promoting teamwork in research. |
| Samoa | Fa'afaletui (Tamasese et al., 2005) | Emphasises a collective approach and importance of reciprocity and relationships. |
| Samoa | Ula framework (Sauni, 2011) | Holistic approach for nurturing and valuing the relationships with Samoan Society. |
| Fijian | Vanua research framework (Nabobo-Baba, 2008) | Fijian Vanua Framework for Research (FVRF) and proposes that it is used when researching Indigenous Fijian histories, knowledges, skills, arts, values, and lifeways. |
| Fijian | Masi Methodology (Naepi, 2019a) | Pacific women centred research methodology. Using masi as an anchoring metaphor. |
| Fijian | Talanoa research: Culturally appropriate research design in Fiji. (Otsuka, 2006) | Talanoa research design that is the most culturally appropriate research design in the ethnic Fijian community in Fiji. |
| Pan-Pacific | Talanoa Research Methodology (Vaioleti, 2006) | A developed pan-Pacific position on research. |
| Pan-Pacific | Vaka Model (Nelisi, 2004) | Significance of Indigenous values, knowledge, and approaches to pedagogy. |

| | | |
|---|---|---|
| Pan-Pacific | Fonofale Model (Pulotu-Endemann, 2009) | Pacific Island model of health for the use in the New Zealand context. |

*Note.* Translation of Pacific languages words and phrases: masi, mulberry bark cloth; talanoa, to tell a story, have a conversation.

## Why develop a new framework?

A review of Kaupapa Māori and Pacific research methodologies identified not only historical whakapapa but contemporary connections between Māori and Pacific people due to migration through the Pacific region and eventual settlement in their ancestral lands (M. Durie, 1998; Haberkorn, 2008). These contemporary connections, and reasons for developing a new framework for research with Māori and Pacific people in Aotearoa, are discussed further below.

Mana Tū also presented an opportunity for Indigenous researchers working with both Māori and Pacific to further consider respectfully connecting these unique epistemological spaces, and populations, to develop a research framework that aimed to:

1. Privilege Indigenous voices, challenge Eurocentric ideologies, be strengths- and evidence-based, ensure culturally safe spaces for participants, connect to the focus of the research and support adaption by future researchers (L. T. Smith, 2012).
2. Work cross-culturally and collaboratively in ways that embody activism and determine guidelines (Swadener & Mutua, 2008).

## Shifting definition of Māori and Pacific identity

The growing and complicated issue of Māori and Pacific identity in Aotearoa (L. T. Smith, 2015) is a compelling reason for developing a new framework. John Rangihau (as cited in L. T. Smith, 2015) was critical of the *pan-Māori* label for two reasons: it was externally imposed to align all things Māori that did not locate an individual's whānau, hapū, or iwi. Similarly, for people of the Pacific, the term, *Pacific* was externally imposed to denote peoples other than Māori who were born and reside in New Zealand and descend from Pacific nations, but the term does not allow for heterogeneity (MPP, 2018; Samu et al., 2019).

Pan-Māori and Pacific labels are most problematic in Aotearoa as they are used as standard ethnicity questions in most research and health settings, only being checked at enrolment and not asked about again (Enright et al., 2021). This approach does not allow people to self-identify as *multi*-ethnic; nor does it account for the fluidity in how people self-identify (Carter et al., 2009; Kukutai & Callister, 2009).

Almost 25% of Aotearoa's total population identify as Māori or Pacific people (Statistics New Zealand–Tatauranga Aotearoa, 2018a). Over half of all Māori (55%) identify as having more than one ethnicity, with well over half of these (60%) identifying as also having a Pacific ethnicity (Te Puni Kōkiri, 2017). For Pacific peoples, 38% identify as having more than one ethnicity (Statistics New Zealand–Tatauranga Aotearoa, 2018b) with almost one-third (32%) identifying with two or more. This diverse population, claiming both Māori and Pacific ethnic and cultural identities, with as much as two-thirds of New Zealand-born Pacific having Māori whakapapa, is being coined as *Generation B*; brown, brainy, beautiful, bicultural, bilingual, and bold (Vaka'uta, 2021).

As more people identify as being or having connections to both Māori and Pacific ethnicities, a research framework that is inclusive for both identities is required. However, advancing this concept requires careful consideration.

## Protocols to progression

Whilst some endorse combining Māori and Pacific research methodologies, particularly for health research (Curtis, 2016), others suggest doing so with caution. Naepi (2015) warned of encountering complex methodological tensions around key questions including: how Pacific engage with KMR methodologies, how is tino rangatiratanga maintained, and how do individual Pacific ethnicities meaningfully engage with pan-Pacific research methodologies? Like others (Airini et al., 2010; Curtis, 2016), she suggested a set of rules to keep the process and participants culturally safe from the outset (Naepi, 2015).

In terms of addressing cultural safety, the use of the *give-way rule* was first developed by Airini et al. (2010) and then Naepi (2015) with the intention of ensuring Māori and Pacific expertise at every level of decision making. Both authors strongly advocate that when there is a difference in cultural interpretations then a decision *gives way* to the research advisor who holds the Māori or specific Pacific expertise. Another option is to create a *negotiated space* or an *in-between* terrain where distinctive worldviews and knowledge bases enter some form of engagement or relationship to potentially be expanded and innovated (L. T. Smith, 2012). This closely negotiated space between Indigenous peoples, such as that of Māori and Pacific peoples, is also referred to by Allen (2012) in his book *Trans-Indigenous*. Having described work to date on combining Māori and Pacific research methodologies, we will now present our proposal – the Tangata Hourua Framework.

## Tangata Hourua Framework – *strength in combining*

To explain the name of this framework, we first ponder the historical Polynesian debate on whether a waka (canoe) or a whare (house) should be built first, as conceptually they are upturned versions of the other (Brown, 2009). This debate is based on shared ancestry, as both waka and whare are highly regarded structures in Polynesian architectural culture, connected by the fundamental skills needed to build them and their high value for both their intended dual purposes (Refiti, 2002). In contemplating this debate, it was decided to build a waka hourua (double-hulled canoe) first, which requires, like a framework, the correct resources and order of events to ensure the right construction (Chun & Racoma, 1995). Traditionally, waka hourua were built to be sturdier, to withstand the longer journeys from the broader Pacific oceans to Aotearoa (Figure 3.1). Thus, the waka has inspired the name Tangata Hourua for a framework in which peoples and worldviews Indigenous to the Pacific are brought together, utilising two hulls to make a waka and strengthening the means with which their journey or research achieves the intended destination and outcome.

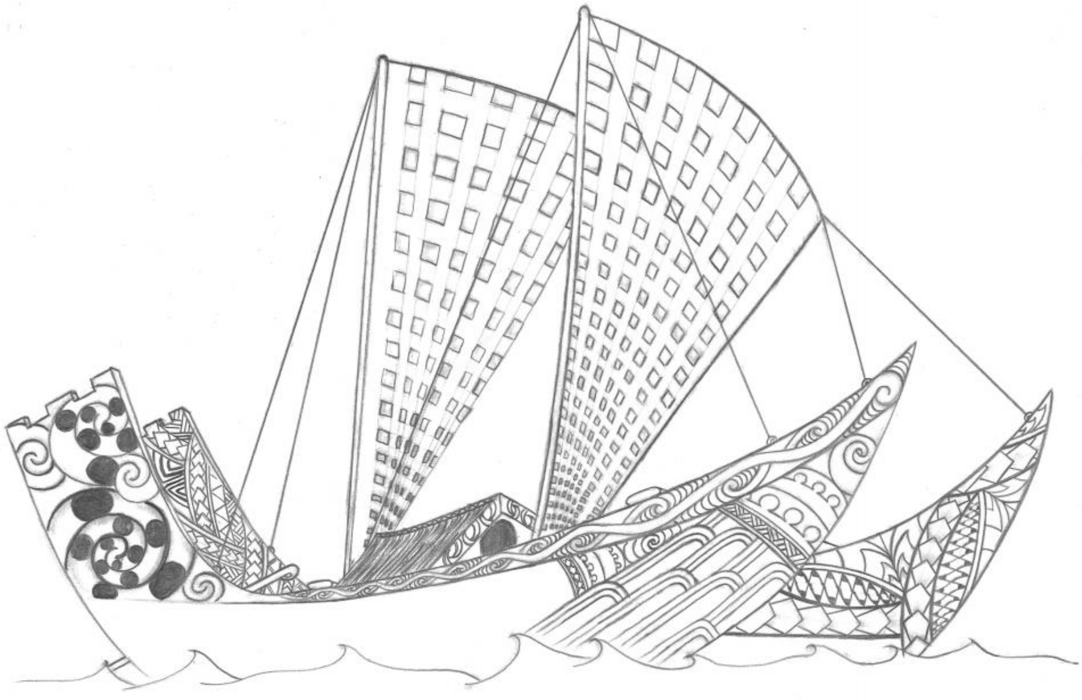

**Figure 3.1.** A waka hourua (double-hulled canoe).
Drawing by Hone (2021a). The combination of the double hull formation represents the strength needed for intended purposes, such as the multiple vast oceanic journeys around the wider Pacific region to Aotearoa (New Zealand) historically undertaken by Māori. Each hull of the waka hourua has designs that are unique to Māori and Pacific people, showing not only the uniqueness but the shared relations that were built during these journeys and continue to the Aotearoa context of today.

Importantly, drawing on these two cultural approaches allows not only a natural recognition of cohesive strengths and similarities, but retains uniqueness, which refers to the populations that this framework aims to address. These are outlined in Table 3.5, which highlights some of the similarities shared by Māori and Pacific core principles.

**Table 3.5**
*Core Kaupapa Māori (Māori principles) and Pacific values and concepts used in the Tangata Hourua Framework from Kaupapa Māori and Pacific research*

| Core Kaupapa Māori Principles | Definition | Core Pacific Principles |
|---|---|---|
| Tino Rangatiratanga | Self-determination | Respect |
| Taonga Tuku Iho | Knowledge handed down | |
| Ako Māori | Culturally preferred pedagogy | |
| Kia piki ake i ngā raruraru o te kainga | Socio-economic mediation | Reciprocity |
| Whānau | Extended family structure | Connectedness and relationships between the individual, family, and community |
| Kaupapa | Shared vision | Service and inclusion |
| Whakapapa | Genealogy | Collectivism and communitarianism<br>Reciprocal relationships |
| Te Reo | Indigenous language | Language |
| Tīkanga | The right way | Love, humility, caring, humour, unity, holism |
| Rangatiratanga | Leadership | |
| Wairuatanga | Spirituality | Spirituality and Christianity |

## Key principles of Tangata Hourua Framework

### *Te takarangi: dual spiral that creates space and light; defined and undefined*

Te Takarangi (the spiral) is used extensively in Māori carving on waka, paepae and whare whakairo, and is a prominent pattern in tā moko (tattooing) on places of movement, including face and buttocks (Witehira, 2013). In Figure 3.2, the takarangi consists of taka (revolutions or rotations) and rangi (heavens or heavenly realm). The double spiral can also mirror the double helix of DNA that has a generational link to metaphysical whakapapa and genealogies that connect Māori to the Pacific (A. Durie, 1997; Mahuika, 2019). The Takarangi dual spiral was chosen to depict the dual purpose and representation of the Tangata Hourua Framework, with the spiral originating from a single point, and splitting to allow space between the spirals that allows the Tangata Hourua Framework to deliberately mirror the reverential space and shared origin of Tangata Whenua (Indigenous people of New Zealand) and Tagata Pasifika (Indigenous people from the Pacific Islands). The spirals' *defined* and *undefined* lines, spaces and core Māori and Pacific values allow an individual's identity and culture to be represented. The bold lines representing a known or decided aspect of their culture or identity and, in contrast, the *undefined* spaces represent what has not yet been discovered; defined and undefined spaces allow a natural *self-determined* motivation to choose one's own current positioning. A. Durie (1997) and L. T. Smith et al. (2016) explain this as an intercultural, in-between space involving an evolutionary process where distinctive worldviews and knowledge bases relationally engage, expand, and innovate, whilst maintaining whakapapa. Tevita Ka'ili uses the term "trans-indigeneity" in a Radio New Zealand article ("World's Indigenous People Gather in New Zealand", 2019, para. 7) which describes the concept of Indigenous people moving outside of their homeland, resulting in contact with other Indigenous people.

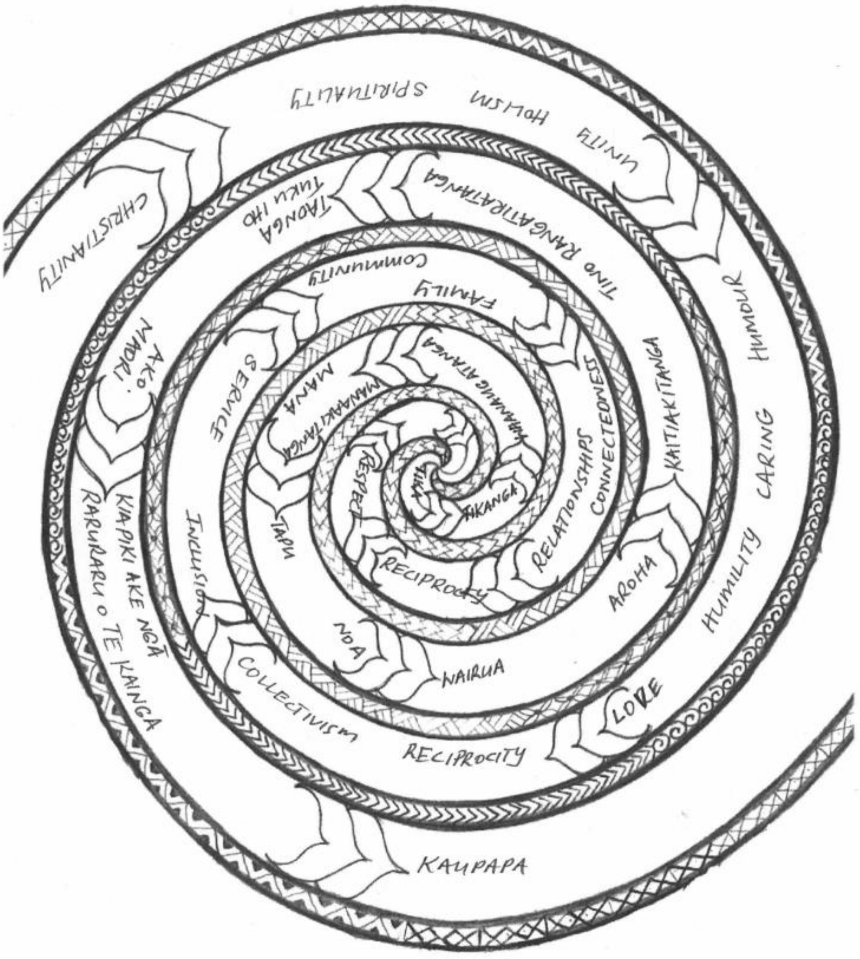

**Figure 3.2.** Tangata Hourua (Strength in Combining).
Drawing by Hone (2021b). The dual spiral design has been used to depict core Kaupapa Māori (Māori principles) and Pacific values within the Tangata Hourua framework. Commonly used Māori and Pacific designs have been embedded within the spiral to visually position their relationship with each other. The larger twin designs represent whale tales, which signify reciprocal movement within the framework. [ako Māori, culturally preferred pedagogy; aroha, to love, feel compassion, empathise; kaitiakitanga, guardianship; kaupapa, collective vision; kia piki ake i ngā raruraru o te kainga, socio-economic mediation; mana, authoritative, valid, respect; manaakitanga, showing respect and care for others; noa, without restraint or conditions; taonga tuku iho, cultural aspirations; tapu, sacredness, restricted; tika, to be correct, right, just or fair; tikanga, correct procedure, custom, practice; tino rangatiratanga, self-determination; wairua, spirituality; whakapapa, family connections; whānau, extended family; whanaungatanga, relationship].

## It was what it was, Is what it is, It will be what it will be

L. T. Smith (2011) contends that Indigenous research theory has had its own particular journey, which the Tangata Hourua framework attempts to support. Each step is outlined as follows.

*It was what it was*: recognises that Māori and other Indigenous people’s ways of understanding and knowing were, and are, subject to colonisation (O’Sullivan, 2001) which in Aotearoa has resulted in health, education, welfare, employment, living standards, cultural identity and social connectedness inequities shared by Māori and Pacific peoples (Carter et al., 2009; Dorling, 2015).

*Is what it is*: acknowledges Māori as Tangata Whenua of Aotearoa, placing Māori methodologies, frameworks, and models at the centre of all research in Aotearoa. This has been acknowledged by incorporating the *give-way rule* (Airini et al., 2010; Naepi, 2015) to address the need for Māori to be front and centre in the creation and development of the Tangata Hourua Framework.

*It will be what it will be*: articulates the need for frameworks such as Tangata Hourua to address several issues. The first issue is to purposefully create safe cultural spaces that are flexible and adaptable for future use (Cohen, 1998). The second, as articulated by Matire Harwood, is to challenge the status quo (“I Don’t Accept The Status Quo,” 2020) in ways that achieve equity and inform the development of services and systems that advance Indigenous people’s health (Reid et al., 2017).

## Strengths and limitations

A strength of the Tangata Hourua Framework is that it allows research of Māori and Pacific people together (Curtis, 2016; Harwood et al., 2018; Naepi, 2015), which is especially important for people who identify as Māori and Pacific multi-ethnic identities, who may experience a sense of not belonging (Agee & Culbertson, 2013; Berking et al., 2007; Keddell, 2014). Another strength is that it is simple or free of clutter, allowing core Māori and Pacific values to be clearly represented, so as to allow those who identify as Māori or Pacific to clearly see themselves reflected in the framework, the research, and the outcomes (Anae, 2001; Grimes et al., 2015; Royal, 2005). A third strength is its adaptability. Future researchers can adapt and develop the framework as needed to be accessible to future generations to achieve and sustain better lives (Rudnev, 2015).

There are also limitations, however, and we do not suggest that the Tangata Hourua Framework should be used for all research involving both Māori and Pacific peoples, as researcher or participant, just in the same way that KMR is not pan-Māori (Rangihau, 1977) nor are Pacific methodologies pan-Pacific (MPP, 2018). However, as this framework proposes, support for cross-cultural partnerships between and amongst Indigenous researchers can create something stronger, more impactful, and thus it may deliver greater equity (Swadener & Mutua, 2008).

## Non-Māori, Non-Pacific

There has been and will be ongoing debate as to whether non-Māori and non-Pacific can meaningfully engage in KMR and PMR that is culturally respectful (A. Jones, 2012; Naepi, 2019b). Māori and Pacific scholars alike advocate for research involving Māori or Pacific peoples to be led by Māori or Pacific people (Airini et al., 2010; L. T. Smith, 1992; Walker et al., 2006). There is a school of through that supports non-Māori researchers' participation and collaboration in KMR, so long as it is Māori-led (Carpenter & McMurchy-Pilkington, 2008; A. Jones, 2012). If Māori and Pacific people are being researched together, both Kaupapa Māori and pan-Pacific research methodologies should engage to support Māori and Pacific people's empowerment and strengths-based interventions (Ponton, 2018) with Kaupapa Māori as a guide to ensure practice is culturally safe (Naepi, 2019b). As Tangata Hourua engages both methodologies and embodies a relational element that allows movement and space for researchers, its use by non-Māori and non-Pacific should be undertaken with the following caveat: if Māori are being researched then it is Māori-led with support from a multicultural team which may include Pacific people (A. Jones, 2020; Naepi, 2019b).

## Conclusion

Tangata Hourua can accommodate, move with, and adapt to the ever-increasing complexities of the growing Māori and Pacific populations in Aotearoa. Additionally, this model can be utilised within a variety of domains, including health, education, social service, justice, and the public and private sectors. Utilisation would require a genuine desire for a combined cultural approach that engages Māori and Pacific people in research that positively contributes to knowledge and wellbeing. A combined Māori and Pacific methodology has the potential to inform robust research into Māori and Pacific inequalities across a variety of sectors and, ideally, help others to challenge these going forward (Carter et al., 2009; Dorling, 2015).

Ultimately, combining methodologies that are Indigenous to Aotearoa with those who have whakapapa connection was not an easy decision. There was an element of fear about getting it wrong, which may lead to paralysis (A. Barnes, 2013; Tolich, 2002); however, as argued above, there were many reasons to continue the journey of research methodology development in Aotearoa. Introducing a new, or at least adapted way of doing research that was both respectful to Tangata Whenua and open to Pacific principles and diverse Māori and Pacific identities has potential. The first aspect of that potential is to build on Māori and Pacific worldviews, the second is to address the methodological tensions in combining Kaupapa Māori with Pacific methodologies, and the last is to ultimately advance knowledge and/or wellbeing for future generations of Māori and Pacific people.

## Authors' Notes

Tania Mullane (RN, MA Māori Development, PhD Candidate) is a first-generation New Zealand born Pacific wahine, with Fijian, Tongan and Greek whakapapa. She has a background in working and in leadership roles in education, nursing, social service, and justice environments. Currently she is the Head of Nursing Pacific at Whitireia.

Dr Matire Harwood (Ngāpuhi) (PhD, MBChB) has a background is in primary health care and rangahau hauora Māori. She is the Director for Tōmaiora, Māori Health Research, and Associate Professor, Faculty of Medical and Health Sciences at University of Auckland; General Practice and Primary Healthcare, editor for the *Māori Health Research Review*; and GP Champion for Primary Care Health Targets at Counties Manukau DHB.

Dr Isaac Warbrick (Ngāti Te Ata, Te Arawa, Ngā Puhi) (BSc (Hons), PhD) is an exercise physiologist, and a Senior Research Fellow and co-Director of Taupua Waiora Centre for Māori Health Research at Auckland University of Technology.

## Glossary

### *Māori language*

| | |
|---|---|
| ako Māori | culturally preferred pedagogy |
| Aotearoa | New Zealand |
| aroha | to love, feel compassion, empathise |
| hapū | sub-tribe |
| hinengaro | mental |
| hui | meeting |
| iwi | tribe |
| Kai Manaaki | Māori health workers |

| | |
|---|---|
| kaitiakitanga | guardianship |
| kaupapa | collective vision |
| Kaupapa Māori | Māori principles |
| kia piki ake i ngā raruraru o te kainga | socio-economic mediation |
| mana | authoritative, valid, respect |
| Mana Tū | Stand with Authority research programme initiative from the National Hauora Coalition Public Health Organisation aiming to test an innovative programme for Māori and Pacific people with type 2 diabetes mellitus |
| manaakitanga | showing respect and care for others |
| mārama | understanding |
| mātauranga | knowing |
| mōhio | thinking |
| noa | without restraint or conditions |
| paepae | ground in front of meeting house |
| rangatiratanga | leadership |
| tā moko | tattoo |
| taonga tuku iho | cultural aspirations |
| tapu | sacredness, restricted |
| Tangata Hourua | Strength in Combining Māori and Pacific research framework |
| Tangata Whenua | Indigenous people of New Zealand |
| te takarangi | dual spiral design |
| tika | to be correct, right, just or fair |
| tikanga | correct procedure, custom, practice |
| tinana | physical |
| tino rangatiratanga | self-determination |
| waiora | total wellbeing of individual and family |
| wairua | spirituality |
| waka | canoe |
| waka hourua | double-hulled canoe |
| whakapapa | family connections, relationships |
| whānau | extended family |
| whanaungatanga | relationship |

| | |
|---|---|
| whare | house |
| whare whakairo | carved meeting house |

### *Pan-Pacific languages*

| | |
|---|---|
| masi | mulberry bark cloth |
| talanoa | to tell a story, have a conversation |

# Chapter 4: Methods

## Setting

The research in this thesis sits under the umbrella of a larger study, the Mana Tū study, which was offered by the NHC PHO. The protocol for the Mana Tū study has been published elsewhere (Selak et al., 2018), as has a description of what Mana Tū is (Harwood et al., 2018). In summary, the Mana Tū study as a whole included almost 400 whānau – Māori, Pacific and people living in neighbourhoods of deprivation – from 2018 to 2020. The purpose of the research in this thesis specifically is to explore the experiences of clients, their whānau and three different types of health care workers providing community-based diabetes prevention programmes to Māori and Pacific people in New Zealand. In the previous chapter, this has been proposed as being critical to identifying how better to support better health outcomes for Māori and Pacific peoples.

## Methodology

In describing the methodology for the thesis research, I will present arguments for my epistemological stance and methodological approach. The specific methodology was chosen to address the research question in a way that is scientifically robust, culturally safe, and feasible. With this in mind, a qualitative approach combining Kaupapa Māori and Pacific values, in the form of Tangata Hourua, was considered the most appropriate methodology.

The preparation and planning that occurred within this research framework involved reviewing existing literature to identify and clarify gaps, and, in turn, frame the research process, including the selection of methodology and method, design, participant criteria, and the research questions.

## Positionality

Positionality “reflects the position that the researcher has chosen to adopt within a given research study” (Savin-Baden & Howell Major, 2013, p. 71). There are three primary ways the researcher may identify and develop their positionality:

1. Locating oneself with regard to the subject such as acknowledging personal positions that have the potential to influence the research.
2. Locating oneself with regard to the participants, such as considering how they view themselves, as well as how others view them.
3. Locating oneself with regard to the research context and process by acknowledging that research will necessarily be influenced by themselves and by the research context (Savin-Baden & Howell Major, 2013).

For Indigenous researchers, this process of ‘positioning’ is influenced by the interrelated concepts of Indigenous ontology (what is real, the nature of reality), epistemology (ways of knowing, the nature of thinking or knowing), methodology (how knowledge is gained, approach to systematic inquiry) and axiology (values, ethics and morals that guide research) (Curtis, 2016; Wilson, 2020).

As the lead researcher of this study, I was invited to this research project by two well-recognised Kaupapa Māori researchers and practitioners, both of whom are working in Māori-led organisations and units. As a Pasifika woman, I have lived, worked, and studied with tangata whenua and tagata Pasifika, in the community, in areas of health, education, and justice. I have also had the privilege to give birth to four children who straddle both Māori and Pacific worlds with poise, pride and determination. My children both have close relatives who identify as Māori and Pacific who have suffered from and died as a direct result of un-managed and treated diabetes. I was fortunate to complete my Masters in Māori Development, and retuned to enrol in the Taupua Waiora

Research Centre, Māori Health Research Unit at AUT for this doctoral research. Identifying personally as Pasifika, with Fijian and Tongan ancestry, I have worked alongside Māori and Pacific individuals, communities, and organisations in the delivery of education or health programmes, which has enabled me to better understand the challenges that exist for Māori and Pacific individuals and whānau in attaining their aspirations for better health and education outcomes. I had to ask myself several questions: What does this mean for a Pacific researcher undertaking research with Māori, Pacific, non-Māori, and non-Pacific people in Aotearoa? How am I able to navigate this position personally, professionally, and academically? How can this research project positively contribute to eradicating the effects of T2D on Māori and Pacific individuals and whānau, and the workforce that support them? Lastly, can the different levels of connection between Māori and Pacific in Aotearoa be utilised to achieve the above. My own journey in Kaupapa Māori research and my *positioning* as a Pasifika researcher in Aotearoa are implicitly linked. This positioning has been and will continue to be questioned, by those who are also trying to understand those of us who are continually challenged to define who we are and where we are from, especially if looks and knowledge do not mirror expectations. As a Pacific researcher conducting research with both Māori, Pasifika, non-Māori, and non-Pasifika people, I and my team have a responsibility to promote research which empowers participants. To ensure this was reflected in this doctoral research, it was important that I had supervisors who identify as Māori and could support me to navigate this complex relationship. Their role as Māori academics with experience in Kaupapa Māori research provided a space for support and guidance to ensure that the principles of Kaupapa Māori research were adhered to. This was imperative, as fundamental to Kaupapa Māori is 'by Māori, for Māori, with Māori' approach to research, putting Māori interests at the centre, in order to make a positive difference (G. H. Smith, 2017, p. 85). Bishop (1996) proposes that non-Māori can participate in Kaupapa Māori research, so long as they do not define, control, or dictate the research. Therefore, to navigate the tensions of this relationship thoughtfully, both supervisors worked closely with me, advising, and asking for clarification and expansion on aspects of the project where needed. Throughout this research project that meant that there has been a critical attempt to maintain a decolonising lens to privilege the advancement of Indigenous knowledge, people and lands; to critique and deconstruct non-Indigenous research frameworks; and to create new Indigenous ways of knowing, doing and being (Naepi, 2015; Wikaire et al., 2017).

## Qualitative methodology

As all research enquiry is shaped by an epistemology that then directs the questions to be asked, the methods used for data collection, the analytical approach and the relationship between the researcher and stakeholders, qualitative research provided such an opportunity where quantitative did not. So, to best answer the research questions, a qualitative approach was deemed the most appropriate to meet the objectives of the study and give voice to the experiences and perspectives of the participants.

Qualitative research has been described as any method or research inquiry that does not rely on statistical analysis or the quantification of numbers for results (Strauss & Corbin, 1998), with the goal being to develop concepts that help understand social phenomena in natural, rather than experimental, settings. Fundamentally, qualitative research should emphasise the meanings, experiences and views of participants and allow the researcher to explore questions in more depth, producing more meaningful data (Patton, 2002). The utilisation of qualitative research to inform health policy and services, as in this research project, provides a way of interacting with and better understanding traditionally marginalised and hard-to-reach groups such as Indigenous peoples (Aspin, 2000).

Qualitative research methodology also fulfilled objectives to activate change, achieve impartiality, and support inquiry that focuses on and furthers the equitable distribution of resources, fairness, and outcomes (Feagin, 2001). Importantly these key aspects supported the study's aim to explore the experiences of Māori and Pasifika with T2D, and their whānau, as these methods are commonly used within health research to capture the experiences of people who have a long-term health condition such as T2D (Reid & Robson, 2006). This approach enables the researcher to build a holistic picture, focusing on the whole person, and analysing the detailed views of informants (Creswell, 1998). Importantly, this holistic approach aligns with Kaupapa Māori and Pacific views in which people are empowered to tell their stories. Qualitative research acknowledges that peoples' reality is socially constructed, and social experiences are created through real-life experiences (Denzin & Lincoln, 2011). Creswell (1998) describes qualitative methodology as enabling an in-depth detailed understanding of the study focus. The concept of qualitative research is supported by the WHO's *The World Health Report* (2000), with calls for qualitative research as a means to inform health policy and services more effectively. In particular, the report highlights the urgent need to redress the lack of information about access to health care and the quality of that health care for Indigenous peoples. Myers (2010) promotes qualitative techniques as best for drawing out knowledge that is culturally embedded in the lives of people and the relationships they engage in. Qualitative methods were therefore considered appropriate to address research questions 1 to 3 as outlined in Chapter 1.

## Responsiveness of qualitative research for Māori and Pacific

To explore and capture the views of Māori and Pacific people with T2D and the workforce that works in this area, the approach was informed and guided by Kaupapa Māori and Pacific principles, values, and methodologies. This research project was underpinned by an approach that was culturally safe and appropriate whilst meeting the obligations in the Treaty of Waitangi ‘Responsiveness to Māori’ frameworks (Reid et al., 2017) as outlined by the Waitangi Tribunal and the Ministry of Health research guidelines. This methodological approach formed the foundation for the research questions, data collection, analysis, and dissemination. The rigour of the study was further strengthened by valid and robust qualitative methods from western paradigms such as the Framework Method (Gale et al., 2013).

This study used qualitative methods underpinned by the Tangata Hourua Framework (Mullane, Harwood, & Warbrick, 2022), an Indigenous reciprocal research framework that draws from Kaupapa Māori and Pacific methodologies**.** The core methodology of this research project is further described in Chapter 3, “Tangata Hourua: A framework drawing from Kaupapa Māori and Pacific research methodologies.”

Additionally, the Framework Method was chosen to complement the Tangata Hourua Framework and used in the qualitative study described below in multiple ways, due to its ability to: compare and contrast data from multiple researchers; compare data across cases as well as within individual cases; and obtain a holistic, descriptive overview from diverse data sets (Gale et al., 2013). In addition, the Framework Method has the ability to identify commonalities and differences in qualitative data by drawing descriptive and/or explanatory conclusions that are clustered around themes. This is detailed further in Chapter 6: “Understanding the workforce for diabetes management with Māori and Pacific peoples: Using Tangata Hourua as the Framework Method for analysis of qualitative research.”

## Methods

### *Participants and the use of primary data*

**Table 4.1**

*Interviews and origin for this project*

| Group | Participants | Data collector | Data analyst |
|---|---|---|---|
| 1. | Kai Manaaki – Mana Tū health workers | TM | Primary data<br>TM |
| 2. | Dieticians working in the same communities with mostly Māori and Pacific people with T2D | TM | Primary data<br>TM |
| 3. | Community Health Workers working in communities with mostly Māori and Pacific people with T2D | TM | Primary data<br>TM |
| 4. | Māori and Pacific people with poorly controlled T2D (defined as HbA1c >65) enrolled in the Mana Tū programme, and whānau | TT | Primary data<br>TM |

*Note.* TM = Tania Mullane; TT = Taria Tane.

The primary data collected for groups 1, 2 and 3 have been collected by the primary researcher via focus groups. The primary data collected for group 4 was collected by another researcher via interviews and is connected to the broader HRC study that this study comes under; further details are available in Tane et al. (2021). (Ethics approval for this part of the research was obtained from the New Zealand Health & Disability Committee (reference: 17/NTB/249/AM02)).

Both primary data sources came directly from participants involved, which allows new discoveries, provides credible evidence for arguments, and gives authoritative information about this study topic. A decision to use these two data sets of evidence was made as they complement and link to each other and allow the voices of Māori and

Pacific people with T2D, their whānau, and the health care workers who work with them to be heard.

For the purpose of this research project, the two sets of raw data were analysed, and themes generated and then contrasted by the author. Using a combined approach of the Tangata Hourua Framework (Mullane, Harwood, & Warbrick, 2022) (Kaupapa Māori and Pacific values) and the Framework Method (Gale et al., 2013) (western research methodology), a qualitative approach allowed recurring themes to emerge.

### ***Focus groups: Introduction***

The first part of the study involved the presentation of the results of the focus groups which involved groups 1, 2 and 3, with the objective being to use the themes identified in the interviews to inform workforce strategies that aim to improve outcomes for Māori and Pacific people with T2D and their whānau.

Focus groups are guided discussions among small groups of people who share a common characteristic central to the topic of interest (Curry et al., 2009), serving as a catalyst for generating unique insights, sharing experiences, and uncovering information that participants would otherwise keep not be willing to share in a one-to-one conversation.

As relationships form a substrate for Indigenous knowledge (Tau, 1999), a focus group method was also chosen to best promote Kaupapa Māori concepts of whanaungatanga, which G. Smith (1997) believes encourages the whānau concept as an effective tool when conducting research, as it allows the "incorporation of a range of skills, personalities, and background knowledge needed to accomplish a set task, such as gathering data from a focus group" (pp. 118-119). M. Durie (2004) believes an emphasis on individual and collective wellbeing means mana (wellbeing, control), mauri (life force), mahitahi (co-operation of researcher and participant) and māramatanga (understanding) are able to be incorporated in focus groups. Further Kaupapa Māori concepts are promoted using focus groups such as kōrero (conversation/narrative) and hui (gathering) (Ware et al., 2018), allowing Māori voices, opinions, and stories to be validated as important information sources by sharing stories and collaborating with others in safe spaces (Kearns et al., 2021). There is also an opportunity to interweave important cultural values of Pacific research (HRC, 2014) such as communal relationships, holism, respect, and reciprocity. These dual core values were adopted throughout the process of organising the focus groups, collecting data via interviews, and analysing the primary data. Small groupings were a necessary element of this research, taking into consideration the need for in-depth, quality discussions, presenting an excellent opportunity to discuss and focus on a particular issue on the basis of the promotion of investigation through the subjective knowledge and life experiences of the respondents (Waldegrave, 2018), which was the case in this instance.

Consequently, three focus groups were created: one for KM, one for CHWs and one for dieticians. The aim was not to gain a broad representation of all health professionals working in this area but rather those supporting Māori and Pacific people, and their whānau, in their communities. This enabled views from three different groups of health professionals ultimately tasked with delivering health services focusing on diabetes.

It was felt that focus groups would be most effective, would allow careful consideration of the construction of groups and the way discussion was guided (research questions to be asked, permission for free exchange, etc.), and would allow saturation to be reached. These points are discussed further below.

### *Construction of focus groups*

The decision to use focus groups for this thesis required some thought as to the composition and total number of groups. The researcher considered factors that may have negatively influenced the group dynamic such as ethnicity, gender, ability, or power variances, in order to ensure that members would not feel inhibited from speaking. For this purpose, focus groups comprising of eight or less participants were held so to create a safe environment where opinions, feelings and views could be shared. Some discussion in such professional groups may relate to employment conditions, hence the venue for the focus groups was not at a place of employment when appropriate. In addition, in terms of the quality and robustness of data, it is essential that a full discussion generating comprehensive information and reflecting a full spectrum of opinions and experiences occurs (Curry et al., 2009).

The face-to-face focus groups took place at a venue that was comfortable and safe for both participants and researcher; the discussions were audio recorded, held in secure rooms on days/times that suited participants, and lasted from 60 to 90 minutes.

### *Protocol and process for focus groups*

Before any focus groups were convened, the following protocol was developed:

- All participants will give consent to participate in the research process – this being part of a focus group.
- Pre-organised times will be determined in a location that is accessible, appropriate and private. The venue and time will be confirmed via phone, text or email with the participants.
- At the beginning of the session an attempt to create a meaningful and reciprocal engagement will occur, to form a relationship that is sustained and maintained.

- This will be achieved by opening with a karakia/prayer, and sharing genealogical, historical, cultural, or socio-political links, as a way of affirming a sense of familiarity and connectedness.
- The participants will give written consent and sign relevant documentation.
- The lead researcher will go over the indicative questions.

Discussion at each meeting was based around the following guided questions:

1. Tell me about your roles.
2. What works? And why?
3. What do you think this is important for you in your role and for Māori and Pacific?
4. What strategies do you employ when working with Māori and Pacific people with T2D?
5. How do you know if you are effective?

Seven KM, eight CHWs and seven dietitians participated in the focus group interviews. Recordings were transcribed by the author first in an orthographic style, checked for accuracy and then transcribed exactly. On request, transcripts were sent to participants, who were invited to contact the author to discuss or request any changes to their interview statements. The first set of transcripts were reviewed by research team members (Dr Harwood and Dr Warbrick) and discussed with the author in research hui (meetings). Here, the language and subjective positioning of the author was explored from the perspectives of research team and were used to guide subsequent analysis.

Ethics approval was obtained, on the June 23, 2020, from the Auckland University of Technology Ethics Committee, reg no. 20/8. Informed consent to participate in the study was obtained from all participants prior to their involvement and all methods performed were in accordance with relevant guidelines and regulations.

The second set of data (group 4) used for this research project came from clients with T2D and their whānau, providing their view of their experiences with the delivery of diabetes programme in community settings by KM staff in contrast with other health care workers delivering similar programmes. It was important to use this data source as it gave a voice to Māori and Pacific individuals and their whānau as to their experience of being part of a unique Kaupapa Māori service which included KM (one of the three groups of health care workers interviewed in relation to the present research). This data source was deliberately thematically analysed utilising the Tangata Hourua Framework so the voices of Māori and Pacific clients and whānau could be authentically heard and to maintain a balance which is often not experienced between Māori and Pacific clients and their health professional (Savage et al., 2020). Once these themes were identified, the KM themes were contrasted with them, as they were the other partner in the delivery of the Kaupapa Māori service the clients and their whānau were part of. The views of the CHWs and dieticians were then contrasted to bring in the views of other health professionals delivering similar health services. A multicultural/multidisciplinary research team (more details provided below) analysed the data that looked at the views of the clients with T2D (and their whānau in some cases) in terms of their experiences with the KM staff delivery of diabetes programme in community settings, and other health care workers who delivered similar programmes.

The interviews from participants in group 4 provided the second set of data which was initially analysed as described previously (Tane et al., 2021); however, the raw data was re-analysed for this research project. The use of two sets of primary data in this study provided credible evidence as to how health workers viewed their work delivering preventative diabetes programmes to Māori and Pacific peoples in the community.

Interviews from participants in group 1, 2 and 3 were audio-recorded with the permission of the participants for focus group discussions (as described in Chapter 6).

The interviews were transcribed, then each transcript was read and re-read to ensure the researchers' familiarity with the whole data set. Initial impressions were recorded, such as exceptionally strong or contrasting views, in the transcript's margins. Interesting segments of text were then highlighted; these could range from only a few words to parts of sentences or whole paragraphs. These 'highlights' were then coded. The coded sections were interpreted in relation to the Tangata Hourua Framework, with conceptually related codes grouped together, confirmed, and then given a brief definition which formed the initial analytical framework. The results consisted of seven themes, each presented with a brief explanatory description of their meaning and examples from the transcripts under that code.

### *In practice*

Mila-Schaaf and Hudson's (2009) theoretical paper introduces the concept of the "negotiated space", a model developed by Linda Tuhiwai Smith, Maui Hudson and colleagues describing the interface between different worldviews and knowledge systems. This is primarily a conceptual space of intersection in-between different ways of knowing and meaning. Naepi (2015) skilfully discusses the methodological tensions that can be encountered when researching with both Māori and Pacific communities in Aotearoa New Zealand. These tensions include how and if Pacific can engage with Kaupapa Māori research methodologies; how can tino rangatiratanga be maintained when Pacific people use Kaupapa Māori research methodologies; how and if individual Pacific ethnicities can meaningfully engage with pan-Pacific research methodologies; navigating the use of two Indigenous research methodologies within one research project; and, finally, how to navigate the dynamics of Māori and Pacific when engaging with research participants who identify as both Māori and Pacific in Aotearoa New Zealand. The 'Give Way Rule' which was first developed by Airini et al. (2010) as a way to engage in cross-cultural research between Māori and Pasifika communities was utilised to navigate these two research methodologies in a way that is still respectful to both of them (Naepi, 2015). The Give Way Rule anticipates that there will be times when there may be different interpretations of the research. Where this happens the range of views are considered and noted, and then the decision on the cultural interpretation of the incident, story or event ‘gives way’ to the research advisor who holds the Māori or specific Pasifika expertise, depending on the ethnicity of the participant. Curtis et al. (2012) further explains the Give Way Rule as useful for cross-cultural research involving Māori participants, as “the rule acknowledges everyone’s contribution; however, the final decision involving cultural interpretation of the incidents would pass to a Māori project team member” (p. 15). This final decision should rest with Māori as tangata whenua.

## Strengths and limitations of this study

Combining Māori and Pacific data fails to acknowledge the unique perspectives of separate cultural groups represented in this study. However, this is consistent with our methodological approach as it maximises statistical power (to aid student success) and supports a structural critique of the effect of ‘society’ *on* ‘ancestry’ (Curtis et al., 2012). Using mixed research methodologies from quantitative, qualitative and cultural domains could be viewed as overly complex. Utilising these various methodologies gives this research project the scope, depth and Indigenous lens required to reflect the participants’ lived experiences of having an LTC such as T2D. As echoed in the literature, research involving Māori has been consistently hampered by the lack of outcome instruments that reflect issues important to Māori and conceived from a Māori perspective of health (M. Durie, 2004b). This is also mirrored for Pasifika peoples. Addressing ethnic inequities in the health research workforce is a strategic priority across the sector (Curtis & Reid, 2013), which is the aim of this project.

## Ethical considerations

From the start, the primary research provided all reasonable privacy and confidentiality for all participants partaking in this study. This also applied to any other data that was analysed. All participants, whether their data was gained via primary or secondary means, have not been and will not be identified via personal details. Participants of the focus groups were informed that the findings will be presented in future academic seminars and academic publications. All research data (soft or hard copy) will be kept in a secure and confidential place.

All participants were given a consent form (which was included in the ethics application) to assist in providing informed consent before commencing the focus groups and to confirm their approval to participate. Each form was explained before and after the focus groups, with particular emphasis on the participants' right to withdraw from the focus groups, and from the study itself, at any time.

# Prelude to Manuscript 2 (Chapter 5): Understanding the workforce that supports Māori and Pacific peoples with type 2 diabetes to achieve better health outcomes

This particular study aimed to understand the perspectives and characteristics of KM and other community-based, non-clinical health workers, with a focus on how they supported Māori and Pacific people living with T2D to achieve better outcomes. Although there is a large workforce of community-based, non-clinical workers in South Auckland delivering diabetes self-management education to Māori and Pacific people that include dietitians, CHWs and, more recently, KM, there is little information about these workers and their perspectives, challenges, effectiveness, and success in delivering these services. Three main themes emerged from interviews with these key workforce groups: whanaungatanga (actively building relationships), cultural safety (being mana enhancing) and cultural alignment (which included alignment with their own work environment and with the clients and whānau). Additionally, KM and CHWs noted that a multidisciplinary approach contributed to experiences of feeling un/valued in their roles, when compared with dietitians. Generally, all three groups agreed that their roles required good relationships with the people they were working with and an understanding of the contexts in which Māori and Pacific people with T2D lived. The recommendations from this chapter included focusing on areas that highlighted best practice in culturally responsive health provision, integrating cultural aspects into mainstream (current and future) health provision, increasing recruitment and retention of the Māori and Pacific diabetes workforce, and workforce development that supported Māori and Pacific people with T2D and their whānau to better health outcomes.

*Note*. The published version of this chapter can be found in Appendix K.

# Chapter 5: Understanding the workforce that supports Māori and Pacific peoples with type 2 diabetes to achieve better health outcomes.

## Background

Currently, 8% of the world's population have type 2 diabetes mellitus (T2D) (Campbell et al., 2019) with significant increases expected in developing countries (Catherine & Zinman, 2007; King et al., 2009; Young et al., 1992; P. Zimmet et al., 2001), and Indigenous people's populations due to a move away from health eating, active lifestyles, and controlled urbanization (Naqshbandi et al., 2008). Additionally, Indigenous peoples have higher rates of diabetes complications such as eye, kidney, vascular disease and significantly advanced rate of mortality compared to non-Indigenous people (Cundy & Drury, 2001) suggesting inequities in diabetes management to reduce the risk for such complications. Such is the case in in Aotearoa New Zealand (hereafter referred to as NZ) with Māori, the Indigenous people of NZ, and Pacific Peoples experiencing significantly higher rates for diabetes and its complications with increased exposure to the wider determinants for diabetes and reduced access to treatments (MOH, 2020).

Community-centred care plays an important role in addressing these inequities through the provision of lifestyle advice, diabetes and self-management education, and medication (MOH, 2015b). In NZ a range of workers, including general and nurse practitioners, nurses, community health workers and dietitians, provide these services. Further efforts to improve access to Māori and Pacific Peoples have tended to focus on outreach by conventional services such as nurse clinics (New Zealand Guidelines Group, 2011) and dietitians (Howatson et al., 2015). However, these may not be effective in achieving equitable outcomes for Māori and Pacific Peoples with T2D. Further, there is little information about what kind of workforce, or workforce development, is required to improve diabetes outcomes for Māori and Pacific Peoples.

In 2016 the National Hauora Coalition (NHC), a Māori-led primary health organisation, received funding to test Mana Tū, an innovative programme for Māori and Pacific Peoples with T2D. Mana Tū (which means ‘to stand with authority’), a whānau ora approach to long-term conditions, is a Māori-led, Kaupapa Māori approach to supporting people living with poorly controlled T2D, and their wider whānau (family members) (Harwood et al., 2018). Kai manaaki (KM) are skilled case managers who are embedded within a primary care service as core workforce; their case management approach supports diabetes self-management with Māori and Pacific Peoples living with poorly controlled T2D (Selak et al., 2018).

In this paper we present a study that aimed to better understand the KM workforce compared with other diabetes workers. The main objective of this research was to investigate and compare the experiences for the main groups of community-based, non-clinical workers currently supporting Māori and Pacific Peoples and their whānau (families) with diabetes in South Auckland NZ – KM, Community Health Workers and Dietitians. The ultimate objective is to use the findings to inform future strategies for Māori and Pacific health workforce development, to improve the delivery of services and diabetes outcomes for Māori and Pacific Peoples.

## Methods

A qualitative study was undertaken within the Tangata Hourua research framework, which was developed by members of this research team, with the aspiration to contribute positively to Māori and Pacific knowledge and wellbeing (Mullane, 2021). The Tangata Hourua aims to uphold the rights of Indigenous peoples to have their knowledge and culture embedded in research by drawing upon Kaupapa Māori and pan-Pacific values and methodologies. In addition, the Tangata Hourua framework addresses the growing trend of Māori and Pacific people to be researched together, increasing numbers of those who identify as both Māori and Pacific and lack of frameworks that culturally address and reflect these approaches and populations (Mullane, 2021).

Specifically, the study aimed to gain an understanding of the experiences for the main groups of community-based, non-clinical workers currently supporting Māori and Pacific Peoples and their whānau (families), rather than a broad representation of all health workers who deliver T2D programmes. Focus groups were determined to be the most appropriate method to obtain this information, presenting an excellent opportunity to focus on a particular issue, privileging the subjective knowledge and life experiences of respondents (Colucci, 2008). Further, focus group methods align with important Māori and Pacific principles including mana-enhancement (acknowledging the contribution and expertise of each participant), mahitahi (co-operation between participants and researchers) and manaakitanga (reciprocity) by providing a collective forum for participants to share their own experiences and contribute to improving the services that they know intimately (Pihama et al., 2002).

The focus groups were conducted with the three main workforce groups working in South Auckland, New Zealand. We chose this region for its ethnic profile, as 13% of the population identify as Māori, representing 24% of all Māori in New Zealand (Statistics New Zealand–Tatauranga Aotearoa, 2017), and 64% of New Zealand’s Pacific population currently lives in Auckland, representing 15% of the Auckland population (Statistics New Zealand–Tatauranga Aotearoa, 2017). The three main workforces, KM, community health workers (CHWs) and dietitians, participated in three separate focus groups. Potential participants were recruited by sending an invitation to organisations employing dietitians, CHWs and KM. Once we had received more than six responses from one of the three workforces, we arranged focus group discussions which lasted 60-70 minutes and took place at work sites and at times that suited participants. Food and refreshments were provided for each group discussion. Informed consent and confidentiality agreements were obtained from all participants at the start of each meeting, and demographic information was collected (see Table 5.1).

The guiding questions were:

1. What can you tell me about your role?
2. What do you think is important to consider in working with Māori and Pacific Peoples living with T2D?
3. How do you know if you are effective?

The primary researcher transcribed the recorded focus group discussions verbatim. Themes arising from the data were analysed and informed by the Tangata Hourua model's core Māori and Pacific values and concepts as a pou (pillar) to guide data analysis and theming. This is to ensure the authentic voices of Māori as Indigenous to New Zealand and the Pacific Peoples of Te Moana Nui a Kiwa (the Pacific Ocean) can be heard.

## Results

Table 5.1 presents the number and demographic profile of participants for each focus group. The focus groups reflected the fact that women make up the great majority of the New Zealand health care workforce (Ministry of Health, 2006), with all participants being female. Analysis of the data identified common themes: whakawhanaungatanga (actively building relationships), cultural safety and cultural alignment. However, there were also two key differences for KM and CHWs who (1) preferred a multi-disciplinary team (MDT) approach, and (2) described their experiences of feeling un/valued in their roles, when compared with dietitians. The themes are presented here.

**Table 5.1**

*Profile of Focus Groups*

| Focus Group | Number | Demographic Profile of the Focus Groups | |
|---|---|---|---|
| | | **Ethnicity – self-identified** | **Gender** |
| Kai Manaaki | Seven | Six Māori<br>One Indo-Fijian | All female |
| Community Health Workers | Eight | Two Māori<br>Two Pacific Peoples (Cook Island Māori and Samoan)<br>Four New Zealand European | All female |
| Dieticians | Seven | Three Pacific Peoples (Tongan and Cook Island Māori)<br>Four New Zealand European | All female |

## Key data themes

### *Culturally safe practice*

As one worker summarised, cultural safety in practice meant using authentic language, sharing decision-making and genuinely wanting the best for clients:

> *"I find the language that you use has to be simple … non-judgmental lens, taking that judgement out, because they are already feeling so crap … we don't use jargon from the clinic we use everyday language that we/they know. It's about creating a supportive environment for people to thrive in and that's also very important" – KM, Māori.*

Culturally safe practice required time. The concept of 'time for equity' allowed appointments to go as long as necessary to "*show you value them and their time*" when we "*just chill out listen, then they talk".* Consequently, clients told workers that they felt heard, and were more likely to *"actually, come up with the solution. You [health worker] don't have to do anything, don't make assumptions that we know any more than they do they know" – KM, Māori.*

Going further, time created the opportunity to shift power from the health worker to the client, as one KM acknowledged

> *"sometimes our appointments would go for an hour or so, 'cause they just needed that time to sort of warm up and then really cause get out what they were trying to say or wanted to know ... there's a valuing of their time and what they're talking about ... it's a two-way thing it's not that anyone is better but because we had the time just sit there and listen" – KM, Māori.*

Cultural concordance – knowing the context within which Māori and Pacific Peoples with T2D lived – was associated with better engagement and, subsequently, better outcomes. As one worker said, "*these are my brothers and sisters. I know what works and what doesn't."* Pacific workers were appreciated by the non-Pacific workers because:

> *"Being in the community and working with Pacific Peoples means language is important, so having a Pacific CHW makes such a difference with supporting us with language, but also with the engagement, she can engage with them in a way that I can't and that's good."*

However, there were major barriers to culturally safe practice. For example, there were inadequate culturally specific resources to work with: "*trying to find pictures [of healthy food options] that represent Māori or Pasifika people is really hard sometimes"* with dietitians commenting that most resources were *"very white"* (CHW, NZ European). This limited their ability to be culturally safe.

Another barrier was the lack of Māori and Pacific workers in the diabetes sector. Living in Māori and Pacific communities, Māori and Pacific workers were more likely to be

> *"Understanding [of] everybody's work timetable, kids' timetable, how are we going to put your food and medication around what you are already doing, and how can we adjust that for your whole family's benefit. Go out to [local food] markets and understand where they shop and what food they eat"* – CHW, NZ European.

All agreed that building Māori and Pacific workforce capacity in T2D management was important in order to reflect the population with the highest incidence of T2D. The dieticians, especially, strongly advocated that any workforce development should attract and retain more Māori and Pacific into health professional roles, which also supported the District Health Board goals of increasing more Māori and Pacific staff.

A key barrier was building cultural safety practice in the non- Māori, non-Pacific workforce. A Pākehā (European) worker described Pākehā feeling overwhelmed and almost paralysed in their practice with Māori and Pacific peoples, and seemed to direct the fault at clients who were less likely to listen or trust non-Māori, non-Pacific workers:

> *"I think potentially as a non-Māori and non-Pacific there's a barrier there right at the start in terms of (from client/whānau perspective) 'am I going to listen, am I going to understand the … mistrust with what's happened before' so how can we start to engage them?"* – Dietician, NZ European.

There was also reflection by these workers that their professional views on the importance of a cultural approach, and it being essential to integrate into practice to build genuine relationships and achieve better diabetes outcomes for clients and their whānau, had changed. With time and experience their ideas on what was good or bad practice had developed:

> *"quite a few years ago I would have thought that was like such bad practice [to spend time developing meaningful relationships rather than take a clinical history]. Now I think it's so important, because I don't need a diet history to be able to do my job and do it well. So yeah, just massive changes of thought and process around how you do things and then obviously that's that for another time at building relationships … sometimes I'll spend an entire session just chatting [in order to know each other].*

Such reflections by the European practitioners in our study suggest that there is hope in terms of the ability to transform practice from not only an individual but collective perspective. Every one of the New Zealand European dieticians spoke about their self-awareness of unconscious biases, with one dietician acknowledging that some clients did not want to work with them because they were Pākehā (New Zealand European), which forced them to reflect on awareness and responsibility of cultural safety. Importantly they acknowledged that when they did not practice in a culturally safe or appropriate way, they did not fulfil their job or provide an effective service.

### *Whakawhanaungatanga*

Whakawhanaungatanga (noun), an important cultural concept for Māori and Pacific peoples, emerged in the focus group discussions. It is formally defined as the "process of establishing relationships, relating well to others" (Moorfield, n.d.). For the focus group participants, it occurred between provider and clients, but required *"treating my patients like they are my sister, my brother, my whānau, which quickly establishes a relationship."*

Despite the word whānau (family) appearing in whakawhanaungatanga, it is more than just making family links – it supports people to establish and maintain personal and culturally relevant connections (Mead, 2016). KM in particular were most aware of its significance, with one stating *"Talking [with clients] about their families and about them first before diving into medical stuff ... build up a relationship, establishing a really good rapport, it's connection. ..."* As described here, it should happen early in the consultation and well before more traditional questioning/informing.

As a Pacific dietician acknowledged, whakawhanaungatanga came easily to the Māori and Pacific staff as it learnt over their lifetime, and reflects their collective cultural values and worldviews:

> *"We [Pacific Peoples] are more like a group rather than self ... [in] understanding them and also understand how the Pacific and Māori live and what mattered to them, fitting into their world view" – Dietitian, Pacific.*

As stated in one focus group "*Trust building is important and how we build trust to them and then they tell things to us; which allows clients to feel safe."* Whakawhanaungatanga provided a framework in which trust was built. As a result, there was better rapport, and the focus group participants said that clients were more open to taking on advice or interventions, resulting in better outcomes down the track.

For non- Māori, non-Pacific health workers *"Things like whakawhanaungatanga is vital, nobody ever writes about it, [yet] it's intrinsic to this community" –CHW, NZ European.*

They felt strongly that more could be done with their non-Māori, non-Pacific colleagues to highlight the importance of whakawhanaungatanga when working with Māori and Pacific Peoples and communities; and that it should be a core competency for all the participants' professional roles. Resources to guide its use and inform users on the quality of their whakawhanaungatanga in practice, were sought.

### *Culturally safe spaces*

Delivering services in traditional cultural settings such as marae (traditional meeting houses) for Māori and church for Pacific Peoples were effective for shifting power to clients, due to their experience of cultural affirmation. One CHW described the importance of traditional cultural settings or principles for services for Māori and Pacific Peoples:

> *"Being based on the whenua [land] of a marae is key to what we do and how we do it. I don't think we can say that any other clinic in the whole of Auckland has as higher Māori ethnicity as we do. [It's a space] where they can just be and interact with others and be heard" – CHW, Māori.*

Participants spoke of their own enjoyment when *"being on the marae and having the marae support, working within an organisation that is guided by kaupapa Māori values … it's a privilege" – KM, Māori.*

Importantly,

> *"the [marae-based] clinic works like a centre of the community, so people feel like they can pop in anytime, walk in clinics to see someone; There is also a spiritual component … the idea of community, the idea of inclusion" – CHW, Māori.*

It was considered an example of best practice, and other providers looked to them as a role model and a centre of excellence.

### *Multidisciplinary team approach*

The KM and CHWs both worked as part of a multidisciplinary teams (MDTs) and felt that this was best for managing T2D for Māori and Pacific Peoples. An MDT approach was strength-based in the sense that different members of the health team had different roles based on their strengths or expertise. They described the importance of working in partnership with non-health service providers, including social or housing services, which facilitated access to interventions that addressed the wider determinants for health, such as poverty. For example, one KM described supporting a client to study for and sit their driver's licence, which then enabled them to attend job interviews and finally attain employment.

The KM in particular felt that being part of a wider team meant that they contributed to the wider environment, and this had an impact on the health and wellbeing of the whole community. This influence occurred at multiple levels. For example, in the primary care clinics, they participated in team meetings, shared experiences and learnings about good practice, and advocated for clients and their whānau. One example was teaching clinicians (GPs and nurses) how they could do more to remove barriers to diabetes care. They knew where to locate or refer people for services and dismissed siloed care: *"I don't know anyone outside the marae because we are so used to using who [multiple health and social service workers] we have here" – KM, Māori.*

The KM and CHW spoke in depth about the importance of a multi-disciplinary approach to their role. In contrast a multidisciplinary approach was not mentioned by the Dieticians, this could be interpreted in several way, one of which is that they did not see it as important, but rather saw themselves in more of an independent practitioner role due to their status as a 'regulated health role' as opposed to the KM and CHW who are regarded as ‘non-regulated health roles’. The ethnic makeup of each of the group may have bearing on what was discussed.

### *Feeling un/valued*

CHWs described feeling marginalised by some diabetes services because they were not in formally recognised roles. KMs are also not regulated yet they had a very different experience. They described a workplace that provided regular supervision and opportunities for peer support, in addition to access to programmes that fulfilled self-determined professional development needs. They felt valued for their cultural and social determinant expertise, and that they were contributing beyond the service to people and their communities.

> *“Actually, we were always treated like professionals of our field”* – KM, Māori.
>
> *“even smaller ‘aha’ moment such as they are smiling, they brought their daughter or someone with them to learn some more, sometimes a community of people sitting there waiting for you”* – KM, Māori

Again, this was not discussed in the dietitians focus group.

## Discussion

This study aimed to understand the experiences of the KM, the workforce for Mana Tū, compared with other community-based, non-clinical health workers, and how they support Māori and Pacific Peoples living with T2D to achieve better outcomes. The analysis of focus group meetings identified similarities and differences between the perspectives of dietitians, CHWs and KM. All three groups agreed that their roles required good relationships with the people they were working with, and an understanding of the contexts in which Māori and Pacific Peoples with T2D lived. Further, there was an expectation that services were culturally safe (mana enhancing) and required more Māori and Pacific workers and resources. However, CHWs and KM reported a preference for working as part of an MDT and described their experiences as unregulated health workers.

All participants placed high value on whakawhanaungatanga, which for them meant making of culturally meaningful connections with others. They felt this aligned with Māori and Pacific worldviews and cultural values in terms of engaging the collective rather than just individuals. Their perspectives strongly indicated that culturally appropriate communication and relationship building, such as whakawhanaungatanga, encouraged individuals and their whānau to be more open, form relationships and feel safe to discuss health and lives. The concept of whakawhanaungatanga, despite being taught in health curricula continues to be challenged as to how this is integrated into health practice by Māori and non-Māori (Keelan, 2019; Moorfield, n.d.), and should not be regarded as a one-off event to connect with the patient and whānau but, rather, something ongoing that is built upon whilst retaining safe boundaries (Lacey et al., 2011).

In response to the unfair burden of health inequalities disproportionately affecting Māori and Pacific Peoples, there is an urgent need to create culturally safe environments (DeSouza, 2008). An Indigenous response to health service delivery is founded on culturally safe practices and concepts (Curtis et al., 2019; Tiatia, 2008). Achieving culturally safe (mana enhancing) practice requires an acknowledgement of one's own culture, and personal biases in order to understand better the culture of others who are different to oneself, with the intention to further recognise and respect the cultures of people, whānau and communities (Wepa, 2015). In New Zealand, a much-needed evolution from cultural competency to cultural safety is occurring and supports the historical call by Māori seeking a shift in power from traditionally being held by health professionals to shared-care, which is strongly based on their health status and rights with respect to the Treaty of Waitangi (Keelan, 2019; Laing & Pomare, 1994). The enablement of culturally responsive healthcare organisations and workforce development (Jongen et al., 2018) is a principal strategy towards the goal of improved cultural competence in health services and systems that better meet the needs of Māori and Pacific Peoples (Department of the Prime Minister and Cabinet, 2021). There are strong calls for this not only to permeate health organisations, but to be sector-wide, and to include social services, education, justice, and research, using systematic and sustainable approaches (Curtis et al., 2019). An accountable mechanism for providing culturally safe care, as defined by patients and their communities, measured through progress towards achieving health equity (Wepa, 2015) is something that may be addressed by the recently announced health reforms. These reforms will establish a Māori Health Authority, with the express aim of enhancing Māori rangatiratanga (governance) for Māori over hauora (health) with greater influence ensured throughout the entire health system (Laing & Pomare, 1994).

The non-regulated workforce is a priority area needing people whose knowledge and skills are required to respond to the culturally responsive models of care needed to meet the health demands of Māori and Pacific and support to better health outcomes (MOH, 2015b). 'Kaiāwhina' is the over-arching term used to describe non-regulated roles in the health and disability sector such as CHWs and KM with essential qualities of resilience, diversity, skill and commitment to support hauora (health) outcomes for all in Aotearoa New Zealand (50% being Māori) (MOH, 2021).

It is important to note that being non-clinical or non-regulated does imply a lack of knowledge or professionalism, as these roles bring the crucial cultural, local and interpersonal skills and expertise that are integral to building relationships and trust with the whānau and communities they work within. A study by Boulton et al. (2009) illustrated the restricted career advancement opportunities for Māori CHWs due to the lack of formal role recognition and limited training options. In contrast, the KM described the importance of feeling valued in their roles when they were members of the MDT, received professional development opportunities and had regular peer review. Research suggests that when physicians and non-physician professionals cohesively work together, improved patient outcomes, including better clinical outcome measures and higher patient satisfaction, occur (Grumbach & Bodenheimer, 2004). Considering the recent health reforms in NZ, including the development of a health charter and its focus on a relevant health workforce for communities (Department of the Prime Minister and Cabinet, 2021; New Zealand Government, 2021), there is scope to support CHWs and KM in the ways described here.

## Conclusion

This study into three distinct roles for health staff who work with Māori and Pacific with T2D is a first of its kind, with unique findings resulting. There was deliberate approach to undertake research that was strength-based, with a focus on the system rather than individual people and their behaviour. Importantly, as much as this was about the workers, the ultimate objective was on achieving excellent outcomes for Māori and Pacific Peoples. However, there are several limitations to this study. This is a small project with three focus groups in one area of NZ, and therefore may not apply to other settings or workforce groups. However, it does provide rich insights into the experiences of those people working with an important cohort and has the potential to inform workforce development strategies both here in NZ and for other Indigenous communities.

Indigenous comprehensive health and social programmes that achieve better diabetes outcomes for Māori and Pacific communities require the right workforce. Our study suggests that support for community-based, non-clinical workers to build meaningful and culturally safe relationships with communities, and contribute as valued team members, will improve diabetes outcomes.

## Glossary

| | |
|---|---|
| Aotearoa | New Zealand |
| Hauora | Health |
| Kai Manaaki | Health navigator |
| Kaiāwhina | Community health worker |
| Kaupapa Māori | Māori world view |
| Mahitahi | Co-operation between participants and researchers |
| Mana enhancing | Acknowledging the contribution and expertise of each participant |
| Mana Tū | Stand with authority |
| Māori | Indigenous people of New Zealand |
| Marae | Traditional meeting house of Māori |
| Rangatiratanga | Governance |
| Tangata Hourua | Combined people |
| Te Moana-nui-a-Kiwa | Indigenous Pacific peoples of the wider Pacific Ocean |
| Treaty of Waitangi | Founding document in New Zealand between Māori and the Crown |
| Whakapapa | Family/genealogy |
| Whakawhanaungatanga | Actively building relationships |
| Whānau | Family |
| Whenua | Land |

## Declarations

### *Ethics approval and consent to participate*

Ethics approval was obtained, on the 23rd of June 2020 by the Auckland University of Technology Ethics Committee. reg no. 20/8. Informed consent to participate in the study was obtained from all participants prior to their involvement and all methods performed were in accordance with relevant guidelines and regulations.

### *Consent for publication*

The authors declare that they consent to publish

### *Availability of data and materials*

All ethics and research guidelines used for this article are publicly available.

Under Indigenous data sovereignty this data is protected and permission to share transcripts was not sought.

### *Competing interests*

The authors declare that they have no competing interests.

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### *Authors Information*

Tania Mullane, Bachelor of Nursing Pacific, Whitireia Institute, DX Box: SX33459, Porirua, Wellington, New Zealand.

Matire Harwood, Department of General Practice and Primary Care, Faculty of Medical and Health Sciences, University of Auckland Private Bag 92019, Auckland Mail Centre, Auckland 1142, New Zealand

Isaac Warbrick, Taupua Waiora Research Centre, Faculty of Health and Environmental Sciences, Auckland University of Technology Private Bag 92006, Auckland 1142, New Zealand

Taria Tane, Department of General Practice and Primary Care, Faculty of Medical and Health Sciences, University of Auckland Private Bag 92019, Auckland Mail Centre, Auckland 1142, New Zealand

Anneka Anderson, Faculty of Medical and Health Sciences, Te Kupenga Hauora Māori, University of Auckland Private Bag 92019, Auckland Mail Centre, Auckland 1142, New Zealand

***Corresponding author***

Tania Mullane: Tania.Mullane@whitireia.ac.nz

***Authors' contributions***

TM and MH designed the study. TM undertook recruitment, interviewing and transcription. TM analysed the data and led the drafting of the manuscript with MH and IW contributing to these steps. All authors contributed to the writing and review of the manuscript and all authors have approved the final manuscript.

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# Prelude to Manuscript 3 (Chapter 6): Understanding the workforce for diabetes management with Māori and Pacific Peoples: Using Tangata Hourua as the Framework Method for analysis of qualitative research

The previous chapter investigated and outlined the key attributes of a workforce delivering diabetes preventative programmes in the community needed to better meet the needs of Māori and Pacific people with T2D. It also revealed the need for more studies that look into the experiences of health workers who work with Māori and Pacific in the communities they are from in regard to what they think is working. Therefore, on this basis, urgent attention to further research was recommended.

Chapter 6 consists of the second presentation of results from two data sources derived from focus groups with three different health workforces and semi-structured interviews with Māori and Pacific people with T2D, and their whānau. This research study sought to facilitate a Kaupapa Māori qualitative investigation of semi-structured interviews with Māori and Pacific patients, and their whānau, on their experiences with KM in contrast to other health care workers such as CHWs and dieticians. This chapter was deemed essential to give Māori and Pacific people with T2D and their whānau a voice around their experiences with a Kaupapa Māori diabetes preventative service via the KM. Their feedback showed that, on the whole, KM had the ability to connect with the community, become integrated into the medical practice they were associated with, and make a positive impact on those they worked with.

Multidisciplinary care planning fostered by the integration of the KM with the practice team allows for better patient experience and care delivery. The KM working together with the practice teams, particularly specialist and practice nurses, helps to creates an environment where the needs of the patient are prioritised.

Not only is this beneficial for patients, but it reinforces the role of the KM within the practice team, as the role works in tandem with existing professional roles to coordinate annual diabetes reviews and allows for the leveraging of home visits for other clinical components of care.

This particular component of the thesis identified a unique set of themes derived from the views of Māori and Pacific individuals and their whānau (as users of health services), and the providers of the health services (Kaupapa Māori and mainstream), which has not been published before.

Data from the two studies were collected and analysed separately to produce two sets of findings. Explicitly looking for disagreements between findings from different methods was an important part of this process – disagreement is not a sign that something is wrong with a study. Such an outcome may lead to a better understanding of the research question (Fielding, 2012). Additionally, combining the different methodologies not only enhances the robustness of the study but may also lead to conclusions that are different from those that would have been drawn through relying on one method alone.

# Chapter 6: Understanding the workforce for diabetes management with Māori and Pacific peoples: Using Tangata Hourua as the Framework Method for analysis of qualitative research

## Introduction

Type 2 diabetes is a common health condition in Aotearoa New Zealand (NZ). One in every four New Zealanders are pre-diabetic, with Māori, the Indigenous people of New Zealand, and Pacific people at significantly increased risk of developing T2D and its complications compared with other ethnic groups in NZ (Beaton et al., 2019; Harwood et al., 2018; Selak et al., 2018). Type 2 diabetes contributes substantially to the lower health status of Māori and Pacific people compared with NZ Europeans, with the gap predicted to increase with T2D incidence (PwC, 2021). Such disparities in T2D are unjust and inequitable, avoidable, and detrimental to society.

Given the inequities in diabetes incidence by ethnicity in NZ, there is an urgent need for diabetes management programmes specific to Māori and Pacific people, including appropriate workforce development (Harwood et al., 2018; Selak et al., 2018). The current lack of effective programmes is partly due to the complex health, social and economic nature of T2D (PwC, 2021). However, one potential area for intervention is the workforce, as the benefits of an appropriately trained and culturally safe workforce are now well-recognised with positive effects on treatment of diabetes in Indigenous populations reported (Beaton et al., 2019). The key features of such a workforce include an excellent understanding of the cultural beliefs, values and practices of intended recipients in addition to the personal, family and community context of living with diabetes (Harwood, et., 2018). With the current health system reforms underway in NZ, including a commitment to deliver on equity, active protection, partnership, tino rangatiratanga and options for Māori (Future of Health, 2021) it is timely to plan, train and employ a workforce that will deliver on these commitments.

Currently, diabetes care in NZ is provided by a wide range of people and services, recently, a new type of workforce – KM – was introduced in communities via a program called Mana Tū (which means 'to stand with authority'). This kaupapa Māori, Māori-led, whānau approach to supporting Māori and Pacific people living with poorly controlled T2D and their wider whānau (Harwood, 2018) delivered to almost 400 people across the North Island of NZ from 2017 to 2019. KM provide an intensive case management approach to diabetes self-management, supporting whānau (those with T2D diagnosis and their wider whānau) with poorly controlled T2D (defined as HbA1c >64mmol/mol) and addressing the wider social determinants of health (Harwood et al., 2018; Mullane, Harwood, Warbrick et al., 2022; Selak, 2018). A specific research framework, Tangata Hourua (Mullane, Harwood, & Warbrick, 2022), was then developed in response to health workforce-focussed questions pertaining to the delivery of Mana Tū compared with other community-based health services to Māori and Pacific people with T2D.

## Methodology

This study used qualitative methods underpinned by the Tangata Hourua Framework (Mullane, Harwood, & Warbrick, 2022), an Indigenous research framework, that draws upon kaupapa Māori principles as outlined by G. H. Smith (1997), as well as Pacific values identified as common amongst Pacific communities residing in Aotearoa (Ministry for Pacific Peoples [MPP], 2018). Some of these core Māori and Pacific values and beliefs as outlined in Table 6.2 below are instruments through which Māori and Pacific people experience and make sense of the world (Marsden, 1988; Ryan et al.,

2019) and have been used to thematically analyse the data collected for this research study. The Tangata Hourua framework has been used to accommodate, move with, and adapt to the ever-increasing complexities of the growing Māori and Pacific populations in Aotearoa (Mullane, Harwood, & Warbrick, 2022) whilst giving the potential to positively inform robust research with Māori and Pacific populations (Naepi, 2015). This potential to introduce a new, or at least adapted, way of doing research has multiple advantages including being respectful to Tangata Whenua; open to Pacific principles; address diverse Māori and Pacific identities; challenge the tensions in combining kaupapa Māori with Pacific methodologies; and advance knowledge, wellbeing, and outcomes for future generations of Māori and Pacific people. The Framework Method (Gale et al., 2013) was then used to apply the Tangata Hourua framework to the data obtained from the participant groups, enabling themes to be developed both inductively from the accounts (experiences and views) of research participants and deductively from an existing framework of themes. Key processes followed in using the Framework Method are outlined below.

## Methods

Two sets of raw data were analysed, themes generated then compared and contrasted using a qualitative approach combined approach of Tangata Hourua Framework (Mullane, Harwood, & Warbrick, 2022) *Kaupapa Māori and Pacific values* and the Framework Method (Gale, 2013) *Western methodology*. This research resulted in a unique set of themes derived from the views of Māori and Pacific individuals and whānau (as users of health services) with the providers of the health services (kaupapa Māori and mainstream) which have not been published before.

A focus group method was chosen to promote individual and collective wellbeing. Key components in the protocol and process at the focus groups included:

- Mihi by the researcher to initially greet and engagement participants (Lacey et al., 2011).
- Opening with a karakia, sharing genealogical, historical, cultural, or socio-political links as a way of affirming a sense of familiarity and connectedness.
- Informed consent forms were distributed and signed by participants.
- Locations were accessible, appropriate, and private.
- Whakawhanaungatanga occurred at the beginning of the session to create a meaningful and reciprocal engagement, to form a relationship that is sustained and maintained (Lacey et al., 2011).
- Discussions, recorded at each meeting, were based around the following guided questions:
    1. What can you tell me about your role?
    2. What do you think is important to consider in working with Māori and Pacific Peoples living with T2D?
    3. How do you know if you are effective?

On request, transcripts were sent to participants, who were invited to contact the author to discuss or request any changes to their interview statements. The transcripts were then reviewed by research team members (MH and IW) discussed with the author in research hui, language and subjective positioning of the author was explored from the perspectives of the research team and were used to guide subsequent analysis.

## Participants

The views of four stakeholder groups were sought in total. The first three groups were via focus group discussion: 1. KM, 2. CHW, and 3. Dieticians – all of whom delivered T2D programmes to Māori and Pacific people in the community and were asked their views on how best to meet the needs of Māori and Pacific people with T2D in the community. The primary data from groups 1, 2 and 3 were collected by the primary researcher via focus groups. Ethics approval for data collected from groups 1-3 was obtained on June 23, 2020, by the Auckland University of Technology Ethics Committee, reg no. 20/8.

Group 4 group views were sought via interviews and consisted of Māori and Pacific people with T2D, and their whānau, who were asked about their involvement of Mana Tū services and experiences working alongside a KM. The primary data from group 4 were collected by another researcher via interviews and are connected to the broader research programme that this study comes under (Harwood et al., 2018; Selak et al., 2018). Ethics approval for group 4 of the research was obtained from the New Zealand Health & Disability Committee (reference: 17/NTB/249/AM02).

**Table 6.1**

*Groups and Ethnicity*

| Group | Participants | Number and ethnicity |
|---|---|---|
| 1. | KM – Mana Tū health workers | 5 Māori, 1 Indo-Fijian |
| 2. | CHWs working in communities with mostly Māori and Pacific people with T2D | 2 Māori, 2 Pacific people (Cook Island Māori and Samoan), 4 NZ European |
| 3. | Dieticians working in the same communities with mostly Māori and Pacific people with T2D | 3 Pacific people (Tongan and Cook Island Māori), 4 NZ European |
| 4. | Māori and Pacific people with poorly controlled T2D (defined as HbA1c >65) enrolled in the Mana Tū programme, and whānau | 32 Māori and Pacific people<br>10 whānau members |

## Data analysis

The primary data from groups 1-3 provided credible evidence as to how health workers viewed their work delivering preventative diabetes programmes to Māori and Pacific people in the community.

The primary data from group 4 gave a voice to Māori and Pacific individuals and their whānau as to their experience of being part of a unique kaupapa Māori service which included KM (one of the three groups of health care workers interviewed). The interviews with participants from group 4 had been analysed previously (Tane et al., 2021) with the raw data re-analysed for the current research project.

Each transcript for groups 1-4, were then read and re-read to ensure familiarity by researchers with the whole data set. Interesting segments of text were then highlighted – these could range from only a few words to parts of sentences or whole paragraphs – and were coded and interpreted in terms of their relation to the Tangata Hourua Framework, with conceptually related codes grouped together, confirmed, and then given a brief definition which formed the initial analytical framework.

**Table 6.2**
*Tangata Hourua Framework core Kaupapa Māori and Pacific values and themes*

| Core Kaupapa Māori Principles | Definition | Core Pacific Principles | Theme |
|---|---|---|---|
| 1. tino rangatiratanga | self-determination | respect | leadership |
| 2. ako Māori | culturally preferred pedagogy | connectedness and relationships between the individual, family, and community | location of services |
| 3. whanaungatanga | | reciprocal relationships<br>caring and reciprocity | building of relationships |
| 4. kaupapa | shared vision | connectedness/collectivism<br>communitarian | multi-disciplinary approach |
| 5. whakapapa | genealogy | unity, holism | importance of being ‘brown’ |
| 6. te reo | Māori language | culture/language, customs, and protocols | informed |
| 7. tikanga | Current | love/humility/caring | doing right/being right |

## Research team

The immediate research team at the time of data collection and analysis was comprised of the lead investigator, workforce researcher and PhD candidate (TM – Fijian/Tongan woman), lead Mana Tū researcher (MH – wahine Māori), research manager and programme manager (TT – wahine Māori), and other members of the wider Mana Tū study including other supervisors (IW – tāne Māori, VS – NZ European woman, AA – wahine Māori).

## Results

A multi-cultural/multi-disciplinary research team (details above) then analysed the data (group 4) that looked at the views of clients with T2D (and their whānau in some cases) on their experiences with KM staff delivery of diabetes programme in community settings, which was then aligned to the views of the KM (group 1), then contrasted with the views of other health care workers (group 2 & 3) who delivered similar programmes. Of the collective data themed using the Tangata Hourua, seven themes were identified as outlined in Table 6.2, although the order of importance differed, as presented below.

1. Whanaungatanga, reciprocal relationships
2. Ako Māori, reciprocal teaching and learning
3. Kaupapa, shared vision
4. Whakapapa, connections over time and space
5. Tino rangatiratanga, leadership
6. Tikanga, doing and being right
7. Te reo, informed

### *1. Whanaungatanga, reciprocal relationships*

Whanaungatanga is significant and can be described as knowing one’s relationships to people and land, with relationships through blood ties and kinship often recited by elders, and relationships with other iwi (tribes) and peoples across Polynesia (Mane, 2009). All participants in this study acknowledged that whanaungatanga was an essential component to health user-service relationship. Clients also noted that this culturally based approach to relationships ensured inclusivity of extended whānau, so diabetes management become a whānau affair: *“I have been a frequent user of the service being diabetic, plus also with my family … [which meant the service] knows us, knows our conditions … has that relationship with us, which I think is really important for Māori.” – Tane, Male*

The building and maintaining of relationships require a sense of reciprocity, accountability, and mutual respect (L. T. Smith, 1999; Tomlins-Jahnke, 2008). Implicit in these relationships are clear roles and responsibilities (Mane, 2009) which KM also said supported them to establish a strong relationship, build rapport and consider things from another’s perspective, building their own knowledge and expertise. For one Māori KM whanaungatanga meant

*[taking] the time to see it from their eyes, helping them to address things that are uncertain or correct any information that’s not quite accurate, making a significant difference, [which included] valuing of their time and what they're talking about.*

CHW and dietician participants also agreed that whanaungatanga was essential to meaningful sustainable interactions. Two Pacific dieticians felt that the connection with the family occurred in steps: *“build up a relationship, establishing a really good rapport… build trust to them.”* However, they also felt that this was more challenging in their roles as they were restricted by limited session times and funding. Clients reported similar experiences with non-Mana Tū staff: *“Because no one has ever really worked with me, with my diabetes, ever. I just used to stay home and just do nothing.”* - *Hine, Female*

### *2. Ako Māori, reciprocal teaching and learning*

Ako acknowledges teaching and learning practices that are inherent and unique to Māori, as well as practices that may not be traditionally derived but are preferred by Māori (G. H. Smith, 1997), grounded in the concept of *reciprocity*, where everyone is empowered to learn with and from each other (MOE, 2022).

Participants suggested that the location of diabetes management was critical to ‘ako’ through the delivery of services in traditional cultural settings such as marae for Māori and churches for Pacific people as an effective shifting of power to clients, due to their experience of cultural affirmation (Mullane, Harwood, Warbrick et al., 2022). Marae-based sessions received positive comments including this from Mere: *“Well from day one for me the marae was very welcoming you know. You sense, you feel a sense of aroha.”* A KM also saw the benefits of clients feeling empowered: *“Being based on the whenua [land] of a marae is key to what we do and how we do it. ... Being on the marae and having the marae support, working within an organisation that is guided by kaupapa Māori values.”* It also provided a place where wider whānau felt supported to be engaged: *“Having whānau and family there and involved because Māori and Pacific work is more whānau-based and collaborative ... connecting with the whole family”- Hone – Male.*

Non-Māori and Pacific participants also recognised the importance of being in their clients’ comfort-zones and getting out of their own in order to be effective, with a NZ European CHW commenting: *“My feeling is we work in the community, we are based* *in Otara, people see us out there, we are not part of the hospital, we are in a place for people to come to and make it more comfortable."*

### *3. Kaupapa, shared vision*

Kaupapa or shared vision was reflected by the health workers who worked in multidisciplinary teams (MDTs) felt it enriched their role to best work with Māori and Pacific people with T2D as it was strength-based – that is, different members of the health team had different roles based on their strengths or expertise (Mullane, Harwood, Warbrick et al., 2022). This was strongly supported by clients: *"So, must be about 9 years. 8 or 9 years I've been with [clinic name]. But I personally wouldn't change anything about it ... everybody's incorporated." – Eru, Male.*

A Māori KM noted that the MDT approach supported *"the capacity of us to be the link between the clinicians and the whānau, cos a lot of the time the whānau was unable to be honest with the clinician for fear of judgment."* A strength was that it allowed the same message but in different ways. They also commented that having the 'experts' working together as a collective would improve clients' knowledge, their wellbeing and also efficiencies.

### *4. Whakapapa, connections over time and space*

For Māori and Pacific peoples, whakapapa or genealogy is an important cultural practice that links people and specific places *together* (MPP, 2018; L. T. Smith, 1999). Participants spoke of the importance of making links, suggesting that having more Māori and Pacific health workers would improve healthcare and importantly outcomes: *"having a Māori [diabetes worker] is important for me. Coz' they kind of understand the cultural element of things, and also the spiritual aspect of health ... so you know having those common beliefs." – Naki, Male*. This included common Māori values *"That caring is aroha and I always say manaakitanga." – Mere, Female***.** When these core Māori values were not present, as experienced with non-Māori and non-Pacific health professionals, their diabetes was often not controlled: *"Because no one has ever really worked with me, with my diabetes, ever. I just used to stay home and just do nothing." – Hone, Male.*

KM spent a lot of time initially remedying past hurts, undertaking significant groundwork with clients who had had negative experiences with other health professionals:

> *basically, people are getting told off all the time … hence people won't pitch up to some of those appointments anymore … they think we are going to judge them and tell them what to do.*

All health workforce participants advocated for building the Māori and Pacific workforce, which they felt would best meet the needs of the clients and whānau with one European Dietitian:

> *Greater recruitment of Māori and Pacific into health professional roles is really important… the reality is we don't have enough Pacific or Māori in the dieticians.*

One European CHW suggested

> *having someone who is Māori or Pasifika working in the team is essential. Having a PI (Pacific person) involved in the delivery of the programme…from that ethnic background…she can engage with them in a way that I can't and that's good.*

A European dietician was acutely aware of their own conscious/unconscious biases:

> *to put it bluntly [it's] a very white health system … that a whānau approach is definitely not included in the way we deliver our services."*

### *5. Tino rangatiratanga, leadership*

Tino rangatiratanga has been defined as self-determination, sovereignty, independence, and autonomy and enables positive wellbeing, of individuals and communities within the hauora/health space, including active protection, partnership, equity and options (Te One & Clifford, 2021). This aligned with participants' views about the diabetes workforce providing choices: *"She's been really helpful in regard to that knowledge and gaining different options." - Tangi, Female.*

Having good evidence on the effectiveness of various programmes supported workers in decision-making, with one KM taking pride in the results of the data at both population and individual levels: *"Mana Tū was a very successful programme, and the research shows that we did have major successes and a few people and a few of them have sustained the changes."* They were able to recognise and articulate the role they played in achieving good outcomes: *"offering appropriate follow up, appropriate cultural support and understanding what they are saying, all those things … we are loving them by removing barriers."*

KM felt that leadership development, which was formally built into their professional training and development (PD), empowered, and inspired them to want to do their best for clients: *"they helped us to develop to the strengths of ourselves and recognise that when we needed some PD we would upskill, yeah, and also to cater to our communities that we were working with."*

### *6. Tikanga, doing and being right*

clients were clear the role of tikanga had in their diabetes management with Māori and Pacific whānau requires love and compassion, humility, and a sense of humour. Such an approach has wide-reaching benefits including across time, as one participant said of Mana Tū:

> *I've found it beneficial. I've found it nurturing. I've found it learning. I've found that I've been given more options, so instead of being crucified, of being judged, I've been taught – Wiremu, Male*

The KM had also had clear and definite views of how they were making a difference: *"Connectivity, that they were happy to see me, and they wanted to see me … they were eager to try new things they were excited. Just that they showed up appointment they came."* Some of the CHWs and dieticians also knew when they were making a connection: *"aha moments … they are smiling today, … they brought their daughter or someone with them to learn some more with them."*

It was noted by clients and their whānau that interactions could be different when they were dealing with non-Māori:

> *there was another health nurse that I use to meet with, who I didn't get on with – she was not Māori and because of certain words that she said [with me] that I didn't agree with, and we started arguing and I was like, wow, that should not happen.*

There was acute awareness from clients and their whānau as to who they thought best met their needs that led to better engagement with the service provided, as outlined in the positive and negative experiences above. To complement these views, European health workers reflected that they were not the most appropriate person to deliver these services and acknowledged the choice Māori and Pacific clients made when deciding not to engage with them.

### *7. Te Reo, informed*

Providing a strong foundation for clients' sense of wellbeing and belonging were Pacific languages and culture, which facilitated healthy relationships within families and communities (MPP, 2018). Clients and whānau noticed when the right language and approaches were used, explained and understood: *"She's always come away being clear and understanding, because their kōrero is more important to her wairua as oppose to me and my sister trying to sort of awhi and take care of her." Mere, Female.*

KM also agreed that appropriate communication and language was important for fitting with the intended Māori and Pacific audience, which they felt was about *"knowing their language, respecting the culturally differences, respecting them."* One KM noted that they ensured language best worked when it was: *"simple …[a] non-judgmental lens, taking that judgement out ... we don't use jargon from the clinic, we use everyday language that we/they know."* Ensuring a strength-based approach meant their approach was to: *"just chill out listen … because a lot of times when they talk, they actually come up with the solution, you don't have to do anything, don't make assumptions that we know any more than they do they know."*

A Pacific CHW's approach to groups used the idea that the curriculum needed to educate and support clients to take ownership of their own health and environment, which included: *"breakfast clubs, student health councils, after school sports, dance workshops, workshops, meetings with key stakeholders, a place for the kids to eat that's sheltered."* Group education was also an integral approach of two Pacific Island dieticians, but came with it challenges:

> *the logistics of how to get a group of people together … it's particularly to Pacific patients I mean do you try to get a Pan Pacific group together and deliver it in English or do you get a Tongan group … or a Samoan group together.*

A European dietician connected with the importance of *"let[ting] them talk [and] tell the[ir] story then you will pick up history"* and in doing so had amended her practice to allow this. Overall, there was recognition, for best results from clients and health care participants, of the importance of the resources being contextualised to the culture the individual identified with. Again, clients were clear about how they felt when communication was not clear:

> *I didn't fully understand it and it wasn't explained properly*. - *Rangi, Male.*

## Discussion

A critical qualitative kaupapa Māori and Pacific investigation into the experiences of people enrolled in Mana Tū, and their whānau, and their experiences with KM – and contrasted to other CHW – has yielded new and rich knowledge.

The findings aligned with some of the core values and principles of the Tangata Hourua Research Framework (Mullane, et., 2022). For participants in this research, whanaungatanga or reciprocal relationships enabled an inclusivity to their extended whānau. Ako Māori or 'our way of being' was contextualised by whānau as to the location of diabetes management services, with recommendations for non-clinical, traditional cultural settings such as marae for Māori and churches for Pacific people. A kaupapa or shared vision was more likely in MDTs which were strength-based in the sense that different members of the health team had different roles based on their strengths or expertise (Mullane, Harwood, Warbrick et al., 2022). Whakapapa or connections occurred when clients saw 'people like me', as they best met their cultural needs.

Tino rangatiratanga or leadership for clients meant being able to make choices from a range of options on what would best suit them at that time, for health workers it meant support and validation of a Māori for Māori, feeling trusted and part of the organisation that offered professional development programmes that were kaupapa Māori and

Pacific-led. Tikanga for the clients was about the right way of doing things, which meant that being tika/correct in diabetes management with Māori and Pacific whānau requires love and compassion, humility, and a sense of humour. The use of te reo or the appropriate language, can inform and enable a strong foundation for connections between relationship, language and identity, which increased personal mana for Māori and a sense of wellbeing and belonging that facilitated healthy relationships within families and communities for Pacific.

For the clients, their whānau and KM involved in Mana Tū, there was a strong connection with service that was culturally responsive, both as the receiver and giver, which aligned to their own cultural values. CHWs and dietitians also agreed that a culturally responsive service was appropriate, which meant, among other things, the inclusion of more Māori and Pacific people to deliver the service in the community. The multidisciplinary approach was not a key feature brought up by the dieticians, but was heavily endorsed by the clients, whānau, KM and CHWs as an essential component of positive experiences. Non-clinical approaches and environments were seen as an essential component, even by the dieticians who, traditionally, are based in a hospital setting.

In summary, clients and whānau appreciated and better engaged with health care workers who: could culturally meet their needs; spoke their language or spoke in non-clinical terms that could be understood; understood who they were and the communities they came from; provided services that were adaptable and non-clinical in their approach, such as where they were delivered; and provided a multi-disciplinary approach. The clients and their whānau highlighted how a multidisciplinary approach engaged them with their health worker and the services they provided. Furthermore, a multidisciplinary approach and collaboration between agencies and/or between lay and professional groups was seen as essential to improving services by all those who worked in this model of delivery. Other aspects that positively contributed to the client/whānau experience were the face-to-face interaction, with flexibility as to where the services were provided. Special mention was given to marae-based services, and the mixture of individual visits as well as groups, which they felt created a *whānau environment*. Building the feeling of tino rangatiratanga was important for the KM who worked under the Mana Tū umbrella which aligned to the government's priorities for health research and service development that contribute to Māori health and eliminates health inequities (Manatū Hauora, 2022). This feeling was also spoken about by the clients and their whānau as something they were able to experience in their relationship with diabetes and their ability to control their destiny.

## Strengths and limitations

As with all research, there are both limitations and strengths in this analysis. Firstly, given the nature of qualitative research as integrally subjective (Harris et al., 2006), this study has presented an account from clients and their whānau who were engaged with the Mana Tū programme about their experiences with KM and then contrasted that with the experience of other health professionals; therefore, the findings are not generalisable to others. As the author's interpretation and subsequent analysis of clients and whānau narratives is subjective (Braun & Clarke, 2006), peer and supervisor review were sought to ensure that the analysis was fair and balanced.

## Conclusion

There is an urgent need for health services to acknowledge the challenges that many people face by responding with better integrated, seamless services that care for those who need it most (Ryan et al., 2019). Achieving equitable outcomes for Māori, Pacific peoples and people living in communities with T2D demands a health care that is specifically designed to achieve health equity. Optimistically, the recent health reforms aim to provide an opportunity to create a transformative, equitable, accessible, cohesive, and people-centred health care system that focuses on working in partnership with Māori and honouring Te Tiriti o Waitangi and improving the wellbeing of all New Zealanders (Manatū Hauora, 2022). This reset in the health system should not be viewed as starting from scratch, as the collective pool of knowledge amassed by tangata whenua and by people from Moana-nui-a-Kiwa has a high-value understanding. The understanding around hauora, wellbeing, as holistic, with a focus on whānau, hapū, iwi and community wellbeing for all, not just a few, should be seen as a chance to centre Indigenous knowledge and leadership in a way that is focused on strength-based solutions to move Māori and Pacific health from the margins to the centre.

## Consent for publication

The authors declare that they consent to publish.

## Availability of data and materials

All ethics and research guidelines used for this article are publicly available.

Under Indigenous data sovereignty this data is protected and permission to share transcripts was not sought.

## Competing interests

The authors declare that they have no competing interests.

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## Authors' contributions

Primary data (group 1, 2 and 3): TM and MH designed the study. TM undertook recruitment, interviewing and transcription. TM analysed the data and led the drafting of the manuscript with MH and IW contributing to these steps. All authors contributed to the writing and review of the manuscript and all authors have approved the final manuscript.

Primary data (group 4): Data collected by TT: (Tane et al., 2021). TM analysed the data and led the drafting of the manuscript with MH and IW contributing to these steps.

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## Glossary

| | |
|---|---|
| ako Māori | culturally preferred pedagogy |
| aroha | affection, sympathy |
| awhi | embrace |
| hui | gathering, meeting |
| iwi | tribe |
| Kai Manaaki | Skilled case managers delivering the Mana Tū programme |
| karakia | prayer |
| kaupapa Māori | Māori values and knowledge |
| kawa | protocol, ceremony |

| | |
|---|---|
| kōrero | conversation |
| mahitahi | co-operation of researcher and participant |
| mana | wellbeing, control |
| Mana Tū | to stand with authority |
| manaakitanga | hospitality, kindness |
| marae | traditional meeting house |
| maramatanga | understanding |
| mauri | life force |
| mihi | greet |
| Moana-nui-a-Kiwa | Pacific Ocean |
| moko | grandchild |
| tāne | man |
| Tangata Hourua Framework | Indigenous research framework |
| tangata whenua | Indigenous people |
| tangi | funeral |
| te reo | Māori language |
| Te Tiriti o Waitangi | The Treaty of Waitangi |
| tika | correct |
| tikanga | customs, meanings, practices; right or correct way to do things |
| tino rangatiratanga | self-determination |
| wahine | woman |

| | |
|---|---|
| waiata | song |
| wairua | spirit, soul |
| whakairo | carving |
| whakapapa | genealogy and lineage |
| whakawhanaungatanga | process of establishing relationships |
| whānau | family members |
| whānau ora | family health |
| whanaungatanga | connection or reciprocal relationships |

# Chapter 7: Discussion and recommendations

## Introduction

In this final chapter of the thesis, I first remind readers of the background for the research, and its aims. I then present a summary of each chapter, the implications and outputs, recommendations, and the strengths and limitations. My own personal reflections on the thesis journey are shared before the concluding statements.

## Research background

The aim of the research reported in this thesis was to the understand the workforce working with Māori and Pacific people who have T2D – their development, accessibility, experiences, effectiveness, and views on how to achieve good outcomes.

This research is particularly timely, given the recent (2021) health system reforms. The New Zealand health system has significant and persistent issues in delivering equity and consistency for all (New Zealand Government, 2021). For many Māori and Pacific people, the existing public health system is experienced as hostile and alienating, and there is limited data on how equitably interventions to address these risk factors and conditions are being provided by the health sector (Manatū Hauora, 2018; Ryan et al., 2019). Those currently ‘missing out’ in terms of receiving quality T2D care that achieves equitable outcomes are Māori, Pacific peoples, people living in communities with markers of socio-economic disadvantage, and people with pre-diabetes (MOH, 2015a). The achievement of health equity requires a primary health care system that is committed to mitigating rather than extending diabetes inequities (Reid et al., 2017).

Evidence suggests that health interventions designed specifically for those ‘currently missing out’ will ultimately achieve health gains and equitable outcomes for all

(Sheridan et al., 2011). Those designing health interventions with Māori and Pacific people in mind need to understand the retention of cultural approaches reflecting, for example, the importance of family, culture, and health (Healthier Lives He Oranga Hauora, 2022), and the spiritual holistic worldview with its connection to lands, people, and other living things (Barton & Wilson, 2008), with a view to increasing Indigenous control.

The research undertaken for this thesis aimed to address these issues in several ways. The first was seeking the view of health workers who delivered preventative diabetes programmes to Māori and Pacific with T2D, and their whānau, in the community. The second was allowing Māori and Pacific people to share their experiences of T2D and their experiences of being part of a Kaupapa Māori diabetes prevention programme and the KM who worked with them. Including their voices in this thesis has given the best opportunity to inform ideas and practices that could be realistically applied to the question of how preventative diabetes programmes can better focus on the primary aim of improving outcomes and experiences for Māori and Pacific people.

## Thesis aims

The specific aims of the thesis were to:

1. Investigate the roles of various health care workers who work with Māori and Pacific people in the community.

2. Investigate how these health care workers offer their health services when working with Māori and Pacific people in the community.

3. Explore the experiences of Māori and Pacific people, and their whānau, of receiving diabetes prevention health services from health care workers (KM) from a Māori perspective.

4. Contrast the views of Māori and Pacific people, and their whanau, on their experience with their KM in comparison with other health workers (CHW and dieticians)
5. Develop a set of recommendations for workforce development aimed at improving health care services, access, experiences and outcomes journey for Māori and Pacific people.

## Summary of chapters

### *Chapter 1: Introduction*

Chapter 1 presented the context of health inequity and the burden of T2D and its sequelae for Māori and Pacific peoples, which are negatively impacting current and future health and wellness and socio-economic outcomes. Current traditional health provision offered through the public health system in Aotearoa is siloed and has had minimal impact in pro-actively addressing those with diabetes or pre-diabetic conditions. However, there is little evidence from monitoring the equitable provision of diabetes programmes and the role this intervention has in eliminating diabetes health inequities for Māori and Pacific peoples. Therefore, the research reported in this thesis sought to produce evidence surrounding Māori and Pacific experiences of the health services they received and to investigate the role health care workers have in eradicating Māori and Pacific people's health inequities.

### *Chapter 2: Background*

Chapter 2 presented a systematic review of the literature on: Indigenous people and knowledge; Indigenous rights; Māori and Pacific people in the context of Aotearoa; the effects of colonisation on Indigenous people, and Māori and Pacific people in particular, including health outcomes, the importance of culture and identity and its relationship to health and wellbeing; the changing understanding diabetes and diabetes in the context of Māori and Pacific peoples; and the importance of culturally appropriate health workforces and approaches to address Māori and Pacific people with diabetes.

The literature review revealed:

- There are ethnic disparities of incidence of poor health and care of diabetes of Indigenous Māori and Pacific peoples.
- Diabetes is experienced at a higher rate by Indigenous people globally. The reasons for this have been linked to deviation from traditional lifestyles and diet.
- This higher rate is also experienced by Māori and Pacific peoples in Aotearoa, resulting in poorer health and outcomes.
- The current Māori and Pacific populations are extremely youthful, growing at a faster rate and becoming more multi-ethnic compared to any other population groups in Aotearoa.
- Identity and culture are explicitly linked in views of health and wellbeing, a situation which is complicated by the growing number of Māori and Pacific people who have multiple ethnicities.
- Currently health provision for Māori and Pacific people is not improving health outcomes, as it is dominated by mainstream provision which does not take into account the importance of cultural competence in the workforce and in the services it delivers.
- A focus on supporting a culturally safer and more responsive workforce is urgently required to enable the delivery of culturally appropriate health services and a workforce that better supports and meets the needs of Māori and Pacific people’s health outcomes.

The studies retrieved and analysed in this review highlighted the urgent need for more meaningful research dedicated to investigating the health inequities of Māori and Pacific people with diabetes, and the most appropriate why to support them in achieving better health outcomes.

## *Chapter 3: Tangata Hourua: A framework drawing from Kaupapa Māori and Pacific research methodologies*

Tangata Hourua can accommodate, move with, and adapt to the ever-increasing complexities of the growing Māori and Pacific populations in Aotearoa. Additionally, this model can be utilised within a variety of domains, including health, education, social services, justice, and the public and private sectors. Utilisation would require a genuine desire for a combined cultural approach that engages Māori and Pacific people in research that positively contributes to knowledge and wellbeing. A combined Māori and Pacific methodology has the potential to inform robust research into Māori and Pacific inequalities across a variety of sectors and, ideally, help others to challenge these inequalities going forward (Carter et al., 2009; Dorling, 2019).

Ultimately, combining methodologies Indigenous to Aotearoa with those who have whakapapa connection was not an easy decision. There is a ‘fear of getting it wrong’ (A. Barnes, 2013) which can lead to ‘paralysis’ (Tolich, 2002). However, as argued above, there were many reasons to continue the journey of research methodology development in Aotearoa, and introduce a new or, at least, adapted way of research that was both respectful to tangata whenua and open to Pacific principles and diverse Māori and Pacific identities. This newly developed research framework for Māori and Pacific people in Aotearoa has the potential to build on Māori and Pacific worldviews, address the methodological tensions in combining Kaupapa Māori with Pacific methodologies, and, ultimately, advance knowledge and/or wellbeing for future generations of Māori and/or Pacific people.

### *Chapter 4: Methods*

As all research enquiry is shaped by an epistemology that that then directs the questions to be asked, the methods used for data collection, the analytical approach and the relationship between the researcher and stakeholders, qualitative research provided an opportunity where quantitative research did not. A qualitative approach was deemed the most appropriate approach to meet the objectives of the study and was therefore the theoretical perspective or stance taken by the researcher for this study. As a result, the most appropriate methodology to address the research questions in a way that was scientifically robust, culturally safe, and feasible was a qualitative approach combining Kaupapa Māori and Pacific values, in the form of Tangata Hourua Framework. This framework attempts to address the methodological tensions encountered when researching both Māori and Pacific communities in Aotearoa New Zealand, and questions such as: How do Pacific peoples engage with Kaupapa Māori research methodologies? How can tino rangatiratanga can be maintained when Pacific use Kaupapa Māori research methodologies? How can individual Pacific ethnicities be meaningfully engaged through pan-Pacific research methodologies? Is it possible to navigate the use of two Indigenous research methodologies within one research project? And, finally, it was essential to consider the complex task of how to engage outside of the dual engagement of Māori and Pacific peoples as research participants, as well as with those who identify as both Māori and Pacific.

Utilising these methods gave this research project the scope, depth and Indigenous lens required to reflect the participants' lived experiences of having a LTC such as T2D.

### ***Chapter 5: Understanding the workforce that supports Māori and Pacific peoples with type 2 diabetes to achieve better health outcomes***

This research explored the role of KM working with Māori and Pacific people living with T2D – their competencies, how they differed from traditional diabetes health roles, such as dietitians, and their impact on health and other outcomes. Māori and Pacific whānau (family), in addition to Māori and Pacific KM and other health care workers, participated in this research project.

Three main themes emerged: whakawhanaungatanga (actively building relationships), cultural safety (mana enhancing) and cultural alignment to role.

### ***Chapter 6: Understanding the workforce for diabetes management with Māori and Pacific peoples: Using Tangata Hourua as the Framework Method for analysis of qualitative research***

A critical qualitative Kaupapa Māori and Pacific investigation into the experiences of people enrolled in Mana Tū, and their whānau, and their experiences with KM – contrasted with their experiences with other CHWs – has yielded new and rich knowledge.

The findings aligned with some of the core values and principles of the Tangata Hourua Research Framework (Mullane et al., 2022).

In summary, clients and whānau appreciated and better engaged with health care workers who: could culturally meet their needs; spoke their language or spoke in non-clinical terms that could be understood; understood who they were and understood the communities they came from; provided services that were adaptable and non-clinical in their approach, such as where they were delivered; and provided a multidisciplinary approach. The clients and their whānau highlighted how a multidisciplinary approach engaged them with their health worker and the services they provided. Furthermore, a multidisciplinary approach and collaboration between agencies and/or between lay and professional groups was seen as essential to improving services by all those who worked in this model of delivery. Other aspects that positively contributed to the client/whānau experience were the face-to-face interactions and flexibility as to where the services were provided. Special mention was given to marae-based services, and the mixture of individual visits as well as groups, which they felt created a *whānau environment*. Building the feeling of tino rangatiratanga was important for the KM who worked under the Mana Tū umbrella, which aligned to the government's priorities for health research and service development that contribute to Māori health and eliminate health inequities (MOH, 2015a). This feeling was also spoken about by the clients and their whānau as something they were able to experience in their relationship with diabetes and their ability to control their destiny.

## Implications and outputs

Given the inequities in diabetes by ethnicity in Aotearoa New Zealand, there is an urgent need for Māori- and Pacific-specific diabetes management programmes including appropriate workforce development (Harwood et al., 2018; Selak et al., 2018). The current lack of effective programmes is partly due to the complex health, social and economic nature of T2D (PwC, 2021). However, one potential area in which to intervene is the workforce. In fact, the benefits of an appropriately trained and culturally safe workforce are now well-recognised (Beaton et al., 2019), with positive effects on the treatment of diabetes in Indigenous populations reported (Tremblay et al., 2020). The other main implication arising from this thesis is the development of the Tangata Hourua Framework (Mullane et al., 2022), an Indigenous reciprocal research framework that draws from Kaupapa Māori and Pacific methodologies.

There is an imperative need for health services to acknowledge the challenges that many people face, by responding with better-integrated, seamless services that care for those who need them most (Ryan et al., 2019). Achieving equitable outcomes for Māori and Pacific peoples and people living in communities with T2D means they deserve and receive health care that is specifically designed to achieve health equity. Optimistically, the recent health reforms aim to provide an opportunity to create a transformative, equitable, accessible, cohesive, and people-centred health care system that focuses on working in partnership with Māori and honouring Te Tiriti o Waitangi and improving wellbeing of all New Zealanders (Manatū Hauora, 2022). We should not view this reset in health as starting from scratch as the collective pool of knowledge amassed by tangata whenua and by people from Moana-nui-a-Kiwa has a high-value understanding. The understanding around hauora (health) and wellbeing as holistic, with a focus on whānau, hapū, iwi and community wellbeing for all, not just a few, should be seen as a chance to centre Indigenous knowledge and leadership in a strength-based, solution-focused way to move Māori and Pacific health from the margins to the centre.

The thesis initially highlighted, through a systematic review, the need for more studies investigating the role of a culturally appropriate health workforce to deliver appropriate diabetes prevention programmes based in the community. Therefore, research inequity exists where few studies have examined the effectiveness of programmes, and who delivers them. The research responsiveness to Māori and Pacific peoples in this thesis required the promotion of Māori and Pacific voices, as discussed in the methodology chapter that not only addressed the lack of frameworks that reflect the growing population of those who identify as both Māori and Pacific, but when Māori and Pacific peoples are being researched together.

I have presented the Tangata Hourua Framework both nationally and internationally:

- Mullane, T. M. (2021, May 23). *Tangata Hourua – Combined people* [Paper presentation]. International Congress of Qualitative Inquiry, Urbana-Champaign, IL, USA.
- Mullane, T. M. (2021, September 8). *Tangata Hourua Framework* [Paper presentation]. New Zealand Vocational Education and Training Research Forum, Wellington.
- Mullane, T. M. (2021, October 7). *Tangata Hourua methodology* [Paper presentation]. Fiji Aotearoa Research Symposium, Wellington.
- Mullane, T. M. (2021, December 6). *Tangata Hourua Framework* [Paper presentation]. International Wellness Conference, Cairns, Australia.

I have also used the framework as a non-invasive cultural self-identification tool with men incarcerated at Auckland South Corrections Facility, as for many of them a disconnect from their culture and confidence in who they are is directly associated with being incarcerated. Additionally, the Tangata Hourua Framework was used with new cohorts of Corrections Officers in training at the facility and student nurses on the Bachelor of Nursing Pacific programme at Whitireia Community Polytechnic. The introduction of this Tangata Hourua Framework is a deliberate attempt support the Indigenous context of the curriculum for these two groups of learners, deliberately supporting a more culturally confident and competent learner and graduate. Both these groups of learners are destined to be working with predominately high populations of Māori and Pacific people who access custodial justice and health services. The first step in increasing cultural competency is having confidence is one’s own cultural background, which enables a better understanding and acceptance of those different to oneself. The Tangata Hourua Framework was utilised as a vehicle to promote a self-awareness of own culture and self-reflection in a way that was appropriate and respectful. A request was made from a Fijian policy analyst with MPP that the Tangata

Hourua Framework be translated into Fijian so it could be used in the Aotearoa context, making it more relatable to the iTaukei Fijian community. Additionally, Tangata Hourua has been suggested as a potential frame of reference for the new health reform initiative Ngāti Toa Rangatira Iwi is proposing, which includes the involvement of Porirua's Pacific community, and which the framework reflects.

## Recommendations

The thesis has identified several recommendations, which are described here. CHWs, such as kaiāwhina, are important in filling the cultural and equity gaps not met by current mainstream provision. However, these roles are also the least well developed or *levelled up* to leverage their positive attributes (Sheridan et al., 2011). Therefore, a recommendation to recruit more Māori and Pacific into the diabetes workforce must sit alongside appropriate support to develop and fund these roles appropriately.

The pursuit of health equity means opportunities for all social groups to be as healthy as possible, with a discerning focus on improving conditions for groups with fewer opportunities (Braveman, 2006). Māori and Pacific are amongst those who have few opportunities, thus are subjected to inequalities and disadvantages, resulting in many in this population becoming not only the hardest to connect with but the least known about and understood. (Sheridan et al., 2011). There are many Eurocentric programmes that are poorly adapted for Māori and Pacific peoples, risking failure. Concerns surround culturally inexperienced clinicians who had little or no training and awareness, and the lack of ongoing cultural advice or support that was available within organisations (Sheridan et al., 2011).

Therefore, specific recommendations are:

- **Workforce**: Recruit more Māori and Pacific people into diabetes roles, from policy and funding, through to clinicians and researchers in addition to KM-type roles. Recognise the value that KM bring to diabetes care.
- **Workforce development**: Mandate cultural competency/safety training to all health providers delivering diabetes programmes to ensure the cultural beliefs and practices of the person with T2D can be responded to appropriately and to that person's preferences.
- **Provision:** More services to be based in the community and therefore more accessible to Māori and Pacific populations.
- **Provision**: Māori health organisations that are currently delivering culturally appropriate diabetes preventative programmes that are improving outcomes and eliminating health inequities, such as Manu Tū, to be recognised and 'scaled-up' wherever possible.
- **Provision**: Introduction of new, more intensive approaches to prevention, early recognition, and management of T2D, while broader strategies are needed to address social disparities.
- **Policy:** Support from funders and policy makers to genuinely address the importance of an Indigenised workforce and the importance of non-clinical roles to be integrated into existing health providers so they can work alongside the clinical staff in a multidisciplinary approach whenever possible, to overcome the system challenges that Māori and Pacific peoples and communities experience.
- **Policy:** Policy and strategies to focus on addressing the epidemic of diabetes in Māori and Pacific peoples, in both the short and long term. Better recognition of the context for Māori and Pacific people living with poorly controlled diabetes including the devastating effect on individuals, whānau, communities, and the

health funding needed to address prevention, assessment, diagnosis, and treatment – particularly at community and primary care levels.

- **Importance of whānau and community**: Acknowledgment that Māori and Pacific whānau and community perspectives are an integral part of any implementation of funding, health and social policies and provision of health interventions and delivery to ensure core Māori and Pacific values are integrated in all aspects and touch points.
- **Consider diabetes and Māori and Pacific health in the re-set:** Take this as an opportune time, semi-post Covid-19, to reflect on the learnings that were gained when Māori and Pacific health providers for the first time received funding that was flexible and accommodating to allow wrap-around health and wellbeing support. And recognise that taking a holistic, whānau-centred approach to service delivery has the greatest success in meeting the needs of diverse Māori and Pacific communities. Additionally, autonomous Māori-for-Māori and Pacific-for-Pacific provision was able to make the best service delivery decisions that were adaptable, effective, engaging and, most importantly, successful to indigenously support better health outcomes for the communities they served.
- **Whānau Ora:** This approach cuts across multiple sectors, services, providers, and settings to enhance quality of care and life for people with complex, long-term health issues, such as T2D, and their whānau/families. This means Whānau Ora approaches recognise the differential distribution of health determinants for poor or good health outcomes for Māori and non-Māori, Pacific and non-Pacific but also requires sectors such as housing, education, social welfare, along with the whole government sector, to work together and address this issue. Therefore, the recommendations concerning Whānau Ora in response to T2D are:

   1. For T2D, preventative programme providers should be community based and work with individuals and whānau in social and cultural contexts that are appropriately holistic.
   2. Utilisation of key people in the delivery of diabetes preventative programmes; these should be Whānau Ora ‘navigators’ who have proved successful in building trusting relationships with whānau.
   3. The wellbeing of whānau when identified and addressed should reflect the physical, emotional, cultural, and social needs in relation to goal setting.

## Research recommendations

1. That the Tangata Hourua be considered as a framework to use when Māori and Pacific people are being researched together. The Tangata Hourua Framework will give cultural context, reference, and boundaries not only to the research project and the researcher(s) but, most importantly, to those being researched in an engaging way that is culturally informed, respectful, and genuine.
2. That the Tangata Hourua Framework be used as a culturally appropriate framework for health, education, social service, or justice services. Additionally, this model can be utilised within health, education, social services, justice, and public and private sectors, where there is a genuine argument for a combined cultural approach that supports and develops Māori and Pacific people to engage in research with clinical outcomes that positively contribute to their wellbeing and allows their communities’ voices to be heard (Curtis, 2016; Harwood et al., 2018) when working with populations of Māori and/or Pacific people and those identifying as multi-ethnic from one or both groups. This model and framework allow core Māori and Pacific values to be represented and participants who are Māori or Pacific to see themselves reflected. It also gives a cultural guide to those working with these populations to

engage in a way that is culturally informed, respectful, and genuine. Importantly, the process means those people working within it have some cultural boundaries to keep each key component safe and address some of the challenges that may arise when dealing with multi-ethnic cohorts such as this. The framework’s purpose is to embody core Māori and Pacific values and principles so those who self-identify as multi-ethnic have an opportunity to see values that resonate, co-existing together rather than separate and apart.

3. That the Tangata Hourua Framework be used as a culturally appropriate self-identification tool for those who identify as both Māori and Pacific – in other words, for the Tangata Hourua Framework model to be utilised as a means for individuals to identify their cultural position within the model. The journey of knowing and feeling confident with one’s ethnicity and culture is ongoing, potentially, this journey could be approached quite differently by those who know who they are and where they are from and those who do not have the knowledge or confidence to know which ethnicity or culture and where they sit. In this instance the double spiral with the two interlinking spirals (as outlined in Figure 3.2) in this context refers to the two parties in a relationship, to whakapapa or genealogy – tangata whenua and tagata Pasifika. The double-spiral nature of Tangata Hourua allows each respective perspective to retain its own unique position and space whilst naturally acknowledging the harmonies that exist. The cohesiveness of the design allows the spiral to create space for those who can conclusively identify their ‘self’ within the bold/definite values and areas. Can those who are not so ‘defined’ in their identity still be recognised and included within the model? If an individual’s cultural position changes, there is scope for them to move within the spiral to find a space that best reflects their current positioning. In summary, Tangata Hourua can

accommodate, move, identify, and adapt to the ever-increasing complexities of the growing Māori and Pacific populations currently in Aotearoa.

## Strengths and limitations

A new Indigenous framework has been developed to positively accommodate, move with, and adapt to the ever-increasing complexities of the growing Māori and Pacific populations in Aotearoa and, potentially, it can be utilised when these population access health, education, social services, justice, and the public and private sectors.

The limitation of developing a new Indigenous framework is that not everyone will agree with this approach. As has been stated, it is not suggested that the Tangata Hourua Framework be used for all research involving both Māori and Pacific peoples, as researcher or participant, just in the same way that Kaupapa Māori research is not pan-Māori (Rangihau, 1977) nor are Pacific methodologies pan-Pacific (MPP, 2018). However, as is proposed in relation to this framework, support for cross-cultural partnerships between and amongst Indigenous researchers can create something stronger and more impactful, and thus it may deliver greater equity (Swadener & Mutua, 2008).

The nature of qualitative research is inherently subjective (Harris et al., 2006), and it is acknowledged that only the voices of three types of health workers and 32 participants were sought; therefore, the findings are not generalisable to others. Additionally, it is acknowledged that the author’s interpretation and subsequent analysis of the narratives of health care workers, clients and whānau could also be subjective (Braun & Clarke, 2013). This was negated by a strong focus on seeking peer and supervisor review throughout the study to ensure that the analysis was fair and balanced.

## Personal reflections

This journey has not been isolated to just academic development (although that has been an integral part of it) – it has also transported me professionally and personally. I had a growing realisation that the inner resilience required to complete this study was naively underestimated and that was correlated with the developing urgency of the need to positively contribute to turning the tide of the diabetes epidemic. There were mixed emotions: being overwhelmed with the negative data; working hard to get results quickly but also get it right; inspiration and optimism for what we do well and could do better. These created tensions and challenges throughout my thesis journey. Yet being a part of something that could in some way positively contribute to this area was enlightening.

Personally, since the completion of my master's degree 11 years ago I have had a baby, been through a relationship breakup, become a solo parent, experienced a close family member being incarcerated, had a child diagnosed as bi-polar resulting in four hospitalisations, moved four different times, lived in three different cities, changed jobs four times, been made redundant, become a Bubu (grandmother), and started a new relationship whilst balancing, bringing up and holding together my immediate whānau, mahi and study. I feel a better person for this experience and, as a mother and Bubu to my Tamariki and Moko who straddle both Māori and Pacific whakapapa and worlds, I hope that my research has made me a better ancestor as with age comes wisdom.

*Madu na wāvuka qai gata*

*When the wāvuka (a reed) matures it becomes sharper*

# Conclusion

The rights of Māori and Pacific people living with poorly controlled diabetes to the highest attainable level of health in Aotearoa are not being met. The reasons are complex but having the correct type of workforce, who will realise these rights, is critical. This research has provided valuable evidence on the workforce required to improve diabetes outcomes for Māori and Pacific people, using a newly developed research framework. Three published articles from the study speak to its contribution to the research environment, and its potential to inform Aotearoa.

There is no doubt there is an urgent need for more research into understanding Māori and Pacific people when they are being researched or services are being developed and delivered, such as in health, education, the social sector, or justice. Additionally, understanding of those who identify as both Māori and Pacific is urgently required to enhance health equity for Māori and Pacific, so this should become a research priority going forward. When appropriate, it is proposed that the Tangata Hourua Framework is an option to use in these circumstances.

Overall, it is concluded that there is an opportunity here to positively inform workforce development strategies that will achieve equity for Māori and Pacific people with T2D and other long-term conditions.

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# Appendices

## Appendix A: Ethics approval letter

### 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

23 June 2020

Isaac Warbrick
Faculty of Health and Environmental Sciences

Dear Isaac

Re Ethics Application: **20/8 Understanding the health workforce that supports Maori and Pasifika living with Type 2 Diabetes to achieve better outcomes: A Kaupapa Maori and Pan Pacific study of Kai Manaaki**

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 23 June 2023.

**Standard Conditions of Approval**

1. The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTEC in this application.
2. A progress report is due annually on the anniversary of the approval date, using the EA2 form.
3. A final report is due at the expiration of the approval period, or, upon completion of project, using the EA3 form.
4. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form.
5. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
6. 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.
7. 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 and that all the dates on the documents are updated.

AUTEC grants ethical approval only. You are responsible for obtaining management approval for access for your research from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

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

For any enquiries please contact ethics@aut.ac.nz. The forms mentioned above are available online through http://www.aut.ac.nz/research/researchethics

(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
**Auckland University of Technology Ethics Committee**

Cc: taniamullane@gmail.com

# Appendix B: Indicative questions

Understanding the health workforce that supports Māori and Pasifika living with type 2 Diabetes to achieve better outcomes: A Kaupapa Māori and Pan-Pacific study of Kai Manaaki.

*Project title:* Understanding the health workforce that supports Māori and Pasifika living with type 2 Diabetes to achieve better outcomes: A Kaupapa Māori and Pan-Pacific study of Kai Manaaki.

*Project Supervisor:* ***Dr. Isaac Warbrick***

*Researcher:* ***Tania Mullane***

**Introduction:**

Each group of Kai Manaaki, Primary Health Care workers, Dieticians, will have their own respective focus groups. At the start of the interview there will be a brief introduction.

The participants will give written consents and sign the relevant documents.

All three groups will be asked three questions:

1. Tell me about your role?
2. What works? And why?
3. What could be improved? And how?
4. What do you think this is important for you in your role and for Māori and Pacific People?
5. How do you know if you are effective?

**Thank you**

***Approved by the Auckland University of Technology Ethics Committee on***

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# Appendix C: Interview and data management protocol

## Auckland University of Technology Ethics Committee (AUTEC)

## Interview and Data Management Protocol

### *Project title and brief description:*

Understanding the health workforce that supports Māori and Pacific People living with Type 2 Diabetes to achieve better outcomes: A Kaupapa Māori and Pan-Pacific study of Kai Manaaki.

This research aims, to deepen and enhance understanding of strategies that are supporting not only participants with T2DM, but the perspective of their whanau to better health outcomes. This will provide insight and assist with identifying factors that are important in understanding whether these programmes, approaches and workforce are having the desired effect from a receiver and delivery point of view.

Furthermore, a chance for the primary health workforce to share their views and experiences may better enhance and encourage other's that work in this area to share their experiences and perceptions of this health issue in New Zealand. Further exploration will be gained by seeking the perspectives of the Kai Manaaki, Primary Health Workers and Dieticians who deliver specific Diabetes focused health programmes to the participants and their whanau in the community.

Additionally, this study will raise awareness, but most importantly provide authentic data related that will contribute to the well-being of individuals, families and communities. Anticipating that this study will in-turn provide and contribute towards building a more culturally aware health workforce, who with the right roadmap of cultural strategies can mature and gain confidence to deliver authentic culturally responsive health services. The findings of this research may be used for academic publications and presentations.

### *Primary Researcher*

Tania Mullane

### *Supervisor/s*

Dr. Isaac Warbrick

Dr. Matire Harwood

### *What data will be produced?*

*What physical data will you study?*

This research project will explore how culturally responsive approaches and strategies in a Primary Health Care context can support and improve Māori and Pacific with Type 2 Diabetes Myelitis (T2DM) to better self-management and ultimately better health outcomes. Furthermore, the project will explore, identify and contribute to the field of diabetes management by highlighting best practice principles which are meaningful for, and positively impact on Māori and Pasifika wellbeing.

*What digital data will you generate? (e.g. field-notes, photographs, audio or video recorded interviews, etc.)*

- *The digital data to be generated will come from audio recording of voices of participant's interviews. The interview will be recorded, ensure safety, I will use voice recorder and a phone to record*

*What file formats and software will you use?*

- *I will be transferring voice files to store on AUT One-Drive*

*How will data be structured and stored?*

- *The data will be stored in individual files and coded on AUT One-Drive*

*How much data you will produce over time – do you have enough storage?*

- *The data will depend on the interviews. It is planned to be 2 hours only. The data will be saved on AUT One-Drive*

*Are you making full use of University provided, fully backed-up storage?*

- *The University fully packed-up storage will be used*

*How will data generated in the field be saved to safe University storage? When will this occur?*

- *The data will be allocated to an individual file. Once interviews are finished this will be uploaded to AUT One-Drive for storage. A copy of the interviews will be given to the contracted Transcriber by email with password protected, and also reminder of the confidentiality agreement to the researcher. Transcriber will sign the confidentiality agreement before accessing the interview data.*

*Do you have a logical file naming convention and directory structure?*

- *File will be coded*

*What quality assurance and back-up procedures are planned?*

- *Two audio recording devices will be used in the interviews. The voice recorder and phone in case one of the devices does not record. Primary researcher will also take notes in the interviews*

## ***What are the ethical requirements for your data?***

*In what way is the data sensitive?*

- *The data is sensitive as it gives health professionals stories, lived experiences, their perspective on delivering DSME programmes to Maori and Pacific People diabetes in the community. It may raise issues about the health system and services that impact the delivery of DSME among Maori and Pacific Peoples, and other broader at issues with the Health System.*
- *The data will be stored on an electronic device. This data will be then be transcribed y an independent contractor. A confidentiality agreement will be included and signed before access to data. The data will be shared by electronic or handed in person to be verified by the participant. This data will be stored on AUT One-Drive and only accessed by password*

*How and where is physical data (physical data/papers/records)? Is digitised data encrypted appropriately?*

- *The physical data will be locked away in a secure room and stored in a locked cabinet with Primary Supervisor. Access to the room is only by key and can only access by research team*

*Will you anonymise / de-identify your data? How? When? What will happen to the identifiable information?*

- *All participants will be anonymous by codes*

*Does your research funder have specific data management and sharing requirements?*

*Should some data be destroyed? When and how? By whom?*

*How will the undertakings about consent, confidentiality, anonymization and other ethical considerations given to participants be assured?*

*Prior to interviews. Confidentiality, anonymization and other ethical considerations will be discussed at the community meeting, where the research project is introduced. Information sheet for participant, consent forms will be given to participants who expressed interests. Written consent form will be collected prior to the interview. In addition, a thorough explanation to ensure participants fully understand the confidentiality concepts.*

What are the plans for data sharing and access?

*Have you discussed data sharing with your research collaborators/ supervisor?*

- *The primary researcher will make data available to Supervisors upon request. Only the primary researcher will have the code to the AUT One-Drive*

*If your research involves people, have you obtained appropriate consent for data sharing?*

- *As part of the Consent to participate this is noted on the Consent Form. It will be reminded to participant before the interview take place*

*Can your data be released immediately, or should you embargo (delay access to) the data? What data will you keep?*

- *The data will not be embargoed. The data will be kept for the standard length of six years as per AUT guidelines*

*Will data be openly available to everyone or will there be access restrictions?*

- *The data will only be available to the supervisors and primary researcher*

*How long will / should data be available for? Will you use a data repository? Which one?*

- *Data will be available for the research project, and kept for 6 years, then be destroyed*

## ***What are your main data challenges? Who can help?***

*Do you need training or support? What is available?*

- *The primary researcher has had a practice with supervisor on data collection (interviewing, crafting and writing up) as part of preparing PGR9. In addition, discussions with supervisors about data collection and they feel comfortable about undertaking the interviews.*

*What University policies are relevant to your project? Have you read and understood them?*

- *The primary researcher have read and study the research policies, it was also covered on Health Research Methodology course paper, which was completed in last semester. The primary researcher are well guided by supervisor team and will always act in an ethical manner in this research*
- *Key tasks included by not limited to*
    - *Informed and voluntary consent*
    - *Respect rights of privacy*
    - *Minimised risks*
    - *Be honest, truthful and avoid deception*
    - *Be socially and culturally sensitive, including making a commitment to the principles of the Treaty of Waitangi (Protection, Participation, Partnership)*
    - *Avoid conflict of interest*
    - *Respectful of participants culture, use their protocols (eg – opening prayers and closing prayers for meetings)*

*Who is responsible for managing the data? What resources will you need?*

- *The primary researcher will take responsibility for managing data. They will need to have access to audio recording devices and AUT One-Drive to store the data. All research need to be kept locked up in a secure room at Primary Supervisor office*

*Who is responsible for data at different stages in its lifecycle?*

- *The primary researcher is responsible for all data at various stages of the research*

*Are sufficient resources (skills, people, storage, technology) available to deliver your plan?*

- *Yes, the primary researcher has access to supervisors for help with this research. ICT support is also accessible for specialist support at AUT*

*What will happen to the data if the Primary Research leaves mid-project?*

- *The data will be with the Primary Supervisor at AUT University. If warranted, the data will be returned to the participants*

## *Don't forget to update your data management plan regularly:*

Date for next review

Once data collection starts May 2020

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# Appendix D: Consent form for individuals

*Project title:* Understanding the health workforce that supports Māori and Pacific People living with Type 2 Diabetes to achieve better outcomes: A Kaupapa Māori and Pan-Pacific study of Kai Manaaki.

*Project Supervisor:* ***Dr. Isaac Warbrick***

*Researcher:* ***Tania Mullane***

○ I have read and understood the information provided about this research project in the Information Sheet dated: 20th April 2020

○ I have had an opportunity to ask questions and to have them answered.

○ I understand that notes will be taken during interviews and that they will also be audio-taped and transcribed.

○ I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.

○ I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.

○ I agree to take part in this research.

○ I wish to receive a summary of the research findings (please tick one) *Yes* ○ No ○

Participants signature*:* ..........................................................................................................

Participants name: ..........................................................................................................

Participants contact details (if appropriate)*:*

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Date:___________________

***Approved by the Auckland University of Technology Ethics Committee on 2019 AUTEC Reference number***

*Note: The Participant should retain a copy of this form.*

# Appendix E: Consent form for focus groups

*Project title:* Understanding the health workforce that supports Māori and Pacific People living with Type 2 Diabetes to achieve better outcomes: A Kaupapa Māori and Pan-Pacific study of Kai Manaaki.

*Project Supervisor: Dr. Isaac Warbrick*

*Researcher: Tania Mullane*

○ I have read and understood the information provided about this research project in the Information Sheet dated: Day…………Month…………Year……….

○ I have had an opportunity to ask questions and to have them answered.

○ I understand that identity of my fellow participants and our discussions in the focus group is confidential to the group and I agree to keep this information confidential.

○ I understand that notes will be taken during the focus group and that it will also be audio-taped and transcribed.

○ I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.

○ I understand that if I withdraw from the study then, while it may not be possible to destroy all records of the focus group discussion of which I was part, I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.

○ I agree to take part in this research.

○ I wish to receive a summary of the research findings (please tick one*):* Yes ○ No ○

Participants signature: ……………………………………………………………………………………………………

Participants name: ……………………………………………………………………………………………………………

Participants contact details (if appropriate):

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**Date**: ______________________________

***Approved by the Auckland University of Technology Ethics Committee on:*** ______________________

***AUTEC Reference number***__________________

*Note: The Participant should retain a copy of this form*

TE WĀNANGA ARONUI
O TĀMAKI MAKAU RAU

# Appendix F: Researcher safety protocol

## Auckland University of Technology Ethics Committee (AUTEC)

## Researcher Safety Protocol

### *Project title and brief description:*

***Project title:*** Understanding the health workforce that supports Māori and Pacific People living with Type 2 Diabetes to achieve better outcomes: A Kaupapa Māori and Pan-Pacific study of Kai Manaaki.

### Applicant

Dr. Isaac Warbrick

### Primary Researcher

Tania Mullane

### *Where is the research being undertaken?*

*What current travel warnings are in effect in the area in which the research will take place?*

- *Auckland region – weather and peak traffic hours*

*At whose property will the research be undertaken?*

- *Participants place of work or AUT office for Focus Group Talanoa/Interview*

*Who is likely to be present at the research location?*

- *Participants and primary researcher*

*What access permissions are needed to undertake the research at the chosen location?*

- *Participants are given choice of preferred venue and location.*
- *If participants preferred their own home, and researcher is at risk as of visiting others home*

*What maps and guides has the researcher consulted to ensure familiarity with the locations?*

- *Consent form will have participants address and contact details, which primary researcher will use google maps to ensure familiarity with the locations*

*What reliable local public transport is available?*

- *Public bus and taxi*

*Which reputable taxi firms are easy to access?*

- *South Auckland Taxi Association*

*Where is it safe to use private cars and leave them in the area?*

- *AUT campus – public car park if prefer to use AUT office otherwise participant home is safe*

*What local rendezvous or contact points are available for researchers?*

- *AUT office and Primary Supervisor Office*

## *Who will be collecting the data and interacting with participants?*

*Who will be accompanying the researcher?*

- *Primary researcher will be doing the interview alone*

*How will the safety of any dependent children accompanying the researcher be assured?*

- *No children will be accompanying the primary researcher*

*How will the safety of any translators, interpreters, intermediaries or transcribers be assured?*

- *Intermediaries will be with primary researcher at community meetings. Community leader will introduce to the community or church groups. Safety will be assured by following the research data collection safety protocol*
- *As participants are Tongan with diabetes and therefore are not vulnerable population, I do not anticipate any concerns with researcher and participants for safety.*

## *How familiar is the researcher with the social or cultural context of the research ?*

*What level of familiarity does the researcher have with the social context of the participants and the research?*

- *Primary researcher is Tongan and participants are Tongans too – familiar with social context as involved with community and church activities*

*What level of familiarity does the researcher have with the cultural context of the participants and the research?*

- *Highly familiar with Tongan culture and protocol*

*What consultation has taken place?*

- *Community meeting for introduction of research project is schedule for November and December 2019*

*What language support is needed?*

- *None, as interview will be conducted in English*

*What local tensions are there?*

*None currently.*

*How strongly active are any cultural, religious or racial divisions?*

*What do local sources, such as the police or local leaders, say about risks in the research area?*

*Which local 'community leaders' have been spoken with to explain the research and gain their endorsement?*

## *What level of access to support is available?*

*Who will be available to provide assistance should it be required?*

- *Primary researcher will inform primary supervisor before an interview of where that interview will be located, and the duration of the meeting – both individual and focus group Talanoa/Interview*
- *I will have my cell phone with me during each interview*

*How will the researcher ensure that those providing support will be aware of any need that arises?*

- *Primary researcher will keep those providing support informed and updated on interview schedules and plan.*

## *What emergency plans are in place? Who can help?*

*What training or support is needed and how will it be accessed?*

- *Primary researcher can access to AUT training and workshops on topic including health and safety, research data collection.*
- *Website also provide information to help with safety plans and protocols*

*What University policies are relevant to your project? Have you read and understood them?*

- *Primary researcher is familiar with health and safety policy at work place, community and church stings*

*How have significant local actors, such as statutory and community organisations been contacted?*

- *Primary researcher will make contact with Tongan community leaders for recruitment and informed of the research project, once Ethic is approved*

*Who has been in touch with potential participants and what advice have they given?*

- *Expert Advisory Group has guided primary researcher on potential participants*

*Who else is aware of the researcher's itinerary and research schedule?*

- *Supervisors*

*How will the researcher keep key support people informed of what is happening?*

- *Primary researcher will updated primary supervisor of interview schedule, call supervisor when arrive at participant interview venue and when leaving at the end of interview*

## Don't forget to update your safety protocol regularly:

### Date for next review

Once data collection start – May 2020

TE WĀNANGA ARONUI
O TĀMAKI MAKAU RAU

# Appendix G: Participant information sheet (English)

**Date Information Sheet Produced: 20th April 2020**

**Project Title**

Understanding the health workforce that supports Māori and Pacific People living with Type 2 Diabetes to achieve better outcomes: A Kaupapa Māori and Pan-Pacific study of Kai Manaaki.

**Invitation**

Kia Ora, my name is Tania Mullane and I am currently undertaking the Doctor of Philosophy programme at Auckland University of Technology (AUT). I am inviting you to participate in my research which you will share your views as primary health professional, on workforce strategies that support Maori and Pasifika with Diabetes to better health outcomes. .

Your participation is voluntary and if you change your mind about participating in the research at any time during the research, then you are free to withdraw at any time during the research.

**What is the purpose of this research?**

How does a culturally conscious health workforce influence Māori and Pasifika with T2DM towards better health? This research project will explore how culturally responsive approaches and strategies in a Primary Health Care context can support and improve Māori and Pacific with Type 2 Diabetes Myelitis (T2DM) to better self-management and ultimately better health outcomes. Furthermore, the project will explore, identify and contribute to the field of diabetes management by highlighting best practice principles which are meaningful for, and positively impact on Māori and Pasifika wellbeing. Culturally competent care (integrating cultural beliefs, values and practices into the service delivery model), has been found to be effective and associated with improved access and quality of health care among ethnic minorities (Marrone, 2007; MOH,2008).

**How was I identified and why am I being invited to participate in this research?**

I will be attending and presenting at scheduled Tongan community and church meetings in November and December 2018. At these meeting, I will explain the research project and the recruitment process. This includes going through the selection process for being a participant. An invitation will be given to participate in the research. In addition, information sheets will be handed out and a list of interested participants will be collected at the end of the meeting. A follow up contact will be made only with expression of interest within a month.

Selection of participants: The inclusion criteria for participating in the research are

- Participants will work as a health professional for a primary health provider
- They will be actively involved in delivering primary health programmes to Maori and Pasifika with Diabetes, and their whanau in the community
- Participants will be willing to share their stories in this study
- Participants will be over 18 years old and able to participate in this study

**How do I agree to participate in this research?**

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

**What will happen in this research?**

I will be collecting data using an interview schedule and would appreciate being able to interview you at a suitable time and mutually agreed designated venue. Interviews will take place from October 2019 to December 2019, at a pre-organised times. Interviews will be conducted in privacy and will be no longer than two hours. I will also be asking you to sign a consent form regarding this research, prior to the interview. I will be digitally recording your stories and your contribution. I will provide transcript for you to check for accuracy before data analysis is undertaken. The research findings will be used for future academic publications and conference presentations. The completed thesis will be presented as a gift to the Tongan community and church group in 2020.

**What are the discomforts and risks?**

No risks and discomforts are anticipated. Your participation will be treated with utmost respect as in the practice of maintaining relationships (tauhi va) which is paramount in the Tongan culture. However, if at any time you want to stop the interview or move on to another question we can do so. If you choose to stop the interview I will do so without any consequences to you and the data from your interview will be destroyed.

**How will these discomforts and risks be alleviated?**

There is a chance you may feel uncomfortable with some of the questions. If during the interview (individual or focus group) you feel uncomfortable with answering any question, there is no problem with you declining to answer the question/s or withdrawing from the interview at any time.

**What are the benefits?**

As noted, this data will valuably inform community, New Zealand government planning and policies around workforce development and delivery of primary health programme to people with diabetes. It will also add to the international research base on diabetes. Currently, New Zealand has no comprehensive T2DM management programme for Māori or Pacific people. Hence the importance to add to the limited field of knowledge in this area, justifying a research project such as this to determine what is working and why.

**How will my privacy be protected?**

Your privacy will be protected by excluding your name and any association with church, community, family/clan, or social groups from this research. I will not engage in casual conversation while conducting the focus group and will ensure that the conversations are not overheard or repeated by others.

**What are the costs of participating in this research?**

The cost of your participation in this study will be your time of up to 2 hours.

**What opportunity do I have to consider this invitation?**

Once you receive the participant information sheet, I will contact you within a month to confirm if you agree to participate in the research.

**What do I do if I have concerns about this research?**

If you have any concerns regarding the nature, you may contract my supervisor from AUT, Dr Isaac Warbrick, isaac.warbrick@aut.acn.nz, phone +64 9 921 9999 ext 7108

Also, if you have concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, *ethics@aut.ac.nz* , phone +64 9 921 9999 ext 6038.

**Whom do I contact for further information about this research?**

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher contact: Tania Mullane taniamullane@gmail.com - 0211451233

Project Supervisor: Dr Isaac Warbrick, isaac.warbrick@aut.acn.nz, phone +64 9 921 9999 ext 7108

I do hope that you find this study of interest and will agree to participate as your contributions will be extremely valuable

I look forward to working on this project with you.

Thank you so much

Tania Mullane
Doctor of Psychology (PhD) student,
Auckland University of Technology (AUT)

**Approved by the Auckland University of Technology Ethics Committee on ______________________, AUTEC Reference number ________________.**

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# Appendix H: Participant email

Primary Health Care Workers and Dieticians

**Date Information Sheet Produced:**

1st June 2020

**Project Title**

Understanding the health workforce that supports Māori and Pasifika living with type 2 Diabetes to achieve better outcomes: A Kaupapa Māori and Pan-Pacific study of Kai Manaaki.

**An Invitation**

Kia Ora

My name is Tania Mullane, as part of my PhD research with AUT, I am inviting you to participate as a Primary health worker or Dietician delivering Diabetes self-management educators (DSME) programmes to Maori and Pacific People in the community which I will be facilitating.

This is an opportunity for you to share your views on the role you have in delivering DSME programmes and importantly the effectiveness of what you consider is working to support Maori and Pacific People to better health outcomes. If you choose to participate you will be asked to share your professional views will be sought within a confidential environment.

It is not expected to be conflict of interest issues or disadvantages if you decide to participate, but I am happy to discuss further if you foresee any.

**What is the purpose of this research?**

Māori and Pacific whanau have significantly higher rates for type 2 diabetes (T2DM) incidence, hospitalisations, complications and mortality. Research in Aotearoa has described the epidemiology of T2DM and to a lesser extent, interventions to improve access to care or reduce the onset of disease and its complications. There is little research about the workforce, or workforce development, required to improve diabetes outcomes for Māori and Pacific People.

This research has significant value for the health of Māori and Pacific Peoples of Aotearoa New Zealand and potentially internationally. Firstly, this research will deepen and enhance understanding of cultural strategies from not only participants with T2DM perspective, but the perspective of their whanau. Further exploration will be gained by seeking the perspectives of the Kai Manaaki, Primary Health Workers and Dieticians who deliver specific Diabetes focused health programmes to the participants and their whanau in the community. This will provide insight and assist with identifying factors that are important in understanding whether these programmes, approaches and workforce are having the desired effect from a receiver and delivery point of view. Furthermore, a chance for the primary health workforce to share their views and experiences may better enhance and encourage other's that work in this area to share their experiences and perceptions of this health issue in New Zealand.

Additionally, this study will raise awareness, but most importantly provide authentic data related that will contribute to the well-being of individuals, families and communities. Hoping that this study will in-turn provide and contribute towards building a more culturally aware health workforce, who with the right roadmap of cultural strategies can mature and gain confidence to deliver authentic culturally responsive health services. The findings of this research may be used for academic publications and presentations.

National Hauora Coalition (NHC) received funding from the Health Research Council (HRC) for the research project this research project sits under. I have received a scholarship (stipend and fees) to enable this PhD to be competed

**How was I identified and why am I being invited to participate in this research?**

You have received this invitation, as you are either Kai Manaaki, Primary Health Workers or Dieticians who deliver DSME programmes to Maori and Pacific People and their whanau in the community. I am hoping to gain insight to assist with identifying factors that are important in understanding whether these programmes, approaches and workforce are having the desired effect from a receiver and delivery point of view.

Selection of participants: The inclusion criteria for participating in the research are as follows which will be screened by myself:

- Participants will work as a health professional for a primary health provider
- They will be actively involved in delivering primary health programmes to Maori and Pasifika with Diabetes, and their whanau in the community
- Participants will be willing to share their stories in this study
- Participants will be over 18 years old and able to participate in this study

**How do I agree to participate in this research?**

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. My contact details are included on this form and on the Consent Form which has been sent with this invitation or by contacting me.

You can withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

**What will happen in this research?**

This is a chance for you, as a Kai Manaaki, Primary Health Workers or Dietician who delivers DSME programmes to Maori and Pacific People and their whanau in the community, to share your views and experiences to raise awareness by providing authentic data related to how you are contributing to the well-being of individuals, families and communities. Ultimately, you can be part of a study that can provide and contribute towards building a roadmap for a more culturally conscious health workforce. Overall a chance for a health care system to mature and gain confidence to deliver authentic culturally responsive health services.

You are invited to attend a focus groups which will be held on AUT South Campus. The focus groups will take from 60 to 90 minutes with kai and refreshments will provided. Here are some guiding questions that may be asked to prompt discussion:

4. Tell me about your role?
5. What works? And why?
6. What could be improved? And how?
7. What do you think this is important for you in your role and for Māori and Pacific People?
8. How do you know if you are effective?

Participation will be voluntary and require your Informed consent to be obtained. All discussion will be recorded, and only used for the purposes of this research project. The recordings will be transcribed by myself to maintain confidentiality.

**What are the discomforts and risks?**

It is recognised that due to the type of work the participants are involved in and the communities that they work within that there could be some risk that information shared could potentially disadvantage the participants and or organisation they work for. Due to this risk, all attempts will be made to ensure that all data collected from the focus groups will remain confidential and no individual or organisation will be identifiable.

Potentially participants may have conflicting views of delivery of services to the organisation they work for. They also may have views or approaches around delivering DSME to Māori and Pacific Peoples that is culturally unsafe. These views or approaches aired within the focus groups may contrast with their peers. This may be addressed by explaining at the start of the focus groups that each person is entitled to their view, which will be treated with respect and confidentiality.

Participants are unlikely to experience employment pressures as the focus groups will be scheduled to fit in with your daily work requirements, and will ideally be geographically close to the area you work in.

**How will these discomforts and risks be alleviated?**

Should you experience significant effects from participating in this research project your can talk to me the Researcher and Facilitator or the Primary Supervisor whose details are below.

**What are the benefits?**

This study will raise awareness and provide authentic data from Primary health workers and Dieticians contributing to the well-being of individuals, families and communities. Additionally, this study will in-turn provide and contribute towards building a more culturally aware health workforce, who with the right roadmap of cultural strategies can mature and gain confidence to deliver authentic culturally responsive health services.

Furthermore, this study would benefit the researcher for several reasons. Firstly, the researcher will obtain a Doctor of Philosophy degree from successfully completing this study. Secondly, the researcher will gain in-depth knowledge and understanding around culturally strategies that better inform the health workforce in supporting Māori and Pasifika with T2DM to healthier lives. Thirdly, the researcher will provide data and research to inform and target interventions specifically Māori and Pacific communities which will positively contribute to future workforce development in this area. The findings of this research may be used for academic publications and presentations.

**How will my privacy be protected?**

At all times your confidentiality will be maintained. Your name or workplace will not be recorded, this so individual participants or your place of work cannot be identified. I will be facilitating the focus groups and the transcribing, which will also ensure another measure of confidentiality.

**What are the costs of participating in this research?**

Participants will be required for 1-2 hours to attend their focus groups. The focus groups will be scheduled at a time and geographically convenient to the participants and as to not impact on your role or daily responsibilities.

**What opportunity do I have to consider this invitation?**

You will have one month to consider if you would like to be part of this research project. At any time after you receive this invitation you are invited to contact myself for further information.

**Will I receive feedback on the results of this research?**

Yes, if requested, you will be provided with a one- or two-page summary of the findings from the focus group you attended. This can be done electronically, via a URL link sent to you after the summary has been completed.

**What do I do if I have concerns about this research?**

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor,

Dr. *Isaac Warbrick, Isaac.Warbrick@aut.ac.nz,* (+649) 921 9999 ext 7591

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, *ethics@aut.ac.nz* , (+649) 921 9999 ext 6038.

**Whom do I contact for further information about this research?**

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

## *Researcher Contact Details:*

Tania Mullane, taniamullane@gmail.com, 0211451233

## *Project Supervisor Contact Details:*

Dr. *Isaac Warbrick, Isaac.Warbrick@aut.ac.nz,* (+649) 921 9999 ext 7591

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**Approved by the Auckland University of Technology Ethics Committee on *the 19th May 2020*, AUTEC Reference number *type the reference number*.**

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# Appendix I: Participants' leaflet

**Date Information Sheet Produced:**

1st June 2020

**Project Title**

Understanding the health workforce that supports Māori and Pasifika living with type 2 Diabetes to achieve better outcomes: A Kaupapa Māori and Pan-Pacific study of Kai Manaaki.

**An Invitation**

Kia Ora, my name is Tania Mullane, as part of my PhD research with AUT, I am inviting you to participate as a Primary health worker or Dietician delivering Diabetes self-management educators (DSME) programmes to Maori and Pacific People in the community which I will be facilitating.

You have received this invitation, as you are either Kai Manaaki, Primary Health Workers or Dieticians who deliver DSME programmes to Maori and Pacific People and their whanau in the community. I am hoping to gain insight to assist with identifying factors that are important in understanding whether these programmes, approaches and workforce are having the desired effect from a receiver and delivery point of view.

This is an opportunity for you to share your views on the role you have in delivering DSME programmes and importantly the effectiveness of what you consider is working to support Maori and Pacific People to better health outcomes. If you choose to participate you will be asked to share your professional views will be sought within a confidential environment.

You are invited to attend a focus groups which will be held on AUT South Campus. The focus groups will take from 60 to 90 minutes with kai and refreshments will provided. Here are some guiding questions that may be asked to prompt discussion:

1. Tell me about your role?
2. What works? And why?
3. What could be improved? And how?
4. What do you think this is important for you in your role and for Māori and Pacific People?
5. How do you know if you are effective?

**What is the purpose of this research?**

Māori and Pacific whanau have significantly higher rates for type 2 diabetes (T2DM) incidence, hospitalisations, complications and mortality. Research in Aotearoa has described the epidemiology of T2DM and to a lesser extent, interventions to improve access to care or reduce the onset of disease and its complications. There is little research about the workforce, or workforce development, required to improve diabetes outcomes for Māori and Pacific People.

Furthermore, a chance for the primary health workforce to share their views and experiences may better enhance and encourage other's that work in this area to share their experiences and perceptions of this health issue in New Zealand.

Additionally, this study will raise awareness, but most importantly provide authentic data related that will contribute to the well-being of individuals, families and communities. Hoping that this study will in-turn provide and contribute towards building a more culturally aware health workforce, who with the right roadmap of cultural strategies can mature and gain confidence to deliver authentic culturally responsive health services. The findings of this research may be used for academic publications and presentations.

National Hauora Coalition (NHC) received funding from the Health Research Council (HRC) for the research project this research project sits under. I have received a scholarship (stipend and fees) to enable this PhD to be competed

**How do I agree to participate in this research?**

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you.

My contact details are included on this form and on the Consent Form which has been sent with this invitation or by contacting me.

You can withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

**How will my privacy be protected?**

At all times, your confidentiality will be maintained. Your name or workplace will not be recorded, this so individual participants or your place of work cannot be identified. I will be facilitating the focus groups and the transcribing, which will also ensure another measure of confidentiality.

**What are the costs of participating in this research?**

Participants will be required for 1-2 hours to attend their focus groups. The focus groups will be scheduled at a time and geographically convenient to the participants and as to not impact on your role or daily responsibilities.

**What do I do if I have concerns about this research?**

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor,

Dr. *Isaac Warbrick, Isaac.Warbrick@aut.ac.nz,* (+649) 921 9999 ext 7591

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, *ethics@aut.ac.nz* , (+649) 921 9999 ext 6038.

**Whom do I contact for further information about this research?**

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

## *Researcher Contact Details:*

Tania Mullane, taniamullane@gmail.com, 0211451233

## *Project Supervisor Contact Details:*

Dr. *Isaac Warbrick, Isaac.Warbrick@aut.ac.nz,* (+649) 921 9999 ext 7591

**Approved by the Auckland University of Technology Ethics Committee on *the 19th May 2020*, AUTEC Reference number *type the reference number*.**

# Appendix J: Published version of Chapter 3: Tangata Hourua: A framework drawing from Kaupapa Māori and Pacific research methodologies

Article

ALTERNATIVE

AlterNative
1–8

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SAGE

## Tangata Hourua: a framework drawing from Kaupapa Māori and Pacific research methodologies

Tania Mullane[1], Matire Harwood[2] and Isaac Warbrick[3]

**Abstract**

Despite a growing amount of research with Māori and Pacific people in Aotearoa New Zealand, frameworks that support robust research methodologies with these peoples are limited. This is particularly so for research involving both Māori and Pacific people, which acknowledges the connections between the two and the uniqueness of all Pacific people. Tangata Hourua (Strength in Combining) is a research framework developed in response to this gap, drawing from Kaupapa Māori (Māori principles) and Pacific methodologies, that seeks to uphold the rights of Māori as Indigenous people of Aotearoa, whilst giving voice to Pacific peoples living here with shared or connected whakapapa (family connections). This article describes the framework's origins, its relationship to Kaupapa Māori and Pacific research methodologies, key principles in its application, and its strengths and limitations. The framework has the potential to be utilised in research that positively contributes to both Māori and Pacific knowledge and well-being.

**Keywords**

Indigenous knowledge, Indigenous research methodology, Māori, multi-ethnic, Pacific people

### Introduction

This research explored the role of Kai Manaaki (KM) working with Māori and Pacific people living with type 2 diabetes mellitus (T2DM) – their competencies; how they differed from traditional diabetes health roles, such as dieticians; and their impact on health and other outcomes. Māori and Pacific whānau (family), in addition to Māori and Pacific KM and other health care workers, participated in this research project. The inception of this framework was prompted by an invitation to join the Mana Tū (stand with authority) research programme (Harwood et al., 2018), an initiative from the National Hauora Coalition Public Health Organisation which aimed to test an innovative programme for Māori and Pacific people with T2DM (Harwood et al., 2018). A key feature of Mana Tū is its trained workforce of KM who were part of the general practice team that identified people with poorly controlled diabetes and assisted them and their whānau to take charge of their long-term condition (Harwood et al., 2018). Even though Māori and Pacific peoples have significantly higher rates for T2DM incidence, hospitalisations, complications, and mortality, research has tended to focus on prevention, services, or treatment (Diabetes New Zealand, 2019; Harwood & Tipene-Leach, 2007; Reid & Robson, 2006). To date, there has been lack of research focusing on workforce development, or the skills required to improve diabetes outcomes for Māori and Pacific peoples (Reid et al., 2017).

During the study design, the team of experienced Māori and Pacific researchers identified the need for a critical review of Māori and Pacific research methodologies (PRMs), to better understand potential sites of alignment and contention with the research questions.

### The whakapapa of Tangata Hourua (Strength in Combining): inspired by Māori and PRMs

#### *Indigenous research methodologies' relationship to Kaupapa Māori (Māori principles) and PRMs*

Indigenous methodologies not only recognise Indigenous communities' shared ways of knowing in the context of self and worldview (Kovach, 2010) but also dispel the myth that only western methods are valid and reliable (Amituanai-Toloa, 2009; L. T. Smith, 2012, 2015, 2021). The dichotomy of Indigenous research theories, core

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[1]Whitireia Community Polytechnic, New Zealand
[2]University of Auckland, New Zealand
[3]Auckland University of Technology, New Zealand

**Corresponding author:**
Tania Mullane, Whitireia Community Polytechnic, Wi Neera Drive, Porirua, Wellington 5022, New Zealand.
Email: Tania.Mullane@whitireia.ac.nz

principles, concepts, values, and resistance to westernised and colonised thinking has been well discussed in Aotearoa by both Māori (Bishop, 1999; L. T. Smith, 2012, 2015, 2021) and Pacific (Helu-Thaman, 1988, 2003; Nabobo-Baba, 2008; Naepi, 2015; Tupuola, 2004) scholars. Collectively, they have expressed discontent with and a resistance to working within these dominant hegemonic and westernised research domains (Bishop, 1998, 2005; A. Jones, 2012; Walker et al., 2006), leading to the development of contemporary Māori and Pacific research models. Māori have led this voyage, such as their travels across the Pacific, and have perhaps gone furthest, to create evolved critical Indigenous decolonised research methodologies (Baker, 2009).

### *Kaupapa Māori research*

When considering an appropriate methodology for Māori research, it is therefore appropriate to reflect on the importance of attaining new knowledge through good research practice, and its impact on well-being, which is perhaps best articulated in this Māori whakataukī (proverb):

> *Mā te rongo ka mōhio*
>
> *Mā te mōhio, ka mārama*
>
> *Mā te mārama ka mātau*
>
> *Mā te mātau ka ora*
>
> Through sensing comes awareness
>
> Through awareness comes understanding
>
> Through understanding comes knowledge
>
> Through knowledge comes wellbeing

In the same way that this whakataukī places mōhio (thinking), mārama (understanding), mātauranga (knowing), and outcomes at its centre, so does Kaupapa Māori theory (Mead, 2016; G. Smith, 1997; L. T. Smith, 2015). However, Kaupapa Māori theorists have gone further to demand safe or tika practices in research, which Mead (2016) advocates should be underpinned by core Māori principles. Although these principles, outlined in Supplementary Table 1, have a literal definition or meaning, more important are their applications to research. For example, whanaungatanga literally means *relationship*, but in research, it could be used to describe the connection between the research collective – researchers, participants, end users – in ways that serve to strengthen each member of the group (Hudson et al., 2010).

For Māori, in addition to having research based on Māori principles, there is a strong desire to have methodologies that also critique the systems and structures that oppress Indigenous knowledge and its development. Kaupapa Māori research (KMR) is a direct response to this (R. Jones et al., 2006; G. Smith, 1997; L. T. Smith, 2021; Walker et al., 2006) and has brought these two crucial pieces together (G. Smith, 1997). As presented in Supplementary Table 2, KMR places Māori ways of knowing and doing at the centre of inquiry; it is aspirational in terms of self-determined research goals and outcomes, within a context of concerns about power and colonisation (G. Smith, 1997).

Importantly, given the focus of Mana Tū on Māori health in relation to diabetes, it is worth noting Māori health models, as presented in Supplementary Table 3, tend to be holistic, inclusive of whānau, with the collective rather than individualistic focus based on core Māori concepts.

### *Pacific peoples and principles*

The term *Pacific peoples* broadly covers Indigenous peoples from the island nations in the South Pacific and, in its narrowest sense, Pacific peoples in New Zealand. Despite the growing diversity of New Zealand's Pacific communities, differing values, ways of living, and beliefs, there are several enduring cultural values that bind an agreed set of common Pacific values (Ministry for Pacific Peoples [MPP], 2018). These prominent values include love, respect, reciprocity, spirituality, family, community, collectiveness, cultural obligation, kinship, and protocols (Amituanai-Toloa, 2009; Health Research Council [HRC], 2014; Tamasese et al., 2010). Bennett et al. (2013) advises that these values may vary in different communities as well as within respective Pacific groups, and are further informed by living and working in New Zealand.

## PRMs

Research models that represent diverse Indigenous Pacific Island epistemologies have been developed by Pacific scholars since the 1980s (Gegeo, 1998) and reflect a response to the changing social environments of Pacific people (Bennett et al., 2013; Naepi, 2019a). PRMs aim to represent Indigenous research that challenges philosophical notions of Pacific knowledge being inferior by positioning a clear understanding of Pacific through a Pacific lens (Naepi, 2019a). PRMs are primarily underpinned by cultural values, informed by a range of Pacific and pan-Pacific worldviews (Sanga & Reynolds, 2017) which at times synergises with Indigenous and KMR (Nabobo-Baba, 2008). PRM has an opportunity to revive and empower Pacific people, by positioning, defining, and evaluating Pacific from a Pacific viewpoint, whilst communicating ontological and epistemological differences that address the diverse Pacific communities within Aotearoa (Naepi, 2019b). There is a call for PRMs to engage and reflect broader Pacific communities that reside in Aotearoa rather than emphasising specific Pacific ethnicities (HRC, 2014; Naepi, 2015; Vaioleti, 2006). Agnew et al. (2004) highlight the limitations of using traditional Pacific models, as they tend to privilege Pacific Island–born and adult perspectives, and do not address the increasing number of young Pacific people identifying with two or more Pacific ethnic groups (HRC, 2014; MPP, 2018; Naepi, 2015). For genuine research to happen, it is imperative that a relational connection between the Pacific researcher and the Pacific methodology exists, to promote best data usage, interpretation, analysis, presentation, and purpose (H. Smith & Wolfgramm-Foliaki, 2021). Some of these unique and innovative models have been outlined in Supplementary Table 4.

## Why develop a new framework?

A review of Kaupapa Māori and PRMs identified not only historical whakapapa but also contemporary connections between Māori and Pacific people due to migration through the Pacific region and eventual settlement in their ancestral lands (M. Durie, 1998; Haberkorn, 2008). These contemporary connections, and reasons for developing a new framework for research with Māori and Pacific people in Aotearoa, are discussed further below.

Mana Tū also presented an opportunity for Indigenous researchers working with both Māori and Pacific to further consider respectfully connecting these unique epistemological spaces, and populations, to develop a research framework that aimed to (a) privilege Indigenous voices, challenge Eurocentric ideologies, be strengths- and evidence-based, ensure culturally safe spaces for participants, connect to the focus of the research and support adaption by future researchers (L. T. Smith, 2012); and (b) work cross-culturally and collaboratively in ways that embody activism and determine guidelines (Swadener & Mutua, 2008).

## Shifting definition of Māori and Pacific identity

The growing and complicated issue of Māori and Pacific identity in Aotearoa (L. T. Smith, 2015) is a compelling reason for developing a new framework. John Rangihau (as cited in L. T. Smith, 2015) was critical of the *pan-Māori* label for two reasons: it was externally imposed to align all things Māori that did not locate an individual's whānau, hapū, or iwi. Similarly, for people of the Pacific, the term, *Pacific* was externally imposed to denote peoples other than Māori who were born and reside in New Zealand and descend from Pacific nations, but the term does not allow for heterogeneity (MPP, 2018; Samu et al., 2019).

Pan-Māori and Pacific labels are most problematic in Aotearoa as they are used as standard ethnicity questions in most research and health settings, only being checked at enrolment and not asked about again (Enright et al., 2021). This approach does not allow people to self-identify as *multi*-ethnic; nor does it account for the fluidity in how people self-identify (Carter et al., 2009; Kukutai & Callister, 2009).

Almost 25% of Aotearoa's total population identify as Māori or Pacific people (Statistics New Zealand, 2018a). Over half of all Māori (55%) identify as having more than one ethnicity, with well over half of these (60%) identifying as also having a Pacific ethnicity (Te Puni Kōkiri, 2017). For Pacific peoples, 38% identify as having more than one ethnicity (Statistics New Zealand, 2018b) with almost one-third (32%) identifying with two or more. This diverse population, claiming both Māori and Pacific ethnic and cultural identities, with as much as two-thirds of New Zealand-born Pacific having Māori whakapapa, is being coined as *Generation B*; brown, brainy, beautiful, bicultural, bilingual, and bold (Vaka'uta, 2021).

As more people identify as being or having connections to both Māori and Pacific ethnicities, a research framework that is inclusive for both identities is required. However, advancing this concept requires careful consideration.

## Protocols to progression

Whilst some endorse combining Māori and PRMs, particularly for health research (Curtis, 2016), others suggest doing so with caution. Naepi (2015) warned of encountering complex methodological tensions around key questions including how Pacific engage with KMR methodologies, how is tino rangatiratanga (self-determination, Māori control) maintained, and how do individual Pacific ethnicities meaningfully engage with pan-PRMs? Like others (Airini et al., 2010; Curtis, 2016), she suggested a set of rules to keep the process and participants culturally safe from the outset (Naepi, 2015).

In terms of addressing cultural safety, the use of the *give-way rule* was first developed by Airini et al. (2010) and then Naepi (2015) with the intention of ensuring Māori and Pacific expertise at every level of decision making. Both authors strongly advocate that when there is a difference in cultural interpretations, then a decision *gives way* to the research advisor who holds the Māori or specific Pacific expertise. Another option is to create a *negotiated space* or an *in-between* terrain where distinctive worldviews and knowledge bases enter some form of engagement or relationship to potentially be expanded and innovated (L. T. Smith, 2012). This closely negotiated space between Indigenous peoples, such as that of Māori and Pacific peoples, is also referred to by Allen (2012) in his book *Trans-Indigenous*. Having described work to date on combining Māori and PRMs, we will now present our proposal – the Tangata Hourua Framework.

## Tangata Hourua Framework – *strength in combining*

To explain the name of this framework, we first ponder the historical Polynesian debate on whether a waka (canoe) or a whare (house) should be built first, as conceptually they are upturned versions of the other (Brown, 2009). This debate is based on shared ancestry, as both waka and whare are highly regarded structures in Polynesian architectural culture, connected by the fundamental skills needed to build them and their high value for both their intended dual purposes (Refiti, 2002). In contemplating this debate, it was decided to build a waka hourua (double-hulled canoe) first, which requires, like a framework, the correct resources and order of events to ensure the right construction (Chun & Racoma, 1995). Traditionally, waka hourua were built to be sturdier, to withstand the longer journeys from the broader Pacific oceans to Aotearoa (Figure 1). Thus, the

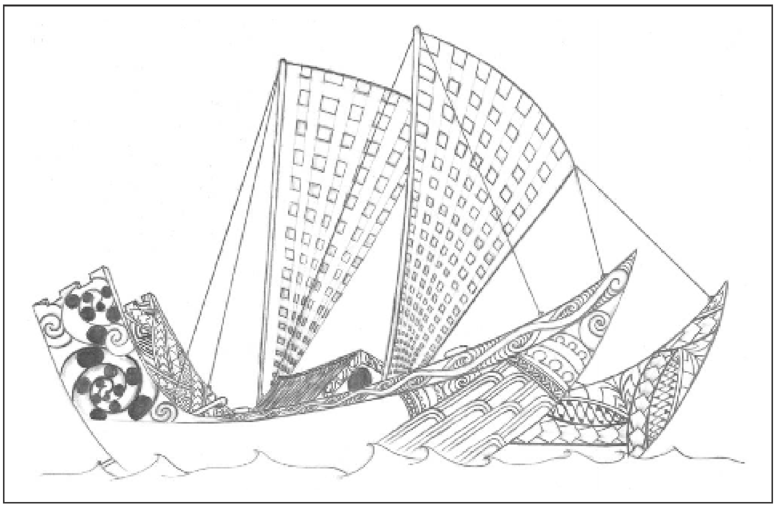

**Figure 1.** A waka hourua (double-hulled canoe). Drawing by Hone (2021a). The combination of the double hull formation represents the strength needed for intended purposes, such as the multiple vast oceanic journeys around the wider Pacific region to Aotearoa (New Zealand) historically undertaken by Māori. Each hull of the waka hourua has designs that are unique to Māori and Pacific people, showing not only the uniqueness but the shared relations that were built during these journeys and continue to the Aotearoa context of today.

waka has inspired the name Tangata Hourua for a framework in which peoples and worldviews Indigenous to the Pacific are brought together, utilising two hulls to make a waka and strengthening the means with which their journey or research achieves the intended destination and outcome.

Importantly, drawing on these two cultural approaches allows not only a natural recognition of cohesive strengths and similarities, but retains uniqueness, which refers to the populations that this framework aims to address. These are outlined in Supplementary Table 5, which highlights some of the similarities shared by Māori and Pacific core principles.

## Key principles of Tangata Hourua Framework

### *Te Takarangi: dual spiral that creates space and light; defined and undefined*

Te Takarangi (the spiral) is used extensively in Māori carving on waka, paepae (ground in front of meeting house), and whare whakairo (carved meeting house), and is a prominent pattern in tā moko (tattooing) on places of movement, including face and buttocks (Witehira, 2013). In Figure 2, the Takarangi consists of taka (revolutions or rotations) and rangi (heavens or heavenly realm). The double spiral can also mirror the double helix of DNA that has a generational link to metaphysical whakapapa and genealogies that connect Māori to the Pacific (A. Durie, 1997; Mahuika, 2019). The Takarangi dual spiral was chosen to depict the dual purpose and representation of the Tangata Hourua Framework, with the spiral originating from a single point, and splitting to allow space between the spirals that allow the Tangata Hourua Framework to deliberately mirror the reverential space and shared origin of Tangata Whenua (Indigenous people of New Zealand) and Tagata Pasifika (Indigenous people from the Pacific Islands). The spirals' *defined* and *undefined* lines, spaces, and core Māori and Pacific values allow an individual's identity and culture to be represented. The bold lines representing a known or decided aspect of their culture or identity and, in contrast, the *undefined* spaces represent what has not yet been discovered; defined and undefined spaces allow a natural *self-determined* motivation to choose one's own current positioning. A. Durie (1997) and L. T. Smith et al. (2016) explain this as an intercultural, in-between space involving an evolutionary process where distinctive worldviews and knowledge bases relationally engage, expand, and innovate, whilst maintaining whakapapa. Tevita Ka'ili uses the term 'trans-indigeneity' in a Radio New Zealand article ('World's Indigenous People Gather in New Zealand', 2019, para. 7), which describes the concept of Indigenous people moving outside of their homeland, resulting in contact with other Indigenous people.

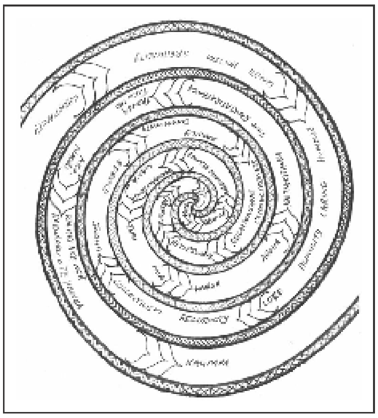

**Figure 2.** Tangata Hourua (Strength in Combining). Drawing by Hone (2021b). The dual spiral design has been used to depict core Kaupapa Māori (Māori principles) and Pacific values within the Tangata Hourua Framework. Commonly used Māori and Pacific designs have been embedded within the spiral to visually position their relationship with each other. The larger twin designs represent whale tales, which signify reciprocal movement within the framework. (ako Māori, culturally preferred pedagogy; aroha, to love, feel compassion, empathise; kaitiakitanga, guardianship; kaupapa, collective vision; kia piki ake i ngā raruraru o te kainga, socio-economic mediation; mana, authoritative, valid, respect; manaakitanga, showing respect and care for others; noa, without restraint or conditions; taonga tuku iho, cultural aspirations; tapu, sacredness, restricted; tika, to be correct, right, just or fair; tikanga, correct procedure, custom, practice; tino rangatiratanga, self-determination; wairua, spirituality; whakapapa, family connections; whanau, extended family; whanaungatanga, relationships)

## It was what it was, Is what it is, It will be what it will be

L. T. Smith (2011) contends that Indigenous research theory has had its own particular journey, which the Tangata Hourua Framework attempts to support. Each step is outlined as follows.

> *It was what it was*: recognises that Māori and other Indigenous people's ways of understanding and knowing were, and are, subject to colonisation (O'Sullivan, 2001), which in Aotearoa has resulted in health, education, welfare, employment, living standards, cultural identity, and social connectedness inequities shared by Māori and Pacific peoples (Carter et al., 2009; Dorling, 2019).
>
> *Is what it is*: acknowledges Māori as Tangata Whenua of Aotearoa, placing Māori methodologies, frameworks, and models at the centre of all research in Aotearoa. This has been acknowledged by incorporating the *give-way rule* (Airini et al., 2010; Naepi, 2015) to address the need for Māori to be front and centre in the creation and development of the Tangata Hourua Framework.
>
> *It will be what it will be*: articulates the need for frameworks such as Tangata Hourua to address several issues. The first issue is to purposefully create safe cultural spaces that are flexible and adaptable for future use (Cohen, 1998). The second, as articulated by Matire Harwood, is to challenge the status quo ("'I don't accept the status quo': Dr Matire Harwood on achieving health equity in Aotearoa", 2020) in ways that achieve equity and inform the development of services and systems that advance Indigenous people's health (Reid et al., 2017).

## Strengths and limitations

A strength of the Tangata Hourua Framework is that it allows research of Māori and Pacific people together (Curtis, 2016; Harwood et al., 2018; Naepi, 2015), which is especially important for people who identify as Māori and Pacific multi-ethnic identities, who may experience a sense of not belonging (Agee & Culbertson, 2013; Berking et al., 2007; Keddell, 2014). Another strength is that it is simple or free of clutter, allowing core Māori and Pacific values to be clearly represented, so as to allow those who identify as Māori or Pacific to clearly see themselves reflected in the framework, the research, and the outcomes (Anae, 2001; Grimes et al., 2015; Royal, 2005). A third strength is its adaptability. Future researchers can adapt and develop the framework as needed to be accessible to future generations to achieve and sustain better lives (Rudnev, 2015).

There are also limitations, however, and we do not suggest that the Tangata Hourua Framework should be used for all research involving both Māori and Pacific peoples, as researcher or participant, just in the same way that KMR is not pan-Māori (Rangihau, 1975) nor are Pacific methodologies pan-Pacific (MPP, 2018). However, as this framework proposes, support for cross-cultural partnerships between and among Indigenous researchers can create something stronger, more impactful, and thus it may deliver greater equity (Swadener & Mutua, 2008).

## Non-Māori, non-Pacific

There has been and will be ongoing debate as to whether non-Māori and non-Pacific can meaningfully engage in KMR and PRM that is culturally respectful (A. Jones, 2012; Naepi, 2019b). Māori and Pacific scholars alike advocate for research involving Māori or Pacific peoples to be led by Māori or Pacific people (Airini et al., 2010; L. T. Smith, 1992; Walker et al., 2006). There is a school of thought that supports non-Māori researchers' participation and collaboration in KMR, so long as it is Māori-led (Carpenter & McMurchy-Pilkington, 2008; A. Jones, 2012). If Māori and Pacific people are being researched together, both Kaupapa Māori and pan-PRMs should engage to support Māori and Pacific people's empowerment and strengths-based interventions (Ponton, 2018) with Kaupapa Māori as a guide to ensure practice is culturally safe (Naepi, 2019b). As Tangata Hourua engages both methodologies and embodies a relational element that allows movement and space for researchers, its use by non-Māori and non-Pacific should be undertaken with the following caveat: if Māori are being researched, then it is Māori-led with support from a multicultural team which may include Pacific people (A. Jones, 2020; Naepi, 2019b).

## Conclusion

Tangata Hourua can accommodate, move with, and adapt to the ever-increasing complexities of the growing Māori and Pacific populations in Aotearoa. In addition, this model can be utilised within a variety of domains, including health, education, social service, justice, and the public and private sectors. Utilisation would require a genuine desire for a combined cultural approach that engages Māori and Pacific people in research that positively contributes to knowledge and well-being. A combined Māori and Pacific methodology has the potential to inform robust research into Māori and Pacific inequalities across a variety of sectors and, ideally, help others to challenge these going forward (Carter et al., 2009; Dorling, 2019).

Ultimately, combining methodologies that are Indigenous to Aotearoa with those who have whakapapa connection was not an easy decision. There was an element of fear about getting it wrong, which may lead to paralysis (A. Barnes, 2013; Tolich, 2002); however, as argued above, there were many reasons to continue the journey of research methodology development in Aotearoa. Introducing a new, or at least adapted way of doing research that was both respectful to Tangata Whenua and open to Pacific principles and diverse Māori and Pacific identities has potential. The first aspect of that potential is to build on Māori and Pacific worldviews, the second is to address the methodological tensions in combining Kaupapa Māori with Pacific methodologies, and the last is to ultimately advance knowledge and well-being for future generations of Māori and Pacific people.

### Authors' note

**Tania Mullane** (RN, MA Māori Development, PhD Candidate) is a first-generation New Zealand born Pacific wahine, with Fijian, Tongan and Greek whakapapa. She has a background in working and in leadership roles in education, nursing, social service, and justice environments. Currently she is the Head of Nursing Pacific at Whitireia.

**Dr Matire Harwood** (Ngāpuhi) (PhD, MBChB) has a background is in primary health care and rangahau hauora Māori. She is the Director for Tōmaiora, Māori Health Research, and Associate Professor, Faculty of Medical and Health Sciences at University of Auckland; General Practice and Primary Healthcare, editor for the *Māori Health Research Review*; and GP Champion for Primary Care Health Targets at Counties Manukau DHB.

**Dr Isaac Warbrick** (Ngāti Te Ata, Te Arawa, Ngā Puhi) (BSc (Hons), PhD) is an exercise physiologist, and a Senior Research Fellow and co-Director of Taupua Waiora Centre for Māori Health Research at Auckland University of Technology.

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### ORCID iD

Tania Mullane https://orcid.org/0000-0002-6458-1655

### Supplemental material

Supplemental material for this article is available online.

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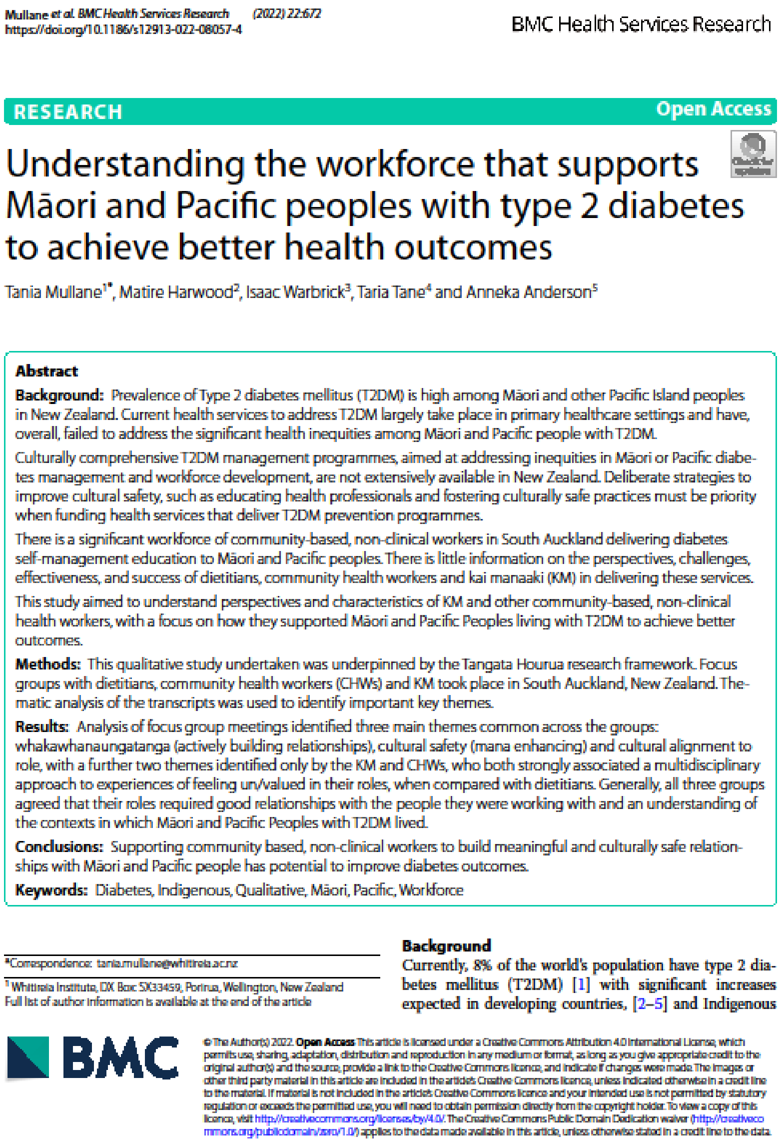
# Appendix K: Published version of Chapter 5: Understanding the workforce that supports Māori and Pacific peoples with type 2 diabetes to achieve better health outcomes



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## Understanding the workforce that supports Māori and Pacific peoples with type 2 diabetes to achieve better health outcomes

Tania Mullane[1*], Matire Harwood[2], Isaac Warbrick[3], Taria Tane[4] and Anneka Anderson[5]

**Abstract**

**Background:** Prevalence of Type 2 diabetes mellitus (T2DM) is high among Māori and other Pacific Island peoples in New Zealand. Current health services to address T2DM largely take place in primary healthcare settings and have, overall, failed to address the significant health inequities among Māori and Pacific people with T2DM.

Culturally comprehensive T2DM management programmes, aimed at addressing inequities in Māori or Pacific diabetes management and workforce development, are not extensively available in New Zealand. Deliberate strategies to improve cultural safety, such as educating health professionals and fostering culturally safe practices must be priority when funding health services that deliver T2DM prevention programmes.

There is a significant workforce of community-based, non-clinical workers in South Auckland delivering diabetes self-management education to Māori and Pacific peoples. There is little information on the perspectives, challenges, effectiveness, and success of dietitians, community health workers and kai manaaki (KM) in delivering these services.

This study aimed to understand perspectives and characteristics of KM and other community-based, non-clinical health workers, with a focus on how they supported Māori and Pacific Peoples living with T2DM to achieve better outcomes.

**Methods:** This qualitative study undertaken was underpinned by the Tangata Hourua research framework. Focus groups with dietitians, community health workers (CHWs) and KM took place in South Auckland, New Zealand. Thematic analysis of the transcripts was used to identify important key themes.

**Results:** Analysis of focus group meetings identified three main themes common across the groups: whakawhanaungatanga (actively building relationships), cultural safety (mana enhancing) and cultural alignment to role, with a further two themes identified only by the KM and CHWs, who both strongly associated a multidisciplinary approach to experiences of feeling un/valued in their roles, when compared with dietitians. Generally, all three groups agreed that their roles required good relationships with the people they were working with and an understanding of the contexts in which Māori and Pacific Peoples with T2DM lived.

**Conclusions:** Supporting community based, non-clinical workers to build meaningful and culturally safe relationships with Māori and Pacific people has potential to improve diabetes outcomes.

**Keywords:** Diabetes, Indigenous, Qualitative, Māori, Pacific, Workforce

### Background

Currently, 8% of the world's population have type 2 diabetes mellitus (T2DM) [1] with significant increases expected in developing countries, [2–5] and Indigenous

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*Correspondence: tania.mullane@whitireia.ac.nz

[1] Whitireia Institute, DX Box SX33459, Porirua, Wellington, New Zealand
Full list of author information is available at the end of the article

people's populations due to a move away from health eating, active lifestyles, and controlled urbanization, [6]. Additionally Indigenous peoples have higher rates of diabetes complications such as eye, kidney, vascular disease and significantly advanced rate of mortality compared to non-Indigenous people [7] suggesting inequities in diabetes management to reduce the risk for such complications. Such is the case in in Aotearoa New Zealand (hereafter referred to as NZ) with Māori, the Indigenous people of NZ, and Pacific Peoples experiencing significantly higher rates for diabetes and its complications with increased exposure to the wider determinants for diabetes and reduced access to treatments [8].

Community-centred care plays an important role in addressing these inequities through the provision of lifestyle advice, diabetes and self-management education, and medication [9]. In NZ a range of workers, including general and nurse practitioners, nurses, community health workers and dietitians, provide these services. Further efforts to improve access to Māori and Pacific Peoples have tended to focus on outreach by conventional services such as nurse clinics [10] and dietitians [11]. However, these may not be effective in achieving equitable outcomes for Māori and Pacific Peoples with T2DM. Further, there is little information about what kind of workforce, or workforce development, is required to improve diabetes outcomes for Māori and Pacific Peoples.

In 2016 the National Hauora Coalition (NHC), a Māori-led primary health organisation, received funding to test Mana Tū, an innovative programme for Māori and Pacific Peoples with T2DM. Mana Tū (which means 'to stand with authority'), a whānau ora approach to long-term conditions, is a Māori-led, Kaupapa Māori approach to supporting people living with poorly controlled T2DM, and their wider whānau (family members) [12]. Kai manaaki (KM) are skilled case managers who are embedded within a primary care service as core workforce; their case management approach supports diabetes self-management with Māori and Pacific Peoples living with poorly controlled T2DM [13].

In this paper we present a study that aimed to better understand the KM workforce compared with other diabetes workers. The main objective of this research was to investigate and compare the experiences for the main groups of community-based, non-clinical workers currently supporting Māori and Pacific Peoples and their whānau (families) with diabetes in South Auckland NZ – KM, Community Health Workers and Dietitians. The ultimate objective is to use the findings to inform future strategies for Māori and Pacific health workforce development, to improve the delivery of services and diabetes outcomes for Māori and Pacific Peoples.

## Methods

A qualitative study was undertaken within the Tangata Hourua research framework, which was developed by members of this research team, with the aspiration to contribute positively to Māori and Pacific knowledge and wellbeing [14]. The Tangata Hourua aims to uphold the rights of Indigenous peoples to have their knowledge and culture embedded in research by drawing upon Kaupapa Māori and pan-Pacific values and methodologies. In addition, the Tangata Hourua framework addresses the growing trend of Māori and Pacific people to be researched together, increasing numbers of those who identify as both Māori and Pacific and lack of frameworks that culturally address and reflect these approaches and populations [14].

Specifically, the study aimed to gain an understanding of the experiences for the main groups of community-based, non-clinical workers currently supporting Māori and Pacific Peoples and their whānau (families), rather than a broad representation of all health workers who deliver T2DM programmes. Focus groups were determined to be the most appropriate method to obtain this information, presenting an excellent opportunity to focus on a particular issue, privileging the subjective knowledge and life experiences of respondents [15]. Further, focus group methods align with important Māori and Pacific principles including mana-enhancement (acknowledging the contribution and expertise of each participant), mahitahi (co-operation between participants and researchers) and manaakitanga (reciprocity) by providing a collective forum for participants to share their own experiences and contribute to improving the services that they know intimately [16].

The focus groups were conducted with the three main workforce groups working in South Auckland, New Zealand. We chose this region for its ethnic profile, as 13% of the population identify as Māori, representing 24% of all Māori in New Zealand [17], and 64% of New Zealand's Pacific population currently lives in Auckland, representing 15% of the Auckland population [17]. The three main workforces, KM, community health workers (CHWs) and dietitians, participated in three separate focus groups. Potential participants were recruited by sending an invitation to organisations employing dietitians, CHWs and KM. Once we had received more than six responses from one of the three workforces, we arranged focus group discussions which lasted 60–70 minutes and took place at work sites and at times that suited participants. Food and refreshments were provided for each group discussion. Informed consent and confidentiality agreements were obtained from all participants at the start of each meeting, and demographic information was collected (see Table 1).

**Table 1** Profile of Focus Groups

| Focus Group | Number | Demographic Profile of the Focus Groups | |
|---|---|---|---|
| | | **Ethnicity – self- identified** | **Gender** |
| Kai Manaaki | Seven | Six Māori<br>One Indo-Fijian | All female |
| Community Health Workers | Eight | Two Māori<br>Two Pacific Peoples (Cook Island Māori and Samoan)<br>Four New Zealand European | All female |
| Dieticians | Seven | Three Pacific Peoples (Tongan and Cook Island Māori)<br>Four New Zealand European | All female |

The guiding questions were:

1. What can you tell me about your role?
2. What do you think is important to consider in working with Māori and Pacific Peoples living with T2DM?
3. How do you know if you are effective?

The primary researcher transcribed the recorded focus group discussions verbatim. Themes arising from the data were analysed and informed by the Tangata Hourua model's core Māori and Pacific values and concepts as a pou (pillar) to guide data analysis and theming. This is to ensure the authentic voices of Māori as Indigenous to New Zealand and the Pacific Peoples of Te Moana Nui a Kiwa (the Pacific Ocean) can be heard.

## Results

Table 1 presents the number and demographic profile of participants for each focus group. The focus groups reflected the fact that women make up the great majority of the New Zealand health care workforce [18], with all participants being female. Analysis of the data identified common themes: whakawhanaungatanga (actively building relationships), cultural safety and cultural alignment. However, there were also two key differences for KM and CHWs who (1) preferred a multi-disciplinary team (MDT) approach, and (2) described their experiences of feeling un/valued in their roles, when compared with dietitians. The themes are presented here.

### Key data themes

#### *Culturally safe practice*

As one worker summarised, cultural safety in practice meant using authentic language, sharing decision-making and genuinely wanting the best for clients:

> *"I find the language that you use has to be simple … non-judgmental lens, taking that judgement out, because they are already feeling so crap … we don't use jargon from the clinic we use everyday language that we/they know. It's about creating a supportive environment for people to thrive in and that's also very important" – KM, Māori.*

Culturally safe practice required time. The concept of 'time for equity' allowed appointments to go as long as necessary to "show you value them and their time" when we "just chill out listen, then they talk". Consequently, clients told workers that they felt heard, and were more likely to "actually, come up with the solution. You [health worker] don't have to do anything, don't make assumptions that we know any more than they do they know" – KM, Māori.

Going further, time created the opportunity to shift power from the health worker to the client, as one KM acknowledged "sometimes our appointments would go for an hour or so, 'cause they just needed that time to sort of warm up and then really really get out what they were trying to say or wanted to know … there's a valuing of their time and what they're talking about … it's a two-way thing it's not that anyone is better but because we had the time just sit there and listen" – KM, Māori.

Cultural concordance – knowing the context within which Māori and Pacific Peoples with T2DM lived – was associated with better engagement and, subsequently, better outcomes. As one worker said, "these are my brothers and sisters. I know what works and what doesn't." Pacific workers were appreciated by the non-Pacific workers because:

> *"Being in the community and working with Pacific Peoples means language is important, so having a Pacific CHW makes such a difference with supporting us with language, but also with the engagement, she can engage with them in a way that I can't and that's good."*

However, there were major barriers to culturally safe practice. For example, there were inadequate culturally specific resources to work with: "trying to find pictures [of healthy food options] that represent Māori or Pasifika people is really hard sometimes" with dietitians commenting that most resources were "very white" (CHW, NZ European). This limited their ability to be culturally safe.

Another barrier was the lack of Māori and Pacific workers in the diabetes sector. Living in Māori and Pacific communities, Māori and Pacific workers were more likely to be "Understanding [of] everybody's work timetable, kids' timetable, how are we going to put your food and medication around what you are already doing, and how can we adjust that for your whole family's benefit. Go out to [local food] markets and understand where they shop and what food they eat" – CHW, NZ European.

All agreed that building Māori and Pacific workforce capacity in T2DM management was important in order to reflect the population with the highest incidence of T2DM. The dieticians, especially, strongly advocated that any workforce development should attract and retain more Māori and Pacific into health professional roles, which also supported the District Health Board goals of increasing more Māori and Pacific staff.

A key barrier was building cultural safety practice in the non- Māori, non-Pacific workforce. A Pākehā (European) worker described Pākeha feeling overwhelmed and almost paralysed in their practice with Māori and Pacific peoples, and seemed to direct the fault at clients who were less likely to listen or trust non-Māori, non-Pacific workers:

> *"I think potentially as a non-Māori and non-Pacific there's a barrier there right at the start in terms of (from client/whanau perspective) 'am I going to listen, am I going to understand the ... mistrust with what's happened before' so how can we start to engage them?" – Dietician, NZ European.*

There was also reflection by these workers that their professional views on the importance of a cultural approach, and it being essential to integrate into practice to build genuine relationships and achieve better diabetes outcomes for clients and their whānau, had changed. With time and experience their ideas on what was good or bad practice had developed:

> *"quite a few years ago I would have thought that was like such bad practice [to spend time developing meaningful relationships rather than take a clinical history]. Now I think it's so important, because I don't need a diet history to be able to do my job and do it well. So yeah, just massive changes of thought and process around how you do things and then obviously that's that for another time at building relationships ... sometimes I'll spend an entire session just chatting [in order to know each other].*

Such reflections by the European practitioners in our study suggest that there is hope in terms of the ability to transform practice from not only an individual but collective perspective. Every one of the New Zealand European dieticians spoke about their self-awareness of unconscious biases, with one dietician acknowledging that some clients did not want to work with them because they were Pākehā (New Zealand European), which forced them to reflect on awareness and responsibility of cultural safety. Importantly they acknowledged that when they did not practice in a culturally safe or appropriate way, they did not fulfil their job or provide an effective service.

### *Whakawhanaungatanga*

Whakawhanaungatanga (noun), an important cultural concept for Māori and Pacific peoples, emerged in the focus group discussions. It is formally defined as the "process of establishing relationships, relating well to others" [19]. For the focus group participants, it occurred between provider and clients, but required "treating my patients like they are my sister, my brother, my whānau, which quickly establishes a relationship."

Despite the word whānau (family) appearing in whakawhanaungatanga, it is more than just making family links – it supports people to establish and maintain personal and culturally relevant connections [20]. KM in particular were most aware of its significance, with one stating "Talking [with clients] about their families and about them first before diving into medical stuff ... build up a relationship, establishing a really good rapport, it's connection. ..." As described here, it should happen early in the consultation and well before more traditional questioning/informing.

As a Pacific dietician acknowledged, whakawhanaungatanga came easily to the Māori and Pacific staff as it learnt over their lifetime, and reflects their collective cultural values and worldviews:

> *"We [Pacific Peoples] are more like a group rather than self ... [in] understanding them and also understand how the Pacific and Māori live and what mattered to them, fitting into their world view" – Dietitian, Pacific.*

As stated in one focus group "Trust building is important and how we build trust to them and then they tell things to us; which allows clients to feel safe." Whakawhanaungatanga provided a framework in which trust was built. As a result, there was better rapport, and the focus group participants said that clients were more open to taking on advice or interventions, resulting in better outcomes down the track.

For non- Māori, non-Pacific health workers "Things like whakawhanaungatanga is vital, nobody ever writes about it, [yet] it's intrinsic to this community" –CHW, NZ European.

They felt strongly that more could be done with their non-Māori, non-Pacific colleagues to highlight the importance of whakawhanaungatanga when working with Māori and Pacific Peoples and communities; and that it should be a core competency for all the participants' professional roles. Resources to guide its use and inform users on the quality of their whakawhanaungatanga in practice, were sought.

### *Culturally safe spaces*

Delivering services in traditional cultural settings such as marae (traditional meeting houses) for Māori and church for Pacific Peoples were effective for shifting power to clients, due to their experience of cultural affirmation. One CHW described the importance of traditional cultural settings or principles for services for Māori and Pacific Peoples:

> *"Being based on the whenua [land] of a marae is key to what we do and how we do it. I don't think we can say that any other clinic in the whole of Auckland has as higher Māori ethnicity as we do. [It's a space] where they can just be and interact with others and be heard" – CHW, Māori.*

Participants spoke of their own enjoyment when "being on the marae and having the marae support, working within an organisation that is guided by kaupapa Māori values ... it's a privilege" – KM, Māori.

Importantly, 'the [marae-based] clinic works like a centre of the community, so people feel like they can pop in anytime, walk in clinics to see someone; There is also a spiritual component ... the idea of community, the idea of inclusion" – CHW, Māori. It was considered an example of best practice, and other providers looked to them as a role model and a centre of excellence.

### Multidisciplinary team approach

The KM and CHWs both worked as part of a multidisciplinary teams (MDTs) and felt that this was best for managing T2DM for Māori and Pacific Peoples. An MDT approach was strength-based in the sense that different members of the health team had different roles based on their strengths or expertise. They described the importance of working in partnership with non-health service providers, including social or housing services, which facilitated access to interventions that addressed the wider determinants for health, such as poverty. For example, one KM described supporting a client to study for and sit their driver's licence, which then enabled them to attend job interviews and finally attain employment.

The KM in particular felt that being part of a wider team meant that they contributed to the wider environment, and this had an impact on the health and wellbeing of the whole community. This influence occurred at multiple levels. For example, in the primary care clinics, they participated in team meetings, shared experiences and learnings about good practice, and advocated for clients and their whānau. One example was teaching clinicians (GPs and nurses) how they could do more to remove barriers to diabetes care. They knew where to locate or refer people for services and dismissed siloed care:

> *"I don't know anyone outside the marae because we are so used to using who [multiple health and social service workers] we have here" – KM, Māori.*

The KM and CHW spoke in depth about the importance of a multi-disciplinary approach to their role. In contrast a multidisciplinary approach was not mentioned by the Dieticians, this could be interpreted in several way, one of which is that they did not see it as important, but rather saw themselves in more of an independent practitioner role due to their status as a 'regulated health role' as opposed to the KM and CHW who are regarded as 'non-regulated health roles'. The ethnic makeup of each of the group may have bearing on what was discussed.

### Feeling un/valued

CHWs described feeling marginalised by some diabetes services because they were not in formally recognised roles. KMs are also not regulated yet they had a very different experience. They described a workplace that provided regular supervision and opportunities for peer support, in addition to access to programmes that fulfilled self-determined professional development needs. They felt valued for their cultural and social determinant expertise, and that they were contributing beyond the service to people and their communities.

> *"Actually, we were always treated like professionals of our field" – KM, Māori.*
> *"even smaller 'aha' moment such as they are smiling, they brought their daughter or someone with them to learn some more, sometimes a community of people sitting there waiting for you" – KM, Māori*

Again, this was not discussed in the dietitians focus group.

## Discussion

This study aimed to understand the experiences of the KM, the workforce for Mana Tū, compared with other community-based, non-clinical health workers, and how they support Māori and Pacific Peoples living with T2DM to achieve better outcomes. The analysis of focus group meetings identified similarities and differences between the perspectives of dietitians, CHWs and KM. All three groups agreed that their roles required good relationships with the people they were working with, and an understanding of the contexts in which Māori and Pacific Peoples with T2DM lived. Further, there was an expectation that services were culturally safe (mana enhancing) and required more Māori and Pacific workers and resources. However, CHWs and KM reported a preference for working as part of an MDT and described their experiences as unregulated health workers.

All participants placed high value on whakawhanaungatanga, which for them meant making of culturally meaningful connections with others. They felt this aligned with Māori and Pacific worldviews and cultural values in terms of engaging the collective rather than just individuals. Their perspectives strongly indicated that culturally appropriate communication and relationship building, such as whakawhanaungatanga, encouraged individuals and their whānau to be more open, form relationships and feel safe to discuss health and lives. The concept of whakawhanaungatanga, despite being taught in health curricula continues to be challenged as to how this is integrated into health practice by Māori and non-Māori [19, 21], and should not be regarded as a one-off event to connect with the patient and whānau but, rather, something ongoing that is built upon whilst retaining safe boundaries [22].

In response to the unfair burden of health inequalities disproportionately affecting Māori and Pacific Peoples, there is an urgent need to create culturally safe environments [23]. An Indigenous response to health service delivery is founded on culturally safe practices and concepts [24, 25]. Achieving culturally safe (mana enhancing) practice requires an acknowledgement of one's own culture, and personal biases in order to understand better the culture of others who are different to oneself, with the intention to further recognise and respect the cultures of people, whānau and communities [26]. In New Zealand, a much-needed evolution from cultural competency to cultural safety is occurring and supports the historical call by Māori seeking a shift in power from traditionally being held by health professionals to shared-care, which is strongly based on their health status and rights with respect to the Treaty of Waitangi [21, 27]. The enablement of culturally responsive healthcare organisations and workforce development [28] is a principal strategy towards the goal of improved cultural competence in health services and systems that better meet the needs of Māori and Pacific Peoples [29]. There are strong calls for this not only to permeate health organisations, but to be sector-wide, and to include social services, education, justice, and research, using systematic and sustainable approaches [25]. An accountable mechanism for providing culturally safe care, as defined by patients and their communities, measured through progress towards achieving health equity [26] is something that may be addressed by the recently announced health reforms. These reforms will establish a Māori Health Authority, with the express aim of enhancing Māori rangatiratanga (governance) for Māori over hauora (health) with greater influence ensured throughout the entire health system [27].

The non-regulated workforce is a priority area needing people whose knowledge and skills are required to respond to the culturally responsive models of care needed to meet the health demands of Māori and Pacific and support to better health outcomes [9]. 'Kaiāwhina' is the over-arching term used to describe non-regulated roles in the health and disability sector such as CHWs and KM with essential qualities of resilience, diversity, skill and commitment to support hauora (health) outcomes for all in Aotearoa New Zealand (50% being Māori) [30].

It is important to note that being non-clinical or non-regulated does imply a lack of knowledge or professionalism, as these roles bring the crucial cultural, local and interpersonal skills and expertise that are integral to building relationships and trust with the whānau and communities they work within. A study by Boulton et al. [31] illustrated the restricted career advancement opportunities for Māori CHWs due to the lack of formal role recognition and limited training options. In contrast, the KM described the importance of feeling valued in their roles when they were members of the MDT, received professional development opportunities and had regular peer review. Research suggests that when physicians and non-physician professionals cohesively work together, improved patient outcomes, including better clinical outcome measures and higher patient satisfaction, occur [32]. Considering the recent health reforms in NZ, including the development of a health charter and its focus on a relevant health workforce for communities [29, 33], there is scope to support CHWs and KM in the ways described here.

## Conclusion

This study into three distinct roles for health staff who work with Māori and Pacific with T2DM is a first of its kind, with unique findings resulting. There was deliberate approach to undertake research that was strength-based, with a focus on the system rather than individual people and their behaviour. Importantly, as much as this was about the workers, the ultimate objective was on achieving excellent outcomes for Māori and Pacific Peoples. However, there are several limitations to this study. This is a small project with three focus groups in one area of NZ, and therefore may not apply to other settings or workforce groups. However, it does provide rich insights into the experiences of those people working with an important cohort and has the potential to inform workforce development strategies both here in NZ and for other Indigenous communities.

Indigenous comprehensive health and social programmes that achieve better diabetes outcomes for Māori and Pacific communities require the right workforce. Our study suggests that support for community-based, non-clinical workers to build meaningful and culturally safe relationships with communities, and contribute as valued team members, will improve diabetes outcomes.

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**Authors' contributions**

TM and MH designed the study. TM undertook recruitment, interviewing and transcription. TM analysed the data and led the drafting of the manuscript with MH and IW contributing to these steps. All authors contributed to the writing and review of the manuscript and all authors have approved the final manuscript.

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**Availability of data and materials**

All ethics and research guidelines used for this article are publicly available. This can be accessed on the AUT University research ethics guidelines link: Research Ethics - AUT.

The datasets generated and/or analysed during the current study are not publicly available due to Indigenous data sovereignty which protects this data and permission to share transcripts was not sought. Please contact corresponding author: Tania.Mullane@whitireia.ac.nz for communications regarding accession of data.

## Declarations

**Ethics approval and consent to participate**

Ethics approval was obtained, on the 23rd $^{rd}$ June 2020 by the Auckland University of Technology Ethics Committee. reg no. 20/8. Informed consent to participate in the study was obtained from all participants prior to their involvement and all methods performed were in accordance with relevant guidelines and regulations.

**Consent for publication**

The authors declare that they consent to publish.

**Competing interests**

The authors declare that they have no competing interests.

**Author details**

[1]Whitireia Institute, DX Box SX33459, Porirua, Wellington, New Zealand. [2]Department of General Practice and Primary Care, Faculty of Medical and Health Sciences, University of Auckland Private Bag 92019, Auckland Mail Centre, Auckland 1142, New Zealand. [3]Faculty of Health and Environmental Sciences, Auckland University of Technology Private Bag 92006, Auckland 1142, New Zealand. [4]Faculty of Medical and Health Sciences, Te Kupenga Hauora Māori, University of Auckland Private Bag 92019, Auckland Mail Centre, Auckland 1142, New Zealand. [5]Faculty of Medical and Health Sciences, Te Kupenga Hauora Māori, University of Auckland Private Bag 92019, Auckland Mail Centre, Auckland 1142, New Zealand.

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