Safe Practice Effective Communication (SPEC): An analysis of the development, content, implementation and nationalisation of de-escalation and aggression management training for mental health services in Aotearoa New Zealand

Priscilla Anne Maria Brebner

A thesis submitted to

Auckland University of Technology

in partial fulfilment of the requirements for the degree of

Doctor of Health Science

2022

Faculty of Health and Environmental Sciences

Abstract

The use of restrictive practices in acute mental health settings is a contentious issue. Eliminating use of these practices in acute mental health settings is a goal in Aotearoa New Zealand and internationally. One way to support this goal is the use of training that teaches prevention of the use of restrictive practices.

In Aotearoa New Zealand, there is a nationally consistent evidence-based training programme called Safe Practice Effective Communication (SPEC). This training focusses on de-escalation techniques, therapeutic engagement, use of trauma informed care principles, the use of cultural engagement as preventative strategies, and teaches the safe use of personal restraint as a last resort.

Using a qualitative, descriptive, intrinsic case study, this research created an understanding of the unique development of a national approach for de-escalation and aggression management training called SPEC in Aotearoa New Zealand. Three phases of research were used to achieve this: (1) a review the current content of Safe Practice Effective Communication (SPEC) training compared to best evidence; (2) a description of how a decision was made to endorse the same de-escalation and aggression management workforce training programme across mental health and addiction services nationally; and (3) an in-depth review of how one district health board (DHB) moved from their existing approach to the agreed national training (SPEC).

This research revealed that safety was central. Improving de-escalation and communication skills to prevent the use of personal restraint[1] promotes safer outcomes for everyone. The use of personal restraint techniques that do not use any form of pain compliance and do not teach regular prone restraint reinforces safer outcomes. Having a nationally consistent workforce training programme across the country ensures that the same type of de-escalation and aggression management training can be taught and delivered. This creates efficiencies and makes it safer for everyone, as no matter what the setting, the same response will occur. Improving cultural safety and cultural responsiveness for the indigenous population, Māori as mana whenua, was identified as vital to effect better health outcomes for Māori. This emphasis on safety signifies a substantial practice change.

This unique national implementation of SPEC occurred due to the unity amongst the clinical nurse leaders throughout the country to adopt SPEC; consistency was obtained through national agreement of the content and method of the training; and the momentum for change was signalled through the implementation processes demonstrated in one large metropolitan

[1] Personal Restraint refers to when a service provider uses their own body to intentionally limit movement of a consumer refer to Standards NZ 2008.

district health board. A common vision and strategic clinical nurse leadership were critical success factors for the national adoption and implementation of SPEC.

Table of Contents

List of Tables

List of Figures

Kupu/Glossary

Hui	To gather, assemble, meet. Gathering, assembly, meeting.
Kai	To eat, to consumer, to partake. Food, meal.
Karakia	To recite ritual chants, say grace, pray, recite a prayer, chant. An incantation, ritual chant, a set form of words to state or make effective a ritual activity.
Kanohi-ki-te-kanohi	Face-to-face, in person, in the flesh.
Mahi	To work, do, perform, accomplish, practice.
Mana	To be legal, valid, authoritative. Prestige, authority, power, influence, status.
Mana whenua	Territorial rights, authority over the land, jurisdiction over the land.
Mihimihi	To greet, pay tribute, thank. Speech of greeting, tribute; introductory speeches at the beginning of a gathering. The focus of mihimihi is on the living and peaceful interrelationships.
Pōwhiri	To welcome, invite, beckon. Invitation, rituals of encounter, welcome ceremony on a marae.
Rangatiratanga	Chieftainship, right to exercise authority, chiefly autonomy, noble birth, attributes of a chief.
Te reo Māori	The Māori language.
Tikanga	Correct procedure, custom, habit, lore, manner, rule, way, code, meaning, convention, protocol, correct, right, reason, purpose, motive, meaning, method, technique.
Tino rangatiratanga	Self-determination, sovereignty, autonomy, self-government, domination, rule, power.
Whakawhanaungatanga	The process of establishing relationships, relating well to others.
Whakataukī	To utter a proverb. Proverb, significant saying.
Whaiora	Person seeking wellness.
Whānau	Extended family, a family group, a familiar term to address several people, the primary economic unit of a traditional Māori society.

	In the modern context the term is sometimes used to include friends who may not have kinship ties.
Whanaungatanga	Relationship, kinship, sense of family connection. A relationship through shared experiences and working together which provides people with a sense of belonging. It develops because of kinship rights and obligations, which also serve to strengthen each member in the kin group. It also extends to whom one develops a close familial friendship or reciprocal relationship.

Source: Moorfield, J. (Ed.). (n.d.). *Te Aka Māori Dictionary*. https://maoridictionary.co.nz

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.

_____

Priscilla Anne Maria Brebner

Acknowledgements

There are many people to acknowledge in the completion of this professional doctorate.

I want to acknowledge and thank my family, especially my husband, who shouldered the load of 'home chores', was always cheerful and helpful with finding the 'right' word, was very patient when listening to sentence construction, for being my IT guru and for being endlessly positive. I thank my children for their genuine interest in my progress and for their love and support during this time.

To my wider network, family, friends, colleagues, and employers who have always been 100% supportive and interested in the progress, understanding when I have declined social invitations, willingly read chapter versions, and who have been endlessly encouraging when moments of doubt set in.

I acknowledge the wisdom and talent of my supervisors, Dr Brian McKenna and Dr Daniel Sutton, two of the smartest people I know. Thank you for your stewardship, guidance, patience, pastoral care, and skills to help me bring this to fruition.

I acknowledge and thank the participants for your rich insights, considerations, participation, and generosity of time.

This thesis is the result of the support from all the above and I am immensely grateful.

I do, however, want to dedicate this thesis to people who work in the acute inpatient units and wards for mental health and addiction, particularly the registered nurses. These are busy and highly dynamic environments, and these environments require specialised staffing 24 hours, 7 days a week. Mental health and addiction is often an under-recognised specialty area of nursing practice. It is my hope that aspects of this practice-based thesis promotes more positive outcomes, contributes to everyone feeling safer, reduces harms from occurring and supports you, the staff, to feel more positive, every day, in your work. Your mahi is important, it is valued, and appreciated. May aspects of this thesis reinforce the great work that you do.

Ethics Approval

Approved by the Auckland University of Technology Ethics Committee on 20th February 2019 AUTEC Reference number 19/23

Chapter 1: Introduction

The use of restrictive practices in acute mental health settings is a contentious issue both in Aotearoa New Zealand and internationally. There is a contemporary focus to reduce and eliminate these practices wherever possible (Bowers, 2014; Health Quality Safety Commission, 2020; Huckshorn, 2004). For many years, mental health clinicians working in acute mental health settings have been provided with training to be able to respond safely when situations of aggression occur and risk the personal safety of both staff and consumers (Wilson et al., 2017). This training has developed in response to need but without consistency (Hollins et al., 2021). In Aotearoa New Zealand, there is a nationally consistent training programme to support a safe, evidence-based, well-prepared response. This training is called Safe Practice Effective Communication (SPEC). The training focusses on de-escalation techniques, therapeutic engagement, understanding trauma-informed care and includes principles of cultural engagement as preventative strategies and teaches the safe use of personal restraint when it is needed as a last resort (Te Pou o Te Whakaaro Nui, 2017a).

This thesis

The overall objective of this study was to create an understanding of the unique content development and implementation of a national approach to staff training for de-escalation and aggression management in acute mental health and addiction services in Aotearoa New Zealand. Three phases of investigation were undertaken: (1) an examination of the current training content compared to international evidence for training that supports de-escalation and improved skills for the management of aggression, (2) a description of how Aotearoa New Zealand came to agree on one consistent training program, and (3) an in-depth review of how one district health board (DHB) moved from their existing approach to the agreed national de-escalation and aggression management training. This thesis presents the research process and findings from all three phases of the study and has been completed as part of a Doctor of Health Science qualification. This is an applied qualification, with a focus on addressing practice-based issues and producing practical insights for service development. The thesis is therefore more compact than a PhD, with less depth and breadth in relation to underlying philosophical and theoretical notions.

This introductory chapter describes the practice setting and the context of acute mental health in Aotearoa New Zealand, where this training occurs. Key terms will be defined and the overarching legislative frameworks that guide and regulate this practice area are outlined. The chapter also contains a discussion of the impact of aggression management for Māori, the

indigenous people of Aotearoa New Zealand[2]. Finally, this chapter outlines the thesis structure and summarises my motivation for exploring this subject matter.

The research findings and conclusions are intended to be useful for other jurisdictions, who are attempting to standardise clinical trainings and will also influence the ongoing national SPEC implementation. It is anticipated that the findings may reinforce the essential elements for training to support de-escalation and will identify how to safely support a person when there is a need to use personal restraint.

Context for this thesis

The context for this thesis, regarding the use of restrictive practices, is presented in this section. The use of such practices in mental health and addictions settings is complex. This section will initially present the international background to the use of such practices, including international human rights and consumer[3] views before discussing the national context for Aotearoa New Zealand.

International background

Responding to challenging behaviours, including behaviours of aggression or violence are an issue in mental health and addiction services worldwide (Cusack et al., 2018; Duxbury et al., 2019; Lawrence et al., 2021; Price et al., 2018). The goal is to minimise the harms that can occur from these behaviours. Restrictive practices are employed by staff when a person is experiencing a high level of emotional intensity and poses a risk to themselves or others (Duxbury, 2015; Mann-Poll et al., 2013). Internationally, the definition of restrictive practices varies from jurisdiction to jurisdiction, but commonly relates to the point when there is a need to restrict a person's movements to ensure safety for them or those around them (Gaynes et al., 2017; Price et al., 2018). The restrictive practices are often used when an individual presents with behaviours that do not appear to respond to non-coercive interventions such as de-escalation, self-calming or self-soothing strategies that an individual may use. Use of restrictive practices have a long history in mental health and have been used historically to manage the inpatient milieu (Muir-Cochrane, 1995).

The use of restrictive practices to manage an environment may have evolved from a notion of Bentham's utilitarian principle (Bentham, 1791); to provide the greatest good for the greatest number of people (Foucault, 1967). Historically, a utilitarian principle was used to manage large

[2] A list of Māori kupu (language, words and phrases) that are commonplace in Aotearoa New Zealand, and used in this thesis, are presented as a glossary on page viii.

[3] Consumer will be used to describe a person who is receiving services, otherwise often referred to as service-user or person with lived experience. If the consumer is Māori, the term Whaiora may be used.

numbers of people in large inpatient asylums. However, understandings of coercive practices have changed and it is now realised that use of these practices are associated with traumatic physical and psychological effects for the individual (Oster et al., 2016) and for the staff involved (Bigwood & Crowe, 2008; El-Badri & Mellsop, 2008).

Research has been undertaken to identify how to reduce and prevent occurrences of aggression and violence in acute mental health care, resulting in a growing call to minimise, if not eliminate, the use of restrictive practices (Gaynes et al., 2017; Haugvaldstad & Husum, 2016; Tucker et al., 2020). The National Association of State Mental Health Program Directors who represent state executives across the United States of America and Columbia, developed a clinical model, Six Core Strategies©(6CS), to support reducing restrictive practices (Huckshorn, 2004). The 6CS is a combination of elements that when implemented result in a significant reduction in the use of restrictive practices (Wieman et al., 2014).

The 6CS are: 1) leadership towards organisational change, which refers to having executive leadership maintain direction and oversight of the strategy for changing practices; 2) using data to inform practice, defined as measuring change empirically, which gives clear visibility to indicate change; 3) workforce development, described as ensuring that staff have the right skills and attributes to be able to promote the practice changes, with a focus on trauma-informed care principles; 4) the use of restraint and seclusion reduction tools such as sensory modulation, de-escalation and therapeutic alternatives; 5) ensuring that people with lived experience are in key leadership roles, and 6) debriefing techniques, using the knowledge gained after an episode of restrictive practice, both from the staff and consumer perspectives, to provide valuable insights into how to avoid future episodes and positively influence change (Huckshorn, 2005a). The use of these strategies are showing considerable promise in the New Zealand context (Ministry of Health, 2015b; O'Hagan et al., 2008; Webster, 2013; Wolfaardt, 2013).

Along with the 6CS, *Safewards* is an evidence-based model that supports the workforce to reduce restrictive practices. *Safewards* describes six primary domains or areas where conflict can occur (Bowers et al., 2015). These are defined as; the staff team, the physical environment, what is occurring outside hospital, the patient community, patient characteristics and the regulatory framework. Within each of these domains, there is the capacity to trigger or inflame a situation that might result in a need for containment. The model helps to identify these potential flashpoints and by doing this, can, in effect separate the conflict from a flashpoint (Bowers, 2014).

Both the 6CS and *Safewards*, have multiple elements, that when applied together offer the opportunity to effectively support the reduction of the restrictive practices (Duxbury et al., 2019;

McSherry, 2017). Common to both 6CS and *Safewards* strategies is the notion that prevention and early identification of the trigger factors are key to avoiding the use of coercion.

International human rights

There are several international conventions, that Aotearoa New Zealand are signatory to, which highlight the need to consider carefully when and how, any restrictive practice is implemented (McSherry, 2017). Paramount amongst these are the following international legislative frameworks: the United Nations Convention on the Rights of Persons with Disabilities (CRPD), the Convention Against Torture and Other Cruel and Inhuman or Degrading Treatment or Punishment (1989), the Optional Protocol to the Convention Against Torture (OPCAT) 2007, the Declaration on the Rights of Indigenous Peoples (the Declaration), and the United Nations Convention of the Rights of the Child (UNCROC). A key theme across this legislation is the requirement to actively avoid the use of restrictive practices and only resort to coercion when absolutely necessary to maintain safety.

Consumer views

People with lived experience of acute mental health care have expressed strong negative views about all forms of restrictive practice. Brophy et al. (2016b) conducted focus groups with people who have experienced acute mental health care and their supporters and concluded that restrictive practices were viewed as unnecessarily overused and made things worse. It has been suggested that restrictive practices are countertherapeutic and can remind individuals about previous abuse (El-Badri & Mellsop, 2008).

Aotearoa New Zealand

In Aotearoa New Zealand, acute mental health care is delivered through 20 district health boards (DHBs). These DHB's are government funded and are accountable for the delivery of all health care to the population who are domiciled in their geographical location. There are 22 mental health inpatient facilities across the country. These inpatient units are expected to deliver acute mental health care to the adult population (this description does not include forensic mental health or youth mental health inpatient facilities). These range from small rural services to large metropolitan services (Ministry of Health, 2015a).

In line with the international efforts to reduce restrictive practices, there have been ongoing efforts to reduce restrictive practices in Aotearoa New Zealand DHB's for more than a decade (Ministry of Health, 2015b, 2016) and in 2016 the Health Quality Safety Commission (HQSC) alongside the national workforce centre, Te Pou o te Whakaaro Nui, embarked on a large-scale

change programme to help DHBs focus on eliminating seclusion (Health Quality & Safety Commission New Zealand, 2021).

Mental health and addictions in Aotearoa New Zealand

There are ever increasing numbers of people who seek mental health and addiction care and treatment in Aotearoa New Zealand. In 2017, 176,314 people sought specialist mental health and addiction support (Ministry of Health, 2017). It is reported that nine percent of people, who access specialist mental health services, receive *only hospital level care* (Ministry of Health, 2017, p. 6), which identifies the people who are admitted to acute mental health units. When inpatient mental health care is clinically indicated due to urgency and safety, many people are admitted using the Mental Health (Compulsory Assessment and Treatment) Act 1992 (Ministry of Health, 2012a).

The use of restrictive practices in Aotearoa New Zealand is highly regulated and is permissible only due to the Aotearoa New Zealand legislative framework. The Mental Health (Compulsory Assessment and Treatment) Act 1992 (MHA) is the legislative framework that permits the use of these restrictive practices. Specifically, subsection 122b permits the use of force, which can be enacted in emergency situations when detaining a person, who is required to receive treatment under the MHA, and permits the use of force for providing the treatment.

Aotearoa New Zealand's *Health and Disability Restraint Minimisation and Safe Practice Standard* (2008) separates restriction into four areas: *personal, physical, environmental and seclusion*. *Personal* restraint is where a service provider uses their own body to intentionally limit movement of a consumer, for example where a consumer is held by a service provider. *Physical* restraint is defined as 'limitations to body movement by use of an object' (also described as mechanical restraint). *Environmental* restraint is defined as 'limiting normal access to an environment' (e.g., an external door is locked, and a person cannot freely exit). The fourth area is *seclusion,* defined as when ' a consumer is placed alone in a room or area at any time for any duration from which they cannot freely exit' (Standards New Zealand, 2008). Section 71 of the MHA legally allows the use of seclusion with clear caveats and monitoring requirements for the safe use of this most restrictive practice (Ministry of Health, 2010). It is important to note that for the purposes of this study, the focus and reference is on *personal restraint* and this definition may differ in other countries/jurisdictions.

Despite this legal mandate for the use of restrictive practices in Aotearoa Zealand, the forementioned international obligations puts the onus on limiting, if not eliminating their use. The CRPD was ratified by Aotearoa New Zealand in 2008, and creates an obligation to promote,

protect and ensure all human rights and fundamental freedoms by people with disabilities, including mental ill health.

The Declaration was passed by the United Nationals General Assembly in 2007 and endorsed by Aotearoa New Zealand in 2010. In Aotearoa New Zealand, the obligation under OPCAT requires independent monitoring of places of detention, which includes mental health facilities, where people may be held against their will with the use of mental health legislation.

Following the Aotearoa New Zealand ratification in 1993, the United Nations Convention on the Rights of the Child (UNCROC) requires the Government to make the best interests of the child, the primary consideration, in all decisions affecting the child's care when that child is serviced by state owned entities.

Māori: the indigenous people of Aotearoa New Zealand

In addition to the international attention on reducing restrictive practices, Aotearoa New Zealand have an obligation to address this issue for Māori. Te Tiriti o Waitangi is a founding document that has a unique role in health care and determines the need to consider and strive to correct the inequities for Māori people (indigenous population). Furthermore, Te Tiriti o Waitangi identifies Māori as tangata whenua and this means that all publicly funded health services are obliged to apply Te Tiriti o Waitangi in all policies and procedures (Ministry of Health, 2019, 2020a, 2020c).

Māori are disproportionally over-represented in all aspects of healthcare, including the use of restrictive practices (Ministry of Health, 2012b, 2014; Oakley-Browne et al., 2006; Wharewera-Mika, 2008). Māori experience more legislated (restrictive) mental health care than non–Māori (Baker, 2017; Oakley-Browne et al., 2006). In 2015, Māori people were almost five times more likely to be secluded in their acute inpatient admission, than people from other ethnic groups (Ministry of Health, 2015b). Māori people comprise approximately 16% of the population, yet account for 26% of people who use mental health services (Ministry of Health, 2015b, p. 48).

There are ongoing attempts to understand this disparity (McLeod et al., 2013; Wharewera-Mika, 2008; Wharewera-Mika et al., 2016) as this is a highly complex issue (Lai et al., 2019). Te Rau Ora (the national Māori workforce centre) and the Māori Caucus, of Te Ao Māramatanga (New Zealand College of Mental Health Nurses) support a better understanding of Māori people's experiences of mental health care and a decrease in the use of compulsory care for Māori (Te Pou o Te Whakaaro Nui, 2014).

Models of care in Aotearoa New Zealand

Since the early 1980s, mental health and addiction services in Aotearoa New Zealand have evolved, moving from an institutional model to a community situated, recovery focused model of care (Ministry of Health, 2017). The recovery philosophy includes concepts of hope, empowerment, self-determination, connectedness, choice and human rights (Jacob et al., 2017). Central to this philosophy is understanding that everyone is unique, and every person's recovery is therefore unique to them. Importantly, the recovery approach broadens health practitioner's understanding that mental illness and distress do not happen in isolation from the person's life experiences (Schneebli et al., 2010). Therefore, family, whānau and carers' perspectives are pivotal in a person's recovery. These principles can be challenging to enact when service users are detained under legislation. There are practice contradictions related to compulsory care that bring the issue of human rights into sharp focus.

Human rights in Aotearoa New Zealand

In addition to the international human rights conventions previously referred to, human rights are protected by national legislation.

The New Zealand Bill of Rights Act supports extra legal protection of human rights, such as, but not limited to: the right to be free from discrimination and inequality, protection from cruel or inhumane treatment, freedom of movement, freedom from arbitrary detention and the requirement for humane treatment when deprived of liberty (Callaghan & Ryan, 2012).

Furthermore, the Code of Health and Disability Services Consumer's Rights (1996) (the Code) continues to be the fundamental tenet for health practitioners in Aotearoa New Zealand to adhere to, and aligns firmly to reducing restrictive practices in mental health (Health and Disability Commission, 1996). Right 2 of the code reminds people that in all aspects of healthcare, they have the right to freedom from discrimination, coercion, harassment, and exploitation.

As previously mentioned, for Aotearoa New Zealand, the Mental Health (Compulsory Assessment and Treatment) Act 1992 is the legislation that permits the use of a restrictive practice in mental health services (Ministry of Health, 2012a). However, the need to ensure every effort is made to avoid using restrictive practices is outlined in national guidelines to the legislation (Ministry of Health, 2010, 2020b). Yet in practice, balancing this principle with human rights creates tensions for clinicians (Bigwood & Crowe, 2008; Riahi et al., 2016).

Reducing restrictive practices in Aotearoa New Zealand

Decreasing restrictive practices in acute mental health units has been a goal for Aotearoa New Zealand mental health services for the last decade, specifically the use of seclusion (Ministry of Health, 2015b, 2020a). There is a clear directive from the Ministry of Health to reduce the use of personal restraint and the use of seclusion; "The Ministry supports a reduction in the use of restraint in mental health services over time, as well as the aspirational goal of the Mental Health and Addiction Quality Improvement Programme to eliminate seclusion by 2020" (Health Quality Safety Commission, 2020; Ministry of Health, 2020a, p. 129). The Ministry advises that "the use of restraint is a last resort that should be avoided wherever possible through the use of less restrictive practices such as those promoted through Safe Practice Effective Communication (SPEC) training" (Ministry of Health, 2020a, p. 129).

Workforce development to support reducing restrictive practices in Aotearoa New Zealand

Primarily, day to day care in an acute mental health unit is delivered by registered nurses (Bigwood & Crowe, 2008; Te Pou o Te Whakaaro Nui, 2017b; Webster, 2013). Although they are supported in this by a multi-disciplinary team, it is commonplace for the decision to use a restrictive practice to be the responsibility of a registered nurse. This is considered an appropriate and fundamental aspect of their role, when caring for a person who is receiving compulsory care (Bigwood & Crowe, 2008; Happell & Harrow, 2010; Riahi et al., 2016).

Registered nurses who work in mental health prepare for and train to respond immediately and safely when there is a risk of personal harm to themselves or others. When this occurs, it is considered that this is a psychiatric emergency and as such requires an urgent response. This can be likened to a physical health emergency event (e.g., cardiopulmonary resuscitation), where a team of highly trained clinical staff respond in a coordinated and proficient manner. In acute mental health, there is training provided to ensure that all staff can use personal restraint safely (both for the person being restrained and themselves). It is a team approach with members of the emergency response team each knowing their key responsibilities. There is awareness and understanding that this acute response needs to occur with the least negative effects on the person as possible and that every possible least restrictive alternative has been attempted beforehand (Standards New Zealand, 2008).

Aotearoa New Zealand has adopted a consistent training programme to support a safe, evidence-based, well-prepared response. This training, called Safe Practice Effective Communication (SPEC), teaches the safe use of personal restraint when needed as a last resort (Te Pou o Te Whakaaro Nui, 2017a). However, the focus is on preventative strategies such as

de-escalation techniques, therapeutic engagement, understanding trauma-informed care and appropriate cultural engagement. This programme of training is endorsed as one way to support reducing restrictive practices by the Director of Mental Health who commented in his 12th annual report:

> SPEC has been designed with service user input and promotes the inclusion of service users as trainers and members of the programme's governing body. This new initiative aims to provide national consistency with best quality, evidence-based training material that can influence and support responses based in least restrictive practices. (Ministry of Health, 2015b, p. 11)

A literature search in the peer-reviewed literature was undertaken from 2014 to current, filtering for those articles in the English language. The key words "physical and/or personal restraint"; "training"; "national" and "consistent" were used. There appears to be no other national jurisdiction that has moved to a nationally consistent training for de-escalation and aggression management.

This study

This research utilises a qualitative case study methodology to describe the development and implementation of the SPEC training programme. The research has three phases:

1. It examines the current training compared against international best practice for de-escalation and aggression management training.

2. It describes how the country's clinical leaders achieved national consistency with de-escalation and aggression management training content.

3. It identifies the critical success factors for implementing a nationally consistent approach at a local level. This involves an in-depth examination into one DHB, noting the utility of implementation science (Nilsen, 2015).

Overview of this thesis

This thesis has been undertaken using three distinct but connecting research phases that when brought together will identify the critical elements necessary for an evidence-based de-escalation and aggression management training, offer information and insights useful for other jurisdictions who are striving for national consistency in clinical practices, and highlight the integral part the clinical leaders and leadership can play with large-scale national change.

Chapter 1 – Introduction and context of this thesis

Chapter 1 sets the scene of the unique context in which this research is situated. It identifies the research intentions and captures the author's reasoning for embarking on this doctoral study.

Chapter 2 – Literature review

Chapter 2 describes the body of knowledge that identifies what is best practice for de-escalation and aggression management training and it goes one step further to identify what unique factors need to be included in training for the Aotearoa New Zealand context.

Chapter 3 – Methodology

This chapter offers the methodology of the three parts to this research, and describes the methods adopted to achieve this. The different aspects for each component are detailed and explains how trustworthiness of the findings is achieved.

Chapters 4, 5, and 6 – Findings

These chapters describe the findings of the three parts of the research. Chapter 4 describes the examination of the international literature compared with the current SPEC training content and presents recommendations for improvement. Chapter 5 describes in detail how clinical leaders achieved national agreement to implement one evidence-based de-escalation and aggression management training programme in multiple organisations across Aotearoa New Zealand. Chapter 6 takes an in-depth review of one DHB's implementation process, as they moved from their existing training programme to SPEC and identified what the enablers to success were, referencing back to implementation science as a guide.

Chapter 7 – Discussion

The final chapter presents a synthesis of the results from each of the three phases of the study, offers implications for practice improvements in SPEC, and suggests considerations for further research. This chapter will present the strengths and limitations of the study. It will also include reflections on my personal experience of this learning journey towards the Doctor of Health Science and how this will make a difference to my practice as a Mental Health Nurse Leader. The chapter will also identify how I will disseminate the findings locally, nationally, and internationally.

Personal motivation

My motivation for embarking on this subject goes back a long way. I am a registered nurse who has worked in a variety of mental health settings for over 40 years, with the last 20 years in leadership roles. A focus area for me has always been to try to promote a safe working environment for all. Safe working relates to safety for people who are receiving care when

acutely mentally unwell, the safety of staff who are supporting them, as well as the safety of family and whānau of those people who require intensive acute mental health care. I also have a strong belief in fairness and equity, reducing disparity for Māori, and improving outcomes for people who are acutely mentally unwell. I genuinely want to leave mental health nursing in a stronger, more evidence-based place with regards to preventing the need for restrictive practices and the use of emergency measures such as the use of personal restraint.

Summary

This chapter described the rationale for this study, specifically to increase the knowledge base in one aspect of workforce development that will, in turn, support the wider international imperative to reduce restrictive practices. The background context in which this workforce development occurs was outlined, including a description of related legislative frameworks. The impact of coercion on consumers and staff was highlighted and particularly the negative impact for Māori, the indigenous people of Aotearoa New Zealand. The intent is for this research to be useful for jurisdictions who are attempting to standardise clinical training and influence the quality improvement of ongoing national SPEC implementation.

Chapter 2: Literature Review

Introduction

This chapter defines and describes essential features of de-escalation and aggression management training within adult mental health and addiction services. Additionally, the literature review contained in the chapter provides insights related to the unique factors that need to be considered for a training for the Aotearoa New Zealand context, recognising Māori as tangata whenua. The review uses the principles of a systematic literature review (Gough et al., 2017).

The previous chapter described the background and context for this thesis. This study is focused on one specific area of workforce development; a training programme that supports mental health clinicians to improve their communication and de-escalation skills and learn how to use personal restraint, where required as a last resort. As the previous chapter outlined, workforce development and training that teaches a restrictive practice, such as how to use personal restraint, should be embedded in safety principles, meet all legislative requirements, promote human rights principles and specifically for the Aotearoa New Zealand population, seek to improve cultural engagement and awareness.

This chapter identifies knowledge of best practice to be taught to mental health and addiction staff to manage aggression, specifically for the Aotearoa New Zealand context. This knowledge forms the basis for part one of this thesis; a comparison of the SPEC training content against best evidence drawn from this literature review. This comparison is presented in Chapter 4.

Method

The international context

A search strategy for identifying relevant international literature was developed based on the findings of two relatively recent robust reviews undertaken in Australia (McKenna et al., 2016 ; McKenna et al., 2015). These reviews synthesised the international literature and outlined the elements of best practice required in staff training for the management of aggression, including the use of personal restraint. A summary of the key findings from these reviews is presented in a tabulated format below in Table 1.

These reviews grouped this best practice into three key moments of care; (1) before an episode of restraint occurs, (2) during an episode of restraint and (3) after an event of restraint. This approach using the three key moments in care is relevant for this thesis, as the conclusions highlight what is needed in a training programme focusing on prevention, what to

do if personal restraint is required and what is required to do immediately after a personal restraint event.

Table 1

Summary of the Key Features that are Recommended Best Practice for Inclusion in Aggression Management Training focused on personal restraint

Before an event of personal restraint	
2014 review (McKenna et al., 2015)	Emphasis on prevention and early detection. Inform consumers, carers, and relevant third parties of the reasons for restraint. Provide a model of care which is trauma-informed, recovery oriented and person centred. Provide training focusing on de-escalation, physical monitoring, basic life support, and local policies.
2016 (McKenna et al., 2016)	Focus on a trained team approach.
During an event of personal restraint	
2014	Training should have fewer restraint positions but with an emphasis on familiarity of use Physical monitoring should occur throughout. Avoid pressure to neck, thorax, abdomen, back, or pelvic area. Prone position is to be avoided. Physical and psychological monitoring should occur. Avoid restraining a person on the floor. If a prone position is required, the person should be restrained in a way that means moving towards the floor in a supported prone position; and then moved to supine as soon as practically possible to do so.
2016	The level of force must be proportionate to the situation, justified, and appropriate. Focus on standing and seated holds. Avoid prone positioning. There is no safe time limit for personal restraint, avoid personal restraint for longer than 10 minutes. Use a fourth person if legs are to be restrained. Pain-inducing techniques must not be used. Controlled and managed room exit will be required if a person is restrained for seclusion. The minimum number of staff is two; preferentially three if the person is resistive.
After an event of personal restraint	
2014	A physical review of the person. Debriefing with consumers and staff. Post event review, include how this could have been avoided.

In the present study, a search strategy was developed to focus on studies published since these earlier reviews. This search strategy used Boolean search methods, MeSH headings and key words. Three databases were searched (CINAHL, MEDLINE and PsycINFO), as well as the Cochrane Library. Using parameters that built on the previous reviews, the year search range was March 2016 to June 2021. The search was limited to English language papers, in peer-reviewed journals and grey literature as noted below.

The following search terms were used; 'personal restraint' OR 'manual restraint', 'physical restraint' OR 'manual restraint' and 'training'. This resulted in 192 unique papers. An abstract review determined the relevance of 37 articles.

These articles were printed off and read in entirety. Some did not have immediate relevance to the mental health and addiction context that this research is focused on, focusing instead on emergency departments, care of the elderly and physical health, or were not research articles. Of the 37, 18 were found to have aspects in their research that were germane to this literature review.

The Aotearoa New Zealand context

The McKenna et al. reviews focused on findings relevant to the Australian context, and therefore searching for relevant information for the Aotearoa New Zealand context was important. The same principles used in the international literature search were applied to the local context and in particular to literature focused on responses to Māori, who are over-represented in mental health and addiction services in Aotearoa New Zealand.

This search also used Boolean search methods, MeSH headings and key words. Three databases were searched (CINAHL, MEDLINE and PsycINFO), as well as the Cochrane Library. To remain in line with the year range used in the search of the international literature, the same year range from 2014 to June 2021 was applied. The terms searched were "personal restraint for Māori" OR "physical restraint for Māori" and "physical restraint with indigenous" OR "personal restraint with indigenous". This yielded two peer-reviewed articles since 2014. Both are included in this literature review.

Grey literature was identified through the library database and used the wider search range that included unpublished reviewed material, conference proceedings and nursing professional college best practice documents. The wider grey literature search yielded a range of material that was reviewed for usefulness for this thesis. Four publications from this search of the grey literature are included in Table 2 (Baker, 2015; Te Pou o Te Whakaaro Nui, 2014, 2015, 2019).

In total 24 articles were reviewed with a focus on approaches to de-escalation or training in de-escalation techniques. Eight articles were qualitative studies focused on practice improvement that can support reduced use of seclusion or personal restraint. Six articles were quality improvement evaluations or audits focused on monitoring the application and outcomes of de-escalation techniques. Seven literature reviews were included, which provided insights related to staff's decision making process, and clinical assessment processes that influence the decision to use restrictive practices, and three articles were related specifically to the Aotearoa New Zealand context related to improving practices with Māori.

The literature is presented in Table 2 as a summary of findings. This is followed by a synthesis of insights gleaned from the literature, with a focus on findings that were not included in Mc Kenna et al.'s previous reviews.

Results

Table 2

Summary of Literature Reviewed and New Knowledge Identified

Author and year	Title	Contribution to current body of knowledge	Analysis of the research contribution
Before an event of personal restraint			
Price et al. (2018)	The support-control continuum: An investigation of staff perspectives on factors influencing the success or failure of de-escalation techniques for the management of violence and aggression in mental health settings	Adds detailed information about de-escalation techniques. Includes concepts of staff managing their own anxieties and identifies the relationship that occurs with service user behaviours and staff responses and how that influences the outcome of de-escalation. These authors identified the continuum of support required when working with a service user to self-regulate their aggression. This paper identified the importance of knowing the service user and what works well for that person. Environmental factors are identified as influential with success (or not) of de-escalation and there may be policies that inadvertently negatively affect the outcome of de-escalation. The paper describes an example when the policy advises moving a person to an alternative room away from others for additional de-escalation however that process can provoke additional tension and be perceived by the service user as scary and threatening.	Qualitative semi-structured interviews with 20 participants. This paper provides rich and recent clinical perspectives that support previous knowledge about the need for good engagement with service users and additionally offers a view about the importance of clinicians understanding their own influences on outcomes. This paper is trustworthy and adds to the body of knowledge regarding the importance of engagement to support de-escalation.
Obi-Udeaja et al. (2017)	Involving service users in teaching healthcare	Strongly advocates that by involving people with lived experience of restraint, they are well placed to describe their experiences and help staff who use	Opinion article therefore does not constitute primary understanding of the issues under consideration, however, does describe exemplars where teaching

Author and year	Title	Contribution to current body of knowledge	Analysis of the research contribution
	professionals about physical restraint	restraint to do so in a way that respects the lived experience.	programmes have jointly taught aggression management with people who have lived experience of restraint.
Jalil et al. (2017)	Mental health nurses' emotions, exposure to patient aggression, attitudes to and use of coercive measures: Cross sectional questionnaire survey	This study revealed associations between staff's emotions and attitude towards and involvement in personal restraint. Suggested that an awareness of own emotions and the provision of appropriate support mechanisms for staff can improve responses when staff are confronted with anger or aggression.	Cross- sectional, correlational, observational study. Research completed as part of PhD study and included 68 participants. Results can be considered useful due to PhD level of rigour with the study design and number of participants.
Hallett and Dickens (2017)	De-escalation of aggressive behaviour in healthcare settings: Concept analysis	This paper was attempting to clarify the understanding and meaning of 'de-escalation' in healthcare. This paper identifies that more understanding is required surrounding the effectiveness of de-escalation but does indicate that targeted interventions to the level of distress in that moment are most likely to be most effective.	Concept analysis literature review with 79 papers reviewed. This research was part of a PhD study. This paper adds to what is currently understood about de-escalation. This literature review demonstrates trustworthiness of findings and therefore are included in the recommendations of this literature review.
Gaynes et al. (2017)	Preventing and de-escalating aggressive behaviour among adult psychiatric patients: A systematic review of the evidence	Systematic review of the literature, which identified that risk assessment tools are likely to be useful to identify risks and mitigate early for potential times of conflict. This reduces the need for personal restraint. This review also identified additional support for use of multimodal approaches that support reducing the need for personal restraint.	Systematic literature review, 17 primary studies reviewed. Each article was reviewed independently by two people, evidence of mitigation of bias. Findings are reliable due to the above factors. These findings add to the body of knowledge already known about the advantages of using a multimodal approach and confirms previously identified knowledge.
Riahi et al. (2016)	An integrative review exploring decision-making factors influencing mental health nurses in the use of restraint	Identified that the decision-making process that registered nurses use when considering restrictive practice such as restraint is complex. It involves ethical and safety responsibilities and identified two issues for staffing; the number of staff present and the experience level of those staff. Identified there is a need for more exploration of what is meant by 'last resort' when restrictive practices are being used.	Integrative review of literature using a framework for analysis. 16 articles reviewed – 8 qualitative and 7 quantitative and 1 mixed method article. This paper explains the rigour with which this analysis was undertaken thus offering reliability with the findings/outcome. The findings are concordant with other relevant papers identified in this research.

Author and year	Title	Contribution to current body of knowledge	Analysis of the research contribution
Haugvaldstad and Husum (2016)	Influence of staff's emotional reactions on the escalation of patient aggression in mental health care	Literature review to determine how negative emotional reactions of staff impact on the issues of patient aggression. Mindfulness-based programmes for staff to increase self-awareness as a prevention strategy was a suggestion.	Pragmatic exploration of the professional literature with a total of 104 articles reviewed. The summary of the literature would indicate trustworthiness and offers newer insights included in this thesis. However, this is a literature review and does not constitute as primary research.
Long et al. (2016)	Training in de-escalation: An effective alternative to restrictive interventions in a secure service for women	This paper describes the de-escalation training in a medium secure female only ward. The paper describes a reduction in the use of seclusion but an indeterminate effect on the use of seclusion. This paper contributes to the body of knowledge that supports organisational initiatives that reduces restrictive practices.	This is a pre-post design research approach paper that describes the evaluation following changes to the way de-escalation was taught. This paper is helpful in that it identifies elements included in de-escalation training.
Shaw et al. (2017)	The use of prone position within a mental health trust: A clinical audit of psychiatric practice and methods for improvement	A retrospective audit of the use of prone position as restraint, reasons for it and if policy were adhered to and length of time in a prone restraint. This audit indicated that in 93% of incidents reviewed, staff had tried using earlier de-escalation. It identified that the prone position was for emergency medication administration only and for the shortest time possible. By implementing a quality improvement approach focusing on increasing the visibility and review of each event the Trust has been able to reduce the prone positional restraint by 50%.	Clinical audit of adherence to standard guidelines, as part of a quality improvement project for a Health Trust. This audit confirms other previous recommendations regarding the intentional need to reduce prone positioning. Although this isn't new knowledge, it does confirm the previous understanding and therefore is used in this analysis and recommendations.
Halm (2017)	Aggression management education for acute care nurses: What's the evidence?	Literature review seeking to determine what effect does de-escalation education have on nurse outcome of aggression management knowledge and how does this affect outcomes. New knowledge is in the use of competency evaluation using relevant scenarios.	Literature review, looking at previous 10 years, 7 original papers. Evidence of rigorous analysis. A trustworthy analysis therefore the new knowledge is included in the findings and recommendations. Noting this is a literature review and therefore does not

Author and year	Title	Contribution to current body of knowledge	Analysis of the research contribution
			constitute additional primary understanding of the issues under consideration.
Brophy et al. (2016b)	Consumers' and their supporters' perspectives on poor practice and the use of seclusion and restraint in mental health settings: Results from Australian focus groups	Using personal accounts drawn from focus groups, this paper adds to current knowledge regarding consumer views of restrictive practices. This paper reinforces the traumatic impact of use of restrictive practices such as seclusion and restraint and viewed these practices as 'overused'. This paper confirms the importance of lived experience voice with deepening the understanding of what can help and what hinders recovery-based practice in acute adult mental health units.	Large scale cross country qualitative design study with consumers and their carers'. There is a companion paper described below. New knowledge and findings from both papers are included in the findings and recommendations as this further endorses the importance of the viewpoint of people who have experienced restraint and or seclusion and how clinical services can learn from this.
Brophy et al. (2016a)	Consumers' and their supporters' perspectives on barriers and strategies to reducing seclusion and restraint in mental health settings	This paper adds to current knowledge as it investigates consumer views about strategies to reduce or eliminate restrictive practices such as seclusion and restraint. This paper (along with the other paper by the same authors) recommends the involvement of people with lived experience of restraint should be involved in the solutions and to consider the service user and carer perspective in the training of staff in personal restraint.	This paper reflects 66 participants across a country (Australia) and adds to the paper identified above. A qualitative approach with wide-ranging participants with wide range of demographical data. The information and findings are pertinent for this research, the information is recent, it contains rich qualitative information that builds on previous information and together with the above paper reinforces the need to include the lived experience voice to help clinical staff with their understanding of the implications of restrictive practices. It is noted however that the sample size is small given the target population and the generalisability of the findings should be treated cautiously.
Wilson et al. (2018)	Mental health inpatients' and staff members' suggestions for reducing physical restraint: A qualitative study	This study identified four major themes that support taking a preventative approach when reducing restrictive practices; improving communication and improving relationships with service users, staffing factors which relates to improving staffing skills and ensuring more time is spent with service users,	Qualitative approach with consumers and clinical staff. Evidence of rigour and reflexive analysis. A research approach that was intentionally focused on identifying suggestions from both consumer and staff, about what can help with reducing restrictive practices.

Author and year	Title	Contribution to current body of knowledge	Analysis of the research contribution
		Environment and space which articulates the need for sensory based environment and paying attention to the aesthetic and use of activities and distraction are useful with reducing restraint. This paper identified the value of "compassionate and empathetic communication throughout the patient journey" (p. 10).	The findings in this paper further reinforce the importance of prevention and includes rich participant quotes.
Maguire et al. (2018)	Risk assessment and subsequent nursing interventions in a forensic mental health inpatient setting: Associations and impact on aggressive behaviour	An examination of the Dynamic Appraisal of Situational Aggression (DASA) and interventions used to prevent aggressive behaviours. Undertaken in a secure forensic setting with both men and women service users.	Retrospective file audit study of 60 service users (30 male and 30 female). This study confirmed previous investigations regarding the use of DASA to indicate when to intervene to prevent aggression. This quantitative inquiry demonstrates utility for this thesis, in that it supports 'prevention' as an approach to reduce the need for restrictive practices.
Tucker et al. (2020)	Recognition and management of agitation in acute mental health services: A qualitative evaluation of staff perceptions	Two major themes are explored in this paper: the *recognition* of behaviours of agitation and the *management* of agitation. These themes were then further explored under subthemes of the role the patient with self-awareness of their emerging agitation and role of the nurse in recognising early signs of agitation. Management of agitation was further defined into types of interventions and processes that support successful management of agitation. This paper adds to the body of knowledge of *getting to know the patient and their needs* supports early intervention and reduces the need to use restrictive interventions.	A descriptive qualitative evaluation conducted with 20 nurses who work in a mental health unit. Some limitations with this study which include that the research was based in one location, and there were time limitations on the length of time for the interviews. However, the findings reinforce the current body of knowledge and further supports prevention as an approach that can avoid the need for a restrictive practice. It is noted however that the this is a small sample size and generalisability does need to be treated cautiously.
Drown et al. (2018)	Nurse perceptions of the use of seclusion in mental health inpatient facilities: Have attitudes to Māori changed?	Having culturally appropriate approaches to de-escalation may assist in reducing seclusion events for Māori. This may mean altering staffing profiles in	An anonymous internet-based survey to assess the staff attitudes from Mental Health Inpatient Unit in Aotearoa New Zealand regarding use of seclusion and awareness of alternatives.

Author and year	Title	Contribution to current body of knowledge	Analysis of the research contribution
		acute mental health units and or providing professional development support	The limitations include not all district health boards responded however this paper is useful in this research as it contributes to body of knowledge re the understanding of or use of culturally appropriate strategies to avoid restrictive practices for Māori.
Wharewera-Mika et al. (2016)	Strategies to reduce the use of seclusion with tāngata whai i te ora (Māori mental health service users)	An exploration of Māori clinical, cultural and consumer perspectives on potential strategies that are likely to support the reduction of restrictive interventions in acute mental health services.	Kaupapa Māori research framework guided by rangahau whānau (research advisory group). Two-day hui was facilitated with 16 Māori expert advisory participants. Study findings from this paper are included in this chapter findings as the dearth of literature in this specific area, make these findings relevant and germane.
Tolli et al. (2021)	Conceptual framework for a comprehensive competence in managing challenging behaviour: The views of trained instructors	This paper describes the perspective of trained instructors for 'Management of Actual or Potential Aggression' (MAPA) on the staff competence in managing challenging behaviours. This study highlights the need for prevention to be taught in aggression management training and introduces the concept of competence in five areas: knowledge, skills, attitudes, confidence, and ethical sensitivity.	An explorative descriptive analysis that reports on 22 semi-structured interviews with current MAPA instructors across two countries. The participants were drawn from areas of mental health and across the age span of services. Good trustworthiness was demonstrated, and this study reinforced current knowledge regarding focusing on prevention of an event of aggression and the need for staff to gain competence and confidence in 5 areas to enhance prevention.
Fletcher et al. (2021)	Comparison of patients' and staffs' perspectives of violence and aggression in psychiatric inpatient settings: An integrative review	This review identified the different perspectives that staff and patients have on the cause of violence and aggression in mental health inpatient facilities. The innovative finding is the identification that the culture of the inpatient setting appears to shape the dynamic between patients and staff. Understanding and addressing dynamic may play an important part of violence prevention.	Integrative literature review that demonstrates rigour with methodology. Thirty papers were synthesised. Findings from this review reinforce pre-existing knowledge that identifies that environment and culture interact with clinical practices to influence preventions of violence.
Te Pou o Te Whakaaro Nui (2014)	Supporting seclusion reduction for Māori: Tihetetia tatau kia puta te hua	Small study completed by Māori Caucus, Te Ao Māramatanga, of Māori mental health nurses who worked in acute mental health services in Aotearoa	Non peer-reviewed study, kaupapa Māori approach, eight Māori mental health nurses participated who work or

Author and year	Title	Contribution to current body of knowledge	Analysis of the research contribution
		New Zealand. Findings are suggestive that there are factors that can impact negatively on Māori when admitted to mental health admission wards. This paper suggests implementing a Māori mental health nursing model based on whanaungatanga, with four elements: (1) kanohi kitea (2) Māori therapeutic relationship, (3) focused engagement using te reo Māori, Karakia, waiata and connections and (4) relational centred practices including working closely with whānau.	previously worked in acute mental health settings in Aotearoa New Zealand. This study contributes new knowledge as there is little currently published that identify recommendations to redress the disparity for Māori with the use of restrictive interventions.
Te Pou o Te Whakaaro Nui (2015)	Towards restraint-free mental health practice: Supporting the prevention of personal restraint in mental health settings	Document to provide guidance on ways to reduce the use of personal restraint in mental health settings. This guidance document has two parts; a restraint prevention framework and guidance tool that can help services to plan for reducing restrictive practices such as seclusion and personal restraint.	Guidance document written to assist mental health and addiction services to plan for and identify best practice approaches. Evidence of stakeholder consultation in the development of this framework. Although considered grey literature, this document is included due to the immediate relevancy for the subject matter.
Te Pou o Te Whakaaro Nui (2019)	Literature themes in least restrictive practice: A brief literature review to inform the implementation of the Six Core Strategies©	This review suggests a focus on trauma-informed approaches and use of seclusion reduction tools would enhance ongoing reduction of restrictive practices in Aotearoa New Zealand. Additionally, this review also suggests local literature does not capture the full picture of the activities occurring in services that support reducing restrictive practices in Aotearoa New Zealand.	This literature review of international and New Zealand literature since 2015 and built on a recent published review (Gooding et al., 2018). The review searched for publications (in Aotearoa New Zealand) related to least restrictive practices. Findings from this paper are included in this research due to its direct relevance with the subject matter and local context.
Baker (2015)	He kai I nga Rangatira He Korero o nga whānau whaiora	This paper identifies three solutions to improve effectiveness of mental health services (1) use of Māori strategies to overcome challenges such as Māori cultural approaches and meaningful activities that foster connections to being Māori (2) a stronger	Non peer-reviewed qualitative summary report from one day hui held in Aotearoa New Zealand. This hui included has ten participant who had lived experience of mental health challenges and who had received mental health service shared their thoughts of restrictive practices.

Author and year	Title	Contribution to current body of knowledge	Analysis of the research contribution
		Māori consumer voice and (3) a centralised database system.	This paper is included due to the direct relevance to the subject matter of this thesis.
During an event of personal restraint			
Hollins et al. (2021)	What are the most common restraint techniques taught by expert practitioners?	The results of an online survey of expert practitioners answered questions regarding use of personal restraint, specifically to try to summarise the 'holds' that are currently used. The summary identified that there was the evidence of high variation across the United Kingdom. This paper adds important information that across England the restraint training is now regulated, however how actual *restraint holds* are taught continue to vary.	Online national survey with relevant stakeholders comprised of expert practitioners. The participants responded to questions related to the use of physical restraint holds. This paper reinforces the variation of technique across the United Kingdom and identified a need for an evaluation of the variation to try to identify 'good restraint technique'. This paper identifies that the limitations include that the people who were identified to respond, may have their own bias about the techniques they are most familiar with. However, the identified variation is important to note.
Hollins (2017)	The National Institute for Health and Care Excellence (NICE) 10-minute physical restraint rule: A discussion of the relative risks	Essay that discusses and debates the relative risks with NICE 10-minute rule for personal restraint. This essay updates knowledge and reminds clinicians that harm can manifest itself within the identified 10-minute timeframe.	This debate paper published in a peer-reviewed journal identifies the risks with any length of personal restraint and further reinforces the need for physical monitoring of every event, and strenuous efforts should be made to avoid prone positioning. Recommendations from this paper are included in this thesis as very little is written on this subject matter and the pertinence and relevance to this thesis.

Discussion

The reviewed literature reinforced the best practice principles for de-escalation and aggression management training as already identified by McKenna et al. (2016) and summarised in Table 1. The earlier literature focused on prevention and early intervention, the use of specific restraint techniques that minimise physical harm and the importance of post event debriefing and review. There was no new knowledge published in the later literature related to physical hold techniques used in personal restraint. The new knowledge identified updates and reinforced the relational aspect when training a workforce in de-escalation and aggression management.

This discussion section will present a more detailed summary of this more recent knowledge. This involves the inclusion of people with lived experience of a restrictive practice as part of the training team, awareness by clinical staff of their own responses to threats of aggression, increased awareness of prevention of an incident of personal restraint and early identification of signs of distress. The more that can be done to identify early signs of distress that might escalate prevents the need for any kind of restraint. Additionally, a new aspect of knowledge identified the usefulness of a competency evaluation for people who undergo training for aggression management. The following section will also present the considerations of best practice in aggression management related to the Aotearoa New Zealand context.

Including the lived experience perspective

Three articles highlighted the value that people with lived experience offer to the clinical workforce (Brophy et al., 2016a, 2016b; Obi-Udeaja et al., 2017). Two papers are published by the same research group (Brophy et al., 2016a, 2016b). They conducted a large-scale focus group exercise across four Australian cities and one rural location. The participants included parents, adult siblings and life partners of people who had been restrained, in addition to a consumer group, who had either experienced a restrictive intervention or witnessed this occurring. They were asked to share their perspectives on how restrictive practices such as seclusion and restraint could be reduced or eliminated. The research is rich in narrative and has many suggestions for improved service delivery, whilst not directly related to a training programme.

This new knowledge reinforces the critical importance of ensuring a person with lived experience or their carer is included in training programmes for clinical staff. This adds relevance and humanity to clinical workforce training. This is reinforced by Obi-Udeaja et al. (2017) who recommend that the voice of consumers and carers is critical to influence how personal restraint is perceived and understood by clinicians.

Staff response to behaviours of aggression

Four articles identified the need to have a better understanding of the emotional response of staff involvement in personal restraint (Haugvaldstad & Husum, 2016; Jalil et al., 2017; Price et al., 2018; Riahi et al., 2016). Riahi et al. (2016) highlighted the importance of understanding mental health clinicians' personal attributes and their biases. It is suggested that by understanding, and therefore modifying such factors, staff faced with aggressive behaviours will experience reduced reactivity. This concept was expanded on by Haugvaldstad and Husum (2016) who recommended that there is a need to understand the genesis of aggressive behaviour and how staff's emotional reactions to patient aggression may contribute to escalation of the situation.

This was based in the theory that aggression can be described as either predatory aggression, which is related to stalking and killing of prey, or affective aggression, which is a response to a real or perceived threat. Aggression in an acute inpatient environment does not happen in a vacuum, and therefore is defined as affective aggression. These authors concluded that there are times when staff's responses and interactions may inadvertently provoke reactivity or incidents of aggression. This may be based in fear and anxiety or may be because of previous experiences of aggression.

It is suggested that the addition of mindfulness-based programmes for staff, to grow in their emotional awareness and expand their emotional control, may support reducing the incidence of personal restraint. Such techniques could be used in aggression management workforce training to help staff with recognising their own triggers and establishing ways to mitigate these.

Primary prevention

Primary prevention involves actions taken to prevent or reduce the chance that behaviours of aggression may occur (Hallett &Dickens, 2017). Two key areas pertinent to primary prevention were strongly evident in the more recent literature. These include good communication that promotes engagement, and the development of de-escalation strategies that prevent a cycle of aggression escalating.

Engagement/Communication

A qualitative study involving inpatients and clinical staff in the United Kingdom reinforced the suggestion that for primary preventative strategies to be successful, there is a need to emphasise meaningful communication between the service user and the clinician (Wilson et al., 2018). Most of the recommendations from this study came under a main theme of building relationships and communication. This has previously been identified by Bowers et al. (2015) in

the description of *Safewards,* which describes ten interventions and includes creating a 'getting to know each other' folder.

In the *Safewards* context, the focus is on communication as a de-escalation tool, and Wilson et al. (2018) build on this notion and suggest that there is value in building "compassionate and empathetic communication throughout the patient journey" (p. 10). This reinforces the current awareness that effective communication supports greater engagement with a service user, for example, when the service user is experiencing personal challenges. When there is an already established therapeutic relationship, the clinician can use this to support the service user with techniques of de-escalation.

Communication is described as way to help prevent the occurrence of an event that might otherwise result in personal restraint. Tucker et al. (2020) reinforced the notion that early identification of behaviours of agitation enable staff to utilise an appropriate intervention and further reinforces person-centred care. This literature reinforces the importance of embedding communication skills in aggression management workforce training.

De-escalation

Two articles emphasised skill acquisition in de-escalation (Hallett & Dickens, 2017; Wilson et al., 2018). However, there is a need to identify what attributes of de-escalation should be involved in training programmes. Wilson et al. (2018) describe the paucity of strong evidence for the efficacy of teaching de-escalation and determined that there is no clear best practice evidence to guide what attributes should be included in training programmes. Furthermore, de-escalation is advocated in many guidelines without clearly identifying what is meant by de-escalation and this in and of itself means there are likely to be discrepancies in the way de-escalation is used. Hallett and Dickens (2017) suggest that de-escalation techniques should be targeted to specific behaviours therefore able to be more directed and thus potentially more useful.

De-escalation is usually described as a secondary level intervention, as it tends to be taught as a response once issues have been noticed. Hallett and Dickens (2017) suggest that there are five attributes which warrant further investigation: communication, self-regulation, assessment, actions and safety. Understanding how each of these attributes can be taught as primary prevention is proposed. The notion of intervening early, averting behaviours and aiming the intervention to match the level of aggressive behaviour is further described by Maguire et al. (2018). In this paper the focus was on using an empirical tool to identify the level of aggressive behaviour and then utilising an intervention most suited to that level of aggression.

Outcomes assessment

Halm (2017) undertook a literature review to identify what the prime outcomes from aggression management training should be. Although this paper was not focused on inpatient mental health contexts, it is relevant as it considers aggression management in an Emergency Department and adds to the body of knowledge regarding this. Halm suggests that possible outcomes are knowledge of the causes of aggression, understanding the needs of the aggressor, use of protocols to assess risk profile, situational awareness which includes understanding early warning signs, interpersonal style when faced with aggressive behaviours, emotional self-regulation when managing aggressive behavioural situations, and behavioural skills acquisition. It is indicated in this research that any training in personal restraint would be strengthened with the addition of a competency evaluation framework, with feedback being given to individuals regarding competency in managing aggressive behaviours using case studies.

The Aotearoa New Zealand cultural context

As previously identified in Chapter 1, Māori are disproportionally represented in all aspects of healthcare including the use of restrictive practices (Ministry of Health, 2012b, 2014, 2017, 2021; Oakley-Browne et al., 2006; Wharewera-Mika, 2008). This aspect of the literature review sought to consider all relevant peer-reviewed journal articles since 2014, that could comment on this and add to the evidence that might inform best practice approaches for training to reduce restrictive practices for Māori.

At the time of writing, there were two published peer-reviewed articles that met the criteria for inclusion in this review (Drown et al., 2018; Wharewera-Mika et al., 2016). However, there is a further body of unpublished knowledge that is worthy of note (McLeod et al., 2013; Te Pou o Te Whakaaro Nui, 2014, 2015, 2017b). Key messages from the unpublished literature are consistent as a body of knowledge and present noteworthy findings, therefore are included in this literature review.

It was identified that there are many strategies that would potentially enhance whanaungatanga (relationship, engagement) with Māori who enter acute mental health inpatient services. They are likened to and similar to the six core strategies (Huckshorn, 2005a), and are based on Māori tikanga (customs, values) (Wharewera-Mika et al., 2016). However, there was one significant recommendation; the presence of Māori staff in acute inpatient mental health settings particularly at the entry point to enhance engagement. Additionally, the literature suggests the use of whakawhanaungatanga (culturally appropriate engagement processes), for example pōwhiri (formal welcome process), karakia (prayer), mihimihi (welcome speech) and kai (food); the use of appropriate cultural assessment tools to improve planning for individuals; support for

the nurturing of self-determination for Māori, referred to as tino rangatiratanga; and ensuring the provision of cultural competency for all staff to support therapeutic engagement with Māori and their whānau (identified family).

Overall summary

This review of recent literature has indicated that there has been further refinement and understanding of 'de-escalation' as an area emphasising prevention. There is new knowledge regarding the importance of staff self-awareness in recognising their own reactions to aggressive behaviours and responses and preventing further escalation of distress. Included in the concept of prevention is the new knowledge that identifies the advantages of using an empirical tool to help identify escalating behaviours. The addition of consumer (lived experience) perspectives in training and education is identified as an approach that can support greater understanding of recovery and offer unique insights for clinical staff. The literature suggests that support for clinical staff to understand the consumer/lived experience perspective is highly likely to improve engagement and therefore help to reduce the need for personal restraint. The newer literature reinforced the concepts that were identified in McKenna et al. (2016), but provided no new information regarding techniques for personal restraint. However, the addition of competency-based evaluation may enhance confidence and competence levels when nurses are faced with aggressive behaviours. For the Aotearoa New Zealand context specifically, the literature strongly recommends that acute mental health service delivery would be improved by intentionally growing the numbers of Māori staff to enhance tikanga and whanaungatanga within inpatient settings. Furthermore, there is no evidence in the literature that there is any other jurisdiction that is following a consistent national training programme for de-escalation and aggression management in acute mental health.

The goal of this literature review was to define the key elements required for a workforce training programme designed to support de-escalation and aggression management in acute mental health in Aotearoa New Zealand. Recent literature augmented the previously robust literature review by McKenna et al. (2016). Through a synthesis of the older and newer information it was established that there are 18 elements that should be included in a de-escalation and aggression management training programme.

These 18 elements are presented in Table 3 below, which lists the elements using the same three moments in time presented by McKenna et al. (2016); *before* a restraint, *during* an event of personal restraint and *after* the event of personal restraint. Furthermore, Table 3 identifies if the element is identified from this literature analysis, therefore identified as <u>new</u>. If the element is one that was previously identified in McKenna et al. and further expanded on or reinforced in

this literature review, it is identified as reinforced. If an element is existing from McKenna et al. it is identified as previous.

Table 3

The Essential Elements for De-Escalation and Aggression Management Training Identifying Which Elements are New, Pre-Existing and Those That are Reinforced From Pre-Existing Knowledge

	Identified requirements to be included in de-escalation and aggression management training	Identified **new, previous** or **reinforced** from previous knowledge
	Before an event of restraint	
1.	Focus on primary prevention	Reinforced
2.	Focus on de-escalation and early recognition of aggressive behaviours	Reinforced
3.	Use of evidence-based aggression assessment tool	New
4.	Trauma-informed care principles	Reinforced
5.	Having culturally appropriate de-escalation strategies	New
6.	Evidence of Māori staff to support de-escalation	New
7.	Staff with high level of cultural awareness and understanding	New
8.	Use of Māori tikanga principles specifically 'whanaungatanga' (engagement)	New
9.	Involvement of consumer/lived experience in training	Reinforced
10.	Competency assessment post training	New
	During and After an event of personal restraint	
11.	Physical monitoring and basic life support measures	Reinforced
12.	Trained team approach and lead person in charge of the process- preferably 3-person team	Reinforced
13.	Prone position to be avoided if possible; if it is used this is to be for the least time possible	Reinforced
14.	As few personal restraint holds as possible; use of pain free techniques only	Reinforced
15.	Taught managed exit from a seclusion room if needed	Previous
16.	Standing restraints to be taught	Previous
17.	Communication skills before an event, during and after with active debriefing	Reinforced
18.	Self-awareness of staff, before during and after an episode of aggression. Recognition of own mood and how this can impact on outcomes	New

These 18 elements form the basis of the analysis in Chapter 4, where the current training programme (SPEC) and its alignment with identified evidence from the literature is evaluated. Furthermore, recommendations regarding SPEC content, drawn from the international literature, will be offered.

Conclusion

In summary, there is clear evidence that personal restraint is reported as a negative experience by people who experience it and should only be used as an option of last resort. It is therefore concluded that the more that can be done to *prevent* the need the use of any restrictive practice the better the outcomes will be. Eighteen essential elements for de-escalation and aggression management training have been identified in the current literature, with a strong emphasis on prevention and early intervention. These elements will be used in evaluating the content of the SPEC training currently being used nationally in Aotearoa New Zealand. The following Study Design chapter (Chapter 3) showcases the way in which this research was structured, designed, and undertaken, and provides a roadmap that demonstrates rigour in this research.

Chapter 3: Study Design

Introduction

The overall objective of this study was to create an understanding of the unique development and implementation of a national approach to staff training for de-escalation and aggression management in Aotearoa New Zealand. To achieve this, the research was designed with three phases as follows: (1) an examination of the current national training content in Aotearoa New Zealand compared to best practice for aggression management (and de-escalation) training, as identified in the literature (2) a description of how mental health and addiction services in Aotearoa New Zealand came to agree on one consistent training program, and (3) an in-depth case example of how one DHB moved from their existing approach to the agreed national de-escalation and aggression management training.

To achieve this level of inquiry across the three discrete areas, a pragmatic approach was used. This study focusses on a specific training programme already in existence, it investigates the issues related to de-escalation and aggression management training, and ultimately provides a much greater understanding of what is needed in the Aotearoa New Zealand context.

A qualitative, intrinsic case study design was used as the methodology to guide this scholarly inquiry. Case study as a methodology will be discussed in this chapter. The ethical and cultural factors are presented, and an account of my motivation for this study, recognising personal bias, contributions and knowledge is additionally offered. The chapter will also describe the three phases of the research and the associated methods in sequence (as displayed in Table 4).

Study design

All academic inquiry is underpinned by a philosophical framework that guides thinking (Patton, 2015). This helps guide what methodology and methods are suitable to answer a particular question. For this study the underlying philosophical framework used was pragmatism. Pragmatism directs the researcher to seek practical and useful answers that can help to answer concrete questions (Patton, 2015). In alignment with the principles of pragmatism, each person interviewed was believed to have their own reality based on practical experience in the context of mental health practice and/or governance. Each participant had their own interpretations and constructions of their experience, which were explored in this study. Pragmatism is democratic in its approach to knowledge creation, meaning that the varying perspectives from all participants were seen as important and valued equally (Patton, 2015). New learning was gleaned from the multiple participant experiences to create practical insights into providing de-escalation and aggression management training and implementing related practice changes.

As the researcher, my personal view also influenced the study design. This study is situated in a clinically based, applied aspect of practice. My background as a nurse and belief system are steeped in practicality. My interest in mental health is based on my understanding that everyone has their own context that they operate within. Understanding context and the relevant influencing factors is essential to establish therapeutic rapport with people. Furthermore, nursing is first and foremost a practice-based caring activity; nurses want to 'do' something to ease a person's suffering, unhappiness or pain (Barker, 1989). This research aimed to gather insights and describe a unique response to a national clinical issue. Therefore, a qualitative, practice-based paradigm, pragmatism, was deemed as an ideal paradigm fit.

Case study methodology

Descriptive case study was the methodology used for this research. Specifically, Merriam's (1998) approach to case study was applied as a guiding framework. Case study was selected for several reasons; case study focuses on a particular event, program or phenomenon (it is particularistic); it produces a rich description of the phenomenon being studied (it is descriptive); and it is suitable to promote greater understanding of the phenomenon being studied (it is heuristic) (Merriam, 1998; Yazan, 2015). Case study is a way to describe social and psychological phenomena and has a long history with evidence of use as early as the beginning of the 19th century (Blumer, 1935).

The subject matter for this study is little known, is innovative and related to a specific training program, thus demonstrating it is *particularistic.* The study also draws on rich narrative accounts from the participants, thus emphasising its *descriptive* characteristics. A *descriptive* approach is considered to be useful when a researcher is not manipulating variables or wanting to test a theory (Merriam, 1998). Finally, the study is *heuristic* as it generates a greater understanding of the practice area, safety, and increased knowledge of what is required for a programme that teaches de-escalation and aggression management.

Within a case study approach, the methodology can be further categorised as intrinsic, instrumental, or collective (Creswell, 2013; Stake, 2006). The main objective for an intrinsic design is to focus more on the case itself, usually when the case is unusual or unique in some way. For instrumental case study research, the researcher may focus on an issue of concern and then select one bounded case to demonstrate this issue (Creswell, 2013). A collective case study attempts to address an issue while also adding to the literature base that helps to better conceptualise the case (Creswell, 2013). In this study, due to the unusual and unique practice area and the programme itself, an *intrinsic* case study design was adopted. Case studies can be used to explore complex social phenomena in context, such as developing and implementing a

national training programme across health services. Merriam (1998) indicates that it is important to define what the 'case' is and set some bounds around the case to be clear what is to be studied.

The 'case' that is studied in this thesis is *the development and content of Aotearoa New Zealand's approach to de-escalation and aggression management (SPEC) training*. The case is timebound (from 2016 to 2019) and the participants are limited to those directly involved in the development of this unique training programme, as well as those leading the implementation of SPEC in one DHB. The aim of studying this case is to produce rich insights into how an area of clinical practice can be changed at national level through creating a shared vision, leadership, and a coordinated approach.

Methods

As already referred to, this case study has three phases, and this section will explain these with the corresponding methods outlined. Table 4 summarises these phases, and a detailed explanation will then be offered for each component phase.

Table 4

Study Phases and Related Data

Study phases	Related data	Data collection and analysis methods
1) An examination of the SPEC training content compared with the core elements of best practice as identified in the literature	• International and national literature on best practice for de-escalation and aggression management • SPEC training manual	• Literature search and review • Content analysis
2) Description of how national consistency was achieved in SPEC training	• Interviews with range of clinical leaders and subject matter experts	• Semi-structured interviews • Thematic analysis
3) In-depth case example in one DHB identifying critical factors for implementation	• Interviews with identified experts during the change process • Analysis of relevant documentation of the implementation process	• Semi-structured interviews • Thematic analysis

Phase 1: Compare current de-escalation and aggression management training with 'best practice'

In the first phase of the study the current de-escalation and aggression management (SPEC) training in Aotearoa New Zealand was reviewed and compared with 'best practice' principles. These principles or key features of relevant training programmes were identified and

synthesised through a literature review, which is summarised in Chapter 2. The literature review revealed the elements necessary to be included in a training programme for clinical staff to support de-escalation and aggression management in acute mental health services. A total of 18 key features were identified and the SPEC teaching material was interrogated using content analysis.

Content analysis

Content analysis is primarily used for the systematic understanding and categorising of text to determine trends and patterns of words used (Patton, 2015). The benefit of using content analysis is that it provides a way for the researcher to quantify the contents of text, it is a clear method and can be repeatable by other researchers (Denscombe, 1998). For this part of the research, a copy of the SPEC training programme, the trainee workbook and summary of the teaching sessions were sourced.

The training material sessions and trainee workbook were interrogated for content that related to each of the 18 elements identified in the literature review. Then each element was assessed as strong, average, or weak within the SPEC training programme using the following process.

The analysis and critique of the training material was based on three criteria. The first criterion used was *frequency*, as in how many times the element was presented in the teaching plans as a discreet focus. The second criterion was a consideration of training modalities to determine the depth to which each element was taught. Specifically, a rating was made based on whether the training addressed relevant *theory/principles*, provided practice *examples*, and allowed for *practice opportunities*. The third criterion was a consideration of the *importance* placed on each element within the trainee workbook (from not being mentioned at all, to being a standalone topic).

An element was assessed as 'strong' when it was presented at least three times with evidence that there was multimodal teaching, covering theory, examples, and practical application (e.g. role plays, case scenarios) and if the element was also included in the trainee workbook. An element was deemed 'adequate' when it was presented at least once in the four-day programme using one of the teaching modalities and was also mentioned in the trainee workbook. An element was deemed as 'weak' if it was either not mentioned or mentioned only in the context of another aspect of the training (i.e. not as a standalone topic) and there was no evidence of the element in training workbook or it was included as part of another topic in the workbook. Of note, there was no pre-existing rubric or criteria, for this purpose found in the literature and the above criteria was developed for this study.

Phase 2: Description of how national consistency was achieved in SPEC training

The second phase of the study detailed how clinical leaders in Aotearoa New Zealand reached consensus to have one evidence-based de-escalation and aggression management training programme across the country.

Semi- structured interviews with clinical leaders and other key stakeholders were used to collect the data and thematic analysis of the interview data was undertaken. The following sections will explain the participant group, how these participants were selected, what measures were taken to ensure their contributions were kept secure, how the data was analysed, and the quality measures taken to ensure findings were trustworthy.

Participant sampling and selection

In this phase of the study both purposive and snowball sampling were used. Merriam (1988) suggests that "purposive sampling is based on the assumption that the investigator wants to discover, understand and gain insight and therefore must select a sample from which the most can be learned" (p. 61). Snowball sampling has been described as a type of purposive sampling and occurs when the original purposive sampling participants suggest, or refer the researcher onto, other participants for their unique contribution (Merriam & Tisdell, 2016).

The purposive participants were all considered as potential contributors due to their knowledge of how the SPEC training was developed and applied nationally. An initial list of ten potential participants was purposively generated following discussion with the thesis supervisors and the Chair of the National Directors of Mental Health Nursing (DOMHN) group. Snowball sampling allowed for the original ten participants to identify other subject matter experts, who could contribute to the knowledge generation for this study. A further three were identified in this way, leading to a total of 13 participants.

The identified potential participants included individuals who could speak to the issues relating to the impact of restrictive practices for Māori; individuals with lived experience of mental distress and service use; and people with national and ministerial leadership roles. Table 5 describes the participants and the relevance of their roles and experience. Establishing information rich participants is identified by Merriam (1988) as an essential element to securing information rich data. Merriam highlights the importance of showcasing the rationale for participant selection, and how this supports trustworthiness and credibility (Merriam, 1998).

Table 5

Participants and Relevance for Selection for this Research

Participant ID	Selection criteria and relevance to research
A	Member of the National SPEC Governance Group, experienced SPEC trainer, member of initial development group of SPEC.
B	Member of National Directors of Mental Health Nurses group, member of National SPEC Governance Group, experienced mental health nurse. Previous trainer of an alternate aggression management training programme.
C	Key informant of early development of SPEC, previous national leader in mental health nursing.
D	Key informant for workforce centre contribution, trainer of previous aggression management training programmes. Experienced clinical leader of a DHB, experience in leading a national group of clinical leaders. Member of the National SPEC Governance Group.
E	Member of National SPEC Governance Group, Ministerial perspective. National clinical leadership role.
F	Member of National SPEC Governance Group, Ministerial and regulatory perspective. National clinical leadership role.
G	Member of National SPEC Governance Group, member of national workforce centre, key informant for Māori and lived experience of mental health services, experience as a SPEC consumer trainer.
H	Member of National SPEC Governance Group, key informant for Māori and lived experience of mental health services, experience as a SPEC consumer trainer.
I	Member of National SPEC Governance Group, key informant as national leader within a national workforce centre focusing on reducing restrictive practices. Brings lived experience of mental health services.
J	Key informant of historical development of SPEC, bringing contribution of lived experience of mental health services and education perspectives including SPEC consumer trainer experience.
K	Member of National Directors of Mental Health Nurses group, member of National SPEC Governance Group. Brings legislative knowledge of reporting requirements, historical knowledge of aggression management training across Aotearoa, New Zealand.
L	Key informant for current SPEC curricula, key informant for historical development. Experienced mental health nurse. Leadership role within a DHB.
M	Key informant for historical development of SPEC. Experienced mental health nurse. Previous SPEC trainer.

In relation to sample size, it is suggested that researchers need to be attentive to reaching a point of saturation of information, where there is no more new information being presented (Lincoln & Guba, 1985; Merriam & Tisdell, 2016). After 13 interviews were completed and analysis was progressing, it was considered by the researcher and supervisors that sufficient information rich data was collected. When themes were being repeatedly identified, no more participants were required. A further consideration was keeping the size of the study manageable within the limits of a doctoral study.

Participant recruitment

The participants were recruited via the DOMHNs National Group Chairperson. The invitation to participate was sent to each of the identified participants by the Chairperson who specifically highlighted the matters of consent and confidentiality. This was in the form of an email with an information sheet (Appendix A) and a consent form (Appendix B). Both the consent form and the information sheet were authorised for use by the Auckland University of Technology Ethics Committee (AUTEC).

The initial ten participants were well known national clinical leaders and therefore complete anonymity was not able to be fully guaranteed. This was made clear both in the participant information sheet and additionally at the time of interview.

Once the series of interviews had started, three additional participants were recommended due to their knowledge of the research area and this led to an additional three interviews, providing a total of 13 participants. The participants who joined from the snowball process also were offered the same confidentiality and anonymity processes as the original participants.

Data collection

Semi- structured interviews were used to elicit participant information. Yin (2018) suggests that "one of the most important sources of case study evidence is the interview" (p. 118). Eliciting relevant and rich information is the goal of interviewing (Patton, 2015). Vaismoradi et al. (2013) suggest that there are three key approaches that can be used with interviews: the conversational interview approach, the interview guide approach, and the standard open-ended interview. For this research, the interview guide approach was adopted, referred to in this section as semi-structured interviews. This offered a structure to focus the discussion on relevant content, while allowing respondents to explore aspects in more depth depending on their experience. This format affords a conversational style, where neither the wording of the questions, nor the order in which they are asked, need to be firmly adhered to (Merriam, 1988).

Patton (2015) describes that no matter what style is used, it is essential to capture the actual words of the interviewees. The goal is to represent and present the interviewee's perspectives and their meanings (Yin, 2018). Yin (2018) cautions that there is a need to corroborate the interviewees stated views and suggests this can be achieved with the use of other sources of information or asking the interviewee their view in more than one way, on more than one occasion. What became evident during the interview process was the concordance that the participants had with each other. This is demonstrated in Chapter 5 with use of quotes and rich description of the participants' narratives.

The interview questions were offered to the participants ahead of the face-to-face interview, in line with recommended best practice (Patton, 2015). The interviews ended with an opportunity for the participant to offer any other narrative that they might want to have included. The semi-structured questions were drafted after discussion with the thesis supervisors and were broad enough to draw out relevant and related information that the informant wanted to share. The core questions asked were:

1. Describe how SPEC was introduced as a national programme?
2. What do you see as the key advantages of SPEC as a national programme?
3. What needed to happen in order to support national implementation?
4. Do you have other contribution that you would like to share, which would be useful to this study?

The interviews were conducted at a place and at a time that suited the participants. Written informed consent was obtained and robust efforts to maintain confidentiality were undertaken. An example of this was supporting a participant to select a venue for the interview that they believed would offer them the degree of confidentiality from colleagues.

As the interviewer, I was aware of the need to follow good interview techniques. Merriam (1998) suggests that the interviewer should ensure that they pay attention, build rapport, be neutral, listen actively, and respect any issues of power differential and influence within each interview. The need to be mindful of these important details resonated with me as researcher, and to mitigate these influences, I used active listening skills, offered the transcribed text back to each participant and reflected on the interview process with my academic supervisors. Merriam cautions that the interviewer should "assume neutrality with the respondent's knowledge" (Merriam, 1988, p. 79). There was a potential for researcher bias to influence the data collection and analysis, and the management of this dynamic is discussed later in this chapter, when trustworthiness is discussed.

Data management and analysis

Good data management is essential (De Chesnay, 2017; Denzin & Lincoln, 2018; Merriam, 1998; Patton, 2015; Stake, 2006). A key consideration is ensuring that data integrity is maintained at each stage of the research process, including the use of recording devices and careful field notes to accurately capture the data and observations, and the safe handling of the transcriptions and resulting data during analysis.

In this research, the interviews were recorded on two devices, data was downloaded to the researcher's computer, listened to in its original form, sent to the transcriber, then re-read in written form once transcribed word for word. For the participants who elected to receive their

transcripts for consideration before analysis, the written form was refined to indicate who was talking, and the questions were typed in italics to make it clear for the reader.

Data analysis is the process of making sense from the data (Merriam, 1998), but first one has to create the information into 'units of data' (Lincoln & Guba, 1985). Lincoln and Guba suggest that "a unit of data should meet two criteria, first, it should be heuristic (it should stimulate the reader to think beyond that specific bit of information). Second, the unit should be the smallest bit of information about something that can stand on its own" (Lincoln & Guba, 1985, p. 345).

Thematic analysis was selected for the method to analyse the data collected from the semi-structured individual interviews. Thematic analysis is described as an umbrella term, covering different approaches used in identifying patterns and themes and thus drawing out key issues to be further discussed (Braun et al., 2017). Braun et al. (2017) identify three key approaches to thematic analysis, namely; coding reliability, reflexive thematic analysis and codebook thematic analysis (Braun et al., 2017). Coding reliability occurs when qualitative data is collected, analysed, and coded with the use of a *coding framework*. This is often done by more than one coder and then subsequent alignment between the coders is considered with a goal of consensus with the coding outcomes (Boyatzis, 1998; Braun et al., 2017). Reflexive thematic analysis emphasises the need for the researcher to be active and reflective with the aim of providing a "coherent and compelling interpretation of the data, grounded in the data, the researcher is a storyteller actively engaged in interpreting data through their own lens" (Braun et al., 2017, p. 6). Codebook thematic analysis sits somewhere in the middle of the two aforementioned approaches and shares a structured approach to coding and also includes the reflexive approach to analysis of these codes (Braun et al., 2017).

Reflexive thematic analysis was used to analyse the data from the semi-structured interviews, primarily as it supports both a descriptive element to the participant interviews and can be used to describe the 'actual experience' of the participants. Thematic analysis offers flexibility when used with varying types of data and lends itself to analysis of interview transcriptions. There is a precedent with using this type of analysis in case study methodology (Cedervall & Aberg, 2010; Manago, 2013).

Thematic analysis requires rigour and diligence with the information collected, ensuring a quality process. A systematic and thorough approach is as important as coding accuracy (Braun et al., 2017). The coding process for this research started with listening to the recorded interviews prior to transcribing and making notes whilst listening. The recorded interviews were then transcribed verbatim. On receipt of the transcription, initial reading was done to review for spelling errors, specifically correcting the Māori kupu (words). For those participants who

requested the raw transcript, this was provided to them to review, and their edits were included in a new word document and returned to me. This was followed by reading and re-reading the transcripts to identify key words or statements that have significance to the study aim. Each key statement was identified and clustered into related groupings. At the final stage, these were combined to create broader themes (Patton, 2015) relevant to understanding the development of a national approach to de-escalation and aggression management training. A macro-enabled word document was created to contain and support a filter process to assist with data management. The broader concepts or themes were then considered carefully and reviewed with the research supervisors and valued colleagues for rigour and reduction of personal bias.

Phase 3: Case example of how SPEC training has been implemented in one district health board

The third phase of the study was an in-depth exploration of how one DHB transitioned from their existing training approach to the agreed national de-escalation and aggression management training (SPEC). The objective of this part of the study was to identify essential features that supported successful implementation. It is of interest and value to understand how the national training has been accepted, implemented, and supported at a local level, whilst maintaining a nationally consistent approach. Understanding how new interventions are implemented in health can be described using an implementation science lens (Baumann & Cabassa, 2020; Chambers et al., 2020; Proctor et al., 2009; Rubenstein & Pugh, 2006). Chapter 6 summarises the findings of this phase of the study and refers to implementation science in the analysis of the information that was collected.

Implementation science

Implementation science is an emerging field in mental health (Proctor et al., 2009). Furthermore, it is defined as "the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices to improve the quality and effectiveness of health services" (Nilsen, 2015, p. 2). Proctor et al. (2009) describes implementation science as being focused on practice-based investigations that support movement of effective health care approaches, such as evidence-based guidelines, from clinical knowledge to routine use.

One framework that offers an understanding of how a new intervention becomes usual practice is Normalisation Process Theory (NPT) (Finch et al., 2013). This theory suggests there are four determinants of embedding successful change; Coherence (how do participants make sense of the new practice); Cognitive participation (what motivates participants to want to gain mastery); Collective action (what makes the new practice work, how is it organised that participants can make it successful); and Reflexive monitoring (what do the participants see and experience that promotes their understanding that this is better than what they were doing before). These four

determinants of NPT guided the questions used in the semi-structured interviews, as outlined below.

Selection of case example and participants

A purposeful approach to case and participant selection was used. The DHB identified for this case example was selected via suggestions from the interviewees in phase 2. Several of the phase 2 participants suggested this DHB due to it's relatively rapid move from the existing aggression management training to fully implementing SPEC. The general manager of this DHB was approached, their permission was gained and their DHB locality research agreement requirements were satisfied.

The Clinical Nurse Director (CND) of the identified DHB was asked to identify up to four staff who were involved in the implementation of SPEC. This resulted in three interviews, a fourth was planned but unable to be finalised, due to scheduling conflicts. The people recommended for interviews were people in key implementation roles who were instrumental in leading the move to SPEC training. Contact with the identified key informants was made via the CND. The proposed participants were provided with participant information and the relevant confidentiality and consent agreements were completed with the participants (attached as Appendices as identified above).

Table 6

Phase 3 Participants and Relevance to the Research

Participant identifier	Selection criteria and relevance to research
3A	Key participant due to executive leadership role within the mental health directorate at the time of the transition. No longer working for the DHB.
3B	Key participant due to extensive input in the delivery of SPEC to the clinical staff.
3C	Key participant due to operational influence into training programmes.

Semi-structured interview process

Semi-structured interviews (as described previously) were selected as the most suitable method of data collection, as these supported the drawing out of specific and focused information (Merriam, 1998). Each interview was conducted at the participant's preferred time and venue. The interview questions were offered beforehand, and the DHB locality approval process had authorised the questions and the participation. The recorded interviews were managed in the same way as for phase two. Every attempt was made to ensure and maintain confidentiality and limitations to this were also explained. The questions for this phase of the research were

developed to intentionally draw out implementation information (Finch et al., 2013) and are listed below.

1. How is SPEC understood by participants? / How do participants compare it to other practices? (Coherence)

2. How do participants come to take part in SPEC? / What motivates them to take part? (Cognitive participation)

3. How do participants make it work? / How is the training organised and structured? (Collective action)

4. How does this change what they do? (Reflexive monitoring)

5. What are the key enablers and barriers for this implementation?

Data management and analysis

The same data management processes were used as described in phase 2. The semi-structured interviews were recorded, then transcribed and stored in a password protected computer file. Thematic analysis (as described in phase 2) was used to analyse the information drawn from the semi-structured interviews.

Quality aspects of this research

Determining confidence in the data, the interpretation and the methods used is essential and referred to as the trustworthiness of the research (Patton, 2015). As previously described above, this research was based on Merriam's case study approach and again using Merriam as a guide, the following section will describe the strategies used to support the believability and consistency of the study process, which therefore validates that the findings are trustworthy (Merriam, 1998).

Merriam (1998) describes six approaches that can show and support the consistency of the data and the analysis. The first approach is triangulation, and this refers to multiple sources of information, multiple investigators or multiple methods that are used to confirm findings. This study had multiple participants and the participants were selected using purposeful sampling that maximised diversity of opinion. Furthermore, there was an alignment and harmony to the data collected that implied consistency of information.

A second approach as suggested by Merriam is member checking, and this can support that the information gleaned from the participants is credible. For this thesis the transcripts were made

available to the participants for checking and any changes requested by the participants were accommodated.

Many of the participants offered similar observations and this meets the criteria for repeated observations over time, which is a third approach that Merriam recommends showing credibility. In addition, peer examination is a process that strengthens the consistency and trustworthiness, and Merriam describes this as when the researcher asks colleagues to comment on the findings as they emerge, and this was achieved as coding and interpretations were checked with supervisor and valued colleagues throughout this research analysis process.

Addressing researcher bias is the fourth approach that Merriam suggests. This was achieved with the use of a presuppositions interview, and attendance at regular supervision, which included reflection on the study process as well as personal self-reflection. Moreover, to address any potential for interviewer participant influence, the participants were offered the option of having their interview completed by a third person.

Merriam's sixth approach is participatory or collaborative modes of research, which is described as involving the participants in the research. For this research, the key stakeholders were invited to contribute to the development of the case study, their input was valued, and the findings strived to reflect their combined experiences.

Merriam suggests that quality research can be supported by transferability. Transferability is established by providing adequate evidence that the research study findings can be applicable to other contexts, situations or populations (Polit & Beck, 2010). This study is rich with participant insight, uses participant words and a reflective consideration of the themes was undertaken. The breadth and depth of the interviews has given maximum ability to achieve transferability, and this can support others to use this research in their own jurisdictions.

Patton (2015) indicates that because the inquirer is a key instrument with qualitative research, the credibility of the researcher is relevant when assessing the credibility of the research. Researcher credibility can be enhanced by offering an explanation about the inquirer and their relevant interest in the area. This can be achieved using reflexivity to identify the inquirer's background and what perspective the inquirer may hold. This includes how the inquirer has addressed potential biases, and whether the inquirer considered how the research has affected the participants and inquirer. The reader must be reassured that, through the use of appropriate research methods, the inquirer has demonstrated competence.

In Chapter 1, there is a description of my rationale for embarking on this research and my background as a nurse, who has worked in mental health for 40 plus years. In the above sections of this chapter, there is explanation of the chosen philosophical framework of pragmatism and the reasoning for the use of case study methodology. Potential inquirer bias was recognised early in this research process and a presuppositions interview was undertaken and reflected on.

My professional employment means that I am well known to the participants, and this meant I was careful to consider my personal views of the subject matter and set them aside as much as possible. I sought peer review throughout the process, as well as academic supervision to recognise and then minimise the effect of bias as much as possible. The established relationship with the participants was helpful with scheduling of interviews and immediate rapport building and credibility with them, as I was known to them.

As part of this process, I was constantly aware of the sensitivity of this subject matter and was alert to the participants' reactions during interviews. I have reflected on my learning throughout this process, and this is summarised in the discussion chapter. As I was well known to all the participants, I was also aware of the need to consider my own views and biases and to guard for any risk of influencing the interviewees or making assumptions about their views.

Ethics

Ensuring ethical principles are upheld is essential to maintain integrity of the research process and trustworthiness of the data (Bradshaw et al., 2017; Denzin & Lincoln, 2018; Doody & Noonan, 2016; Guba, 1981; Lincoln & Guba, 1985). Scholarly study requires adherence to relevant approval mechanisms (Patton, 2015). Ethical approval was sought and approved by the Auckland University of Technology Ethics Committee (AUTEC). This was approved on 20th February 2019 and the approval number is 19/23.

In accordance with the AUTEC process, participants were provided with information that explained the research aim, how the information would be used and how it would be stored. Full explanation of the study was provided in Information Sheets, as previously noted, and signed consent forms were collected from each participant. At the beginning and end of each interview, the parameters of this research and confidentiality of the research were reiterated and there was an option for the participant to receive a copy of the transcript. All steps possible have been undertaken throughout to retain anonymity, privacy and confidentiality of the participants and all participants indicated their understanding of the limitations to this.

Additionally, cultural approvals were gained from Māori Caucus, Te Ao Māramatanga, New Zealand College of Mental Health Nurses and Rev Mahaki Albert, Tumu Tikanga (Chief Advisor

Māori) from Counties Manukau District Health Board. Locality approval for the DHB selected for part three of the study was achieved in June 2019.

Summary

This chapter described the philosophical basis and methodological approach for this research. An explanation was given as to why pragmatism as a paradigm was selected and explains the rationale for using a qualitative, intrinsic descriptive case study as the research approach.

The chapter concludes with an explanation of how the findings can be trusted and therefore may be applicable elsewhere by evidencing the systematic fieldwork, the rigour with analysis of the data, and establishing the credibility of the researcher and structural coherence of the inquiry. The following three chapters present the findings of the three phases of the research.

Chapter 4: Review of SPEC Training Content

Introduction

The research findings from this case study are presented according to the three interrelated but separate phases: (a) a review of the current SPEC training programme compared with the latest evidence drawn from the literature (b) an examination of how Aotearoa New Zealand came to agree on one consistent approach for de-escalation and aggression management training and (c) an in-depth review of how one DHB moved from their existing approach to the agreed national de-escalation and aggression management training programme (SPEC).

In Chapter 2 the literature review identified 18 essential elements necessary for an evidence-based de-escalation and aggression management training. In this chapter, the current training programme (SPEC) and its alignment with identified evidence from the literature is presented. Furthermore, recommendations regarding SPEC content, drawn from this analysis will be offered.

The current SPEC training programme

SPEC training consists of four 8-hour days delivered by local DHB trainers. The broad content of the four days is outlined in Table 7 below. The following description of the four-day training is drawn from materials provided to me as part of this research and following discussion with trainers (who were also participants in part two of the research).

The SPEC model, as identified by the National SPEC Governance Group for de-escalation and aggression management training (Te Pou o Te Whakaaro Nui, 2017a) recommends that the sessions are conducted by trainers who have completed a 'train the trainer' programme and identifies that at least one of the 'trainers' is a consumer trainer (a person with lived experience who has completed the training). The teaching model recommends that the day begins and ends with karakia and whakawhanaungatanga.

Table 7 offers a summary of the SPEC training programme, with the learning outcomes identified on the left-hand side and the teaching activities of the programme listed on the right-hand side.

Table 7

Summary of 4-Day SPEC Training

Day 1	
Subject	**Activities**
Understanding the context of SPEC	Relevant legislation; local policies and relevant local procedures
Identify own communication styles	Designed to identify own frustration triggers and early identification of triggers for potential of aggression for others, including how each can affect the other
Principles of trauma-informed care	Focus on early intervention and de-escalation exercises
Day 2	
Practice exercises for de-escalation	Intensified understanding of trauma-informed care principles and prevention strategies
Recovery principles	Building on existing knowledge
Person-centred care principles	Building on existing knowledge
Practice-based exercise of preventative measures including 'breakaway techniques'	Familiarisation of de-escalation and prevention techniques Familiarisation of quick, easy breakaway techniques
Day 3	
Self-care	Check on all participants for their wellbeing, acknowledging that participants may be affected by previous aggression management events. Promotion of wellbeing
Practice-based learning of personal restraint – focus on safety* (note: additional information provided below)	Ensure competency, understanding of safety, including physical safety (before, during, and after a personal restraint). Includes physiological distress/positional asphyxia
When to use personal restraint	Scenario-based approach, provide understanding of when personal restraint is indicated
Documentation	Obligations, legislative requirements[+] and local expectations
Day 4	
Reflections on previous three days	Reinforce new ideas, clarify issues raised, support the new learning
Review of competency for personal restraint	Ensure safety in practice, reinforce new learning
Scenario-based practice for personal restraint** (note: additional information provided below) where increased levels of personal restraint are required. Includes working as a three-person team. Includes the use of seclusion[++]; how to enter and exit a room safely and requirements of documentation and ongoing monitoring	Promotes team-based approach, supports competency achievement
Communication	Review elements of effective communication, with each other, with consumers, with family whānau
Reflections and evaluation process for the course	Receive feedback on training delivery, allows for individualised feedback and follow-up if needed

Additional information:

*In preparation for the training of techniques for safe personal restraint holds, the initial session focuses on safety aspects, i.e., health assessment when using prone positioning and how to recognise symptoms of positional asphyxia.

There is a focus on strengths-based language and an exercise on documentation requirement. The afternoon focuses on practice-based learning with opportunities to become familiar with the technique of personal restraint holds, using them safely; and practising de-escalation skills. Specific safety principles are reinforced—safe distance, good posture and balance, using natural movement, tone and volume when speaking, how to approach an individual without activating fear, identifying the key communicator when using de-escalation skills with the service user, importance of clear unambiguous language, sense of who and what else is happening around the service user, the place and space that the person is in. Safety for all is reinforced and is a key theme.

**Roles and responsibilities are introduced and reinforced throughout the day, with rationale for the three-person team and the identification of the role for each person. There is an emphasis on communication, coordination, and safety for all. There is close monitoring of the practice element and practical explanation of how and when to safely swap in and out to relieve colleagues for times if a prolonged period of personal restraint is required. There is opportunity to practice when and how to safely lower a person to the floor and getting up safely and in a controlled manner. There is a practise for manoeuvring tricky small spaces including stairwells and doorways. The training for entering and exiting a seclusion room are practised with a focus on safety.

+Mental Health (Assessment and Treatment) Act 1992; Ministry of Health restraint reporting to Directors of Area Mental Health in each DHB

++Ministry of Health (2010) Seclusion under the Mental Health (Assessment and Treatment) Act 1992

As identified in Table 7, the content was drawn from teaching plans, discussions, and observations. In 2019, Te Pou commissioned and created the SPEC Fidelity Checklist which is designed to support fidelity of SPEC training delivery across the DHBs[4]. The following section compares the SPEC content with the key elements drawn from the literature in Chapter 2.

Comparison with best practice

A review of international and local literature identified 18 best practice elements that should be in a training programme for de-escalation and aggression management in mental health and addiction services. The current content that is taught in SPEC was examined to establish alignment with published evidence and frameworks for best practice. A rubric was developed, and is detailed in Chapter 2, to determine the strength rating of each element. Each element is identified as 'strong, adequate or weak' based on analysis of alignment and recommendations are made. Element 9; service user/consumer involvement was unable to be determined is this manner, and this is explained in the analysis that follows.

Table 8 summarises these key elements and the strength of alignment. The recommendations are also drawn from the literature reviewed in Chapter 2.

[4] SPEC Fidelity Tool. Unpublished resource for SPEC trainers developed by Te Pou o Te Whakaaro Nui Fidelity-tool-May-2020.pdf

Table 8

Key Elements of a De-escalation and Aggression Management Training Programme Showing Strength of Alignment to Literature.

	Identified requirements from the literature	SPEC
	Before an event of personal restraint	
1.	Focus on primary prevention	Strong
2.	Focus on de-escalation and early recognition of aggressive behaviours	Strong
3.	Use of evidence-based aggression assessment tool	Weak
4.	Trauma-informed care principles	Strong
5.	Having culturally appropriate de-escalation strategies	Weak
6.	Evidence of Māori staff to support de-escalation	Weak
7.	Staff with high level of cultural awareness and understanding	Weak
8.	Use of Māori tikanga principles specifically 'whanaungatanga' (engagement)	Weak
9.	Involvement of consumer/lived experience in training	Met[5]
10.	Competency assessment	Strong
	During and After a period of restraint	
11.	Physical monitoring and basic life support measures	Adequate
12.	Trained team approach and lead person in charge of the process- preferably 3-person team	Strong
13.	Prone position to be avoided if possible; if it is used this is to be for the least time possible	Strong
14.	As few physical restraint holds as possible; pain free techniques only	Strong
15.	Taught managed exit from a seclusion room if needed	Strong
16.	Standing restraints to be taught	Strong
17.	Communication skills before an event, during and **after** with active debriefing	Adequate
18.	Self-awareness of staff, before during and **after** an episode of aggression. Recognition of own mood and how this can impact on outcomes	Strong

In-depth analysis of SPEC content and best practice

As seen in Table 8 above, all 18 best practice elements for de-escalation and aggression management training are evident in the current SPEC training content. However, the analysis identified areas in SPEC that could be strengthened in closer alignment with the evidence base. The following discussion describes how each of the requirements or standards are met and highlights where there are strengths and gaps in current training curricula. Some of the 18 best practice requirements have been grouped together and are rated as a single element.

Early intervention, primary prevention (Table 8; requirements 1, 2)

As the previous chapter identified, the more recent literature adds to previous knowledge and is consistent in that the earlier a person receives support when distressed, the more chance

[5] Refer to Element 9 description

there is to prevent the need for a restrictive practice. Requirements one and two in Table 8; early intervention and primary prevention are described here in this section together, as these two key elements are interconnected. The SPEC training content includes the promotion of early intervention as well as prevention strategies. This is evidenced in more than eight different teaching exercises in days one and two with evidence of multiple teaching modalities, including a practice-based session. There is evidence of this in the workbook. It appears from the analysis of teaching material that this is considered an important part of this training. These two elements are considered as strongly represented within the SPEC curriculum.

Use of evidence-based aggression assessment tool (Table 8; requirement 3)

The more recent literature supports the use of a multimodal evidence-based tool to objectively identify an escalation in behaviours, that may result in aggression (Bowers, 2014; Gaynes et al., 2017; Hallett & Dickens, 2017; Maguire et al., 2017). A multimodal approach to understanding an individual's cycle of distress, and early recognition of an individual's cycle of escalation and provision of interventions that can be used to redirect, distract, and support self-management is promoted. Additionally, more recent knowledge reinforces the advantages of using an evidence-based tool for clinicians to objectively identify times of potential conflict and use mitigation strategies early in order to reduce behaviours of aggression. Maguire et al. (2017) examined the use of DASA and associated interventions to prevent aggressive behaviours for people in a forensic setting. This tool is showing early promise for use in acute mental health settings as a method to support earlier identification of distress for service users.

There is evidence in the SPEC curricula in the first two days of teaching plans that early identification of the cycle of behaviours of aggression is taught in several sessions. There did not appear to be a separate teaching session on the advantages of using an objective measure measurement tool in any of the teaching material and this element was not able to be located in the participant workbook. Therefore, this element within SPEC is deemed weak.

Trauma-informed care principles (Table 8; requirement 4)

The literature is unambiguous that all training for staff related to early prevention of aggression should be firmly grounded in trauma-informed care (TIC) principles (Brophy et al., 2016b). This built on the earlier recognition of the importance of using a TIC approach (McKenna et al., 2015). A TIC approach recognises the role that previous trauma plays in the way a consumer responds to fearful events (Muskett, 2014). Establishing strong engagement with the consumer based on trust is an integral component for clinicians. Engagement is identified as a core element for a de-escalation and aggression management training programme.

The SPEC training indicated evidence of three separate sessions that teach trauma-informed care principles on day two, with TIC revision on days three and four. The sessions are of mixed modality including group activity and PowerPoint presentation, and handouts. There is evidence of inclusion in the participant workbook. The principles are reinforced during teaching of personal restraint holds on days three and four. Therefore, this analysis considers that this an area of strength in SPEC.

Appropriate cultural responses (Table 8; requirements 5, 6, 7 & 8)

The requirements that support better outcomes for Māori are described as having culturally appropriate de-escalation strategies, ensuring staff have a high level of cultural awareness and understanding, evidence of Māori staff to support de-escalation and that use of Māori tikanga principles that enhance mana (dignity) are all discussed in this section.

As previously described, Aotearoa New Zealand has disproportionally high numbers of Māori who experience restrictive practices such as seclusion and/or restraint (Ministry of Health, 2017). There are many strategies that could potentially enhance engagement with Māori who enter acute mental health inpatient services (Drown et al., 2018; Te Pou o Te Whakaaro Nui, 2014, 2017b; Wharewera-Mika, 2008; Wharewera-Mika et al., 2016). Of note, a strong recommendation emerged from the literature that the presence of Māori staff in acute inpatient mental health settings, particularly at the entry point, enhances engagement. The literature further recommends the use of culturally appropriate engagement processes; for example, pōwhiri, karakia, mihimihi, kai, using appropriate cultural assessment tools, and fostering of self-determination for Māori referred to as tino rangatiratanga. Finally, the literature supports that all staff should be well versed in cultural competency to support therapeutic engagement with Māori and their whānau. There was a small amount in the participant workbook that referenced this and a reference document is used as supporting material (Te Pou o Te Whakaaro Nui, 2013). However, there was no other evidence of relevant teaching material. The teaching plans indicate that SPEC starts the day with waiata (song) and karakia (chant, prayer) and demonstrates whakawhanaungatanga with introductions, but does not appear to contain explicit material related to teaching cultural awareness or cultural competency.

Therefore, it is considered that SPEC has a weak rating in this area, and this should be strengthened. This is a concept that will discussed in further depth in the discussion section in Chapter 7. Importantly however, it is identified that in Aotearoa New Zealand, all staff who are employed in DHBs, for whom aggression management and de-escalation training is mandated, are also mandated to attend a form of ‘cultural training’ (M. Albert personal communication, January 25, 2019). This is core and central to mental health practice in Aotearoa New Zealand.

However, the content of cultural training can vary between DHBs, analysis of which is beyond the scope of this thesis. SPEC has been developed with an articulated assumption that all attendees will have attended a core mandated DHB cultural competence training[6].

Involvement of consumer/lived experience (Table 8; requirement 9)

Recent literature reinforces the imperative to include people who have had lived experience of restrictive practices (consumers) into de-escalation and aggression management training (Brophy et al., 2016a, 2016b; McKenna et al., 2015; Obi-Udeaja et al., 2017). SPEC training also outlines the imperative to include a consumer as an equal partner when facilitating SPEC training. This is outlined in the SPEC train the trainer guidance and in a paper that is written by the National SPEC Governance Board to support this process[7]. The analysis for this element concluded that the research designed rubric was unable to be used for this element as this specific element relates to participation in the training, not as an element taught within the curricula. It was appropriate to assess this element as 'met' or 'not met'. The evidence that was provided supported the conclusion that this element was met within SPEC training.

Competency assessment at the completion of SPEC (Table 8; requirement 10)

A further training element recently suggested in the literature is the need for competency assessment in the teaching of aggression management. This suggests that taking an approach that uses real life examples when teaching de-escalation skills and aggression management, and using blended learning could further enhance how staff respond in real life situations (Halm, 2017). SPEC uses a range of methods when teaching de-escalation and communication in the first two days. These include a small group exercise where participants can practice using their own recent experiences when there have been behaviours of aggression in the workplace. The skills of de-escalation and aggression management are further reinforced in the practice teaching that occurs on days three and four. In addition, SPEC currently identifies people who are considered competent at the end of the four-day SPEC training. The current process is a peer-reviewed process by the trainers (one of whom is a consumer trainer) and participants are deemed 'competent' in SPEC using trainer judgement. Therefore, SPEC would be considered strong in this area.

Physical monitoring and basic life support measures (Table 8; requirement 11)

Recent literature is clear that constant physical monitoring of the service user is required to assess for physical distress should it occur during a restraint event (Hollins, 2017; McKenna et

[6] Following discussion with Chair of SPEC National Governance Group.
[7] Unpublished document included in the training materials made available.

al., 2016). This builds on the previously documented recommendation that a restraint should not occur for longer than 10 minutes (National Institute for Health and Care Excellence, 2015). Hollins (2017) cautioned, “it is reasonable to conclude that the longer a restraint goes on the more dangerous it can become for the individual being restrained” (p. 719). Hollins contended that there needs to be a more detailed understanding of an individual’s physiological responses as they are being restrained and it is this physiological rationale that strongly directs the need for intensive physical monitoring, during a personal restraint episode.

SPEC training teaches and describes the risks of positional asphyxia on day three in a PowerPoint teaching session. This is reinforced in the scenarios that occur on day four, with a focus on looking for signs and symptoms of positional asphyxia, as well as ensuring physical wellbeing is maintained throughout any personal restraint event. This is also evident in the participant workbook. The teaching plan evidences that SPEC supports the concept of non-prone restraint. The practical scenario-based teaching session on day four demonstrates and reinforces that if prone positioning does occur, this needs to be managed to ensure this occurs for the least possible amount of time and to monitor the service user carefully for signs and symptoms of physical distress. There was evidence of two teaching sessions, multimodal methods, and evidence that this element (physical monitoring and basic life support measures) is included in the participant workbook. This indicates that this element is currently adequate. However, the more recent literature highlights the physical health risks of prolonged duration of personal restraint. This should be strengthened in SPEC content.

Trained team approach (Table 8; requirement 12)

McKenna et al. (2016) confirmed that personal restraint should only be undertaken by a trained team who understand each other’s roles and have a clearly defined lead person. The team approach is taught as an integral part of SPEC. This is evident on days three and four. The day four practice-based scenario includes competency assessment of participants’ understanding of the specific roles and responsibilities for each person in a team approach. SPEC teaches a three-person minimum team approach, which is then further reinforced in the practice-based scenarios on day four by matching practitioner’s skills and capabilities with the allocation of roles (i.e., if a practitioner has a greater rapport with the person who is being restrained then consideration ought to be given to them being allocated the role of main communicator). SPEC teaches that when identifying the best person to act as communicator, consideration should be given to the best cultural fit and the needs of the service user. There is evidence of PowerPoint learning and group activity on days three and four and there is evidence of inclusion in the participant workbook. Therefore, this element is considered a strength within SPEC.

The physical 'restraint holds' aspect of aggression management training (Table 8; requirements 13, 14, 15 & 16)

The requirements that comprise the physical 'holds' part of the training are collectively presented in this section titled 'restraint holds'. The elements identified from the literature are a) prone positioning is to be avoided if possible and if used, for the least amount of time possible (this links strongly with teaching of standing restraint); b) the teaching of as few personal restraint holds as possible, with pain free techniques only, and c) a focus on taught managed exit from a seclusion room, if needed.

The importance of avoiding prone positioning is reinforced in recent literature (Hollins, 2017; McKenna et al., 2016; McKenna et al., 2015; McKenna et al., 2017; Shaw et al., 2017). The risks for the service user when in the prone position are clearly outlined and a teaching curriculum that includes a full understanding of the risks is strongly recommended. Having a programme that teaches as few personal restraint holds as possible is identified in McKenna et al. (2016), along with the recommendation to teach standing restraint and controlled exit from a seclusion room. McKenna et al. also recommended the avoidance of pain compliance as a method of restraint. Recent literature clearly stipulates "all restraint techniques must be safe for use" (Hollins et al., 2021). These authors recommend that techniques and procedures must also be "teachable and learnable" (p. 10).

The SPEC programme teaches the practical aspect of personal restraint on days three and four. SPEC teaches and practices a range of personal restraint techniques that begin with the least restriction and containment, and incrementally progress. This includes seclusion room entry and exit. There are five 'restraint holds' taught, and there is evidence that these are practiced methodically to enable participants in the learning to gain in confidence and competence with each progressive level of restriction. Practising a safe room entry and exit is done using scenarios and individual participants are assessed for capability. This is conducted in a training environment, which cannot replicate a real dynamic situation. However, as much as possible, the training content endeavours to ensure that a room entry and exit replicates the acute inpatient environment. For example, a training environment will indicate the door width, corridor widths etc., which allows for more realistic practice-based preparation.

The personal restraint techniques are taught in a progressive and incremental approach—from least to most restrictive. As identified above, practice-based scenarios are used so that participants can gain confidence (these occur on day four). The teaching programme indicates that the techniques are taught using a 'show and then do' approach to learning. This is

reinforced with support and close supervision as participants learn the specific movements. The participant workbook includes the terms and names of the personal restraint holds.

There is practice for when a prone position occurs inadvertently, as well as an inevitable planned prone position. There is also practice for times when health professionals need to swap their roles during an event of personal restraint. Standing restraint is practised using scenarios and SPEC teaching reinforces the need to ensure that a prone position is avoided as much as possible, and if it occurs that it is limited to the least possible amount of time. Physical monitoring for health events is reinforced. None of the SPEC physical restraint holds teach the use of pain compliance.

The analysis indicates that there is strong evidence that the three requirements are met (prone positioning to be avoided if possible and if used to be for the least amount of time possible, as few restraint holds as possible with pain free techniques only, and taught managed exit from a seclusion room). Using the identified rubric as the measure, these four elements are considered a strength within SPEC curriculum

Communication skills before, during and after an event and use of debriefing (Table 8; requirement 17)

As previously identified, McKenna et al. (2016) described training needs in three time periods: 1) before a restraint occurs, 2) during a restraint and 3) after a restraint.

Communication skills are integral in these three phases. *Before a restraint* occurs, there is a time period when de-escalation has the opportunity to affect an alternate outcome, and this is described in the literature as primary prevention. *During a restraint* the need for clear unambiguous communication is essential for the person being restrained and for the staff involved to ensure that the safest outcome is achieved. In the time *after restraint* excellent communication skills are needed to support the service user and staff with post event debriefings. Recent literature highlights the learning opportunities when staff engage meaningfully in reflection and reflexive review to develop practice wisdom (Haugvaldstad & Husum, 2016; Hollins et al., 2021).

Considering the three time periods, the analysis concluded that SPEC training was strong in two of these three areas. In day one of the SPEC training the communication styles of clinicians are identified, communication is reinforced as a de-escalation option, and attendees are required to consider their own communication style and reflect on what impedes and what helps. There is evidence both in the training teaching plans and in the participant workbook, that SPEC training continuously reinforces communication. For example, attendees are required to define

the role and responsibility of the primary person in a 3-person restraint, with mention of the need for clear communication for the person assigned the number one role. The communication aspect taught in the time periods before and during a restraint is considered a strength for SPEC training. However, there was only one reference to communication after an event of personal restraint and therefore this aspect of the training is weak.

Self-awareness of staff, before during and after an episode of aggression. Recognition of own mood and how this can impact on outcomes (Table 8; requirement 18)

Recent literature supports the need for staff to understand their own emotional reactions to patient aggression and how their personal bias may contribute to escalation of the situation (Haugvaldstad & Husum, 2016; Jalil et al., 2017; Price et al., 2018; Riahi et al., 2016). This literature proposes that there are times when staff's responses and interactions may inadvertently provoke incidents of aggression. This may be based in fear and anxiety or may be because of previous experiences of aggression. However, reflective, and reflexive practice can mitigate this.

SPEC introduces the concept of personal understanding of one's own triggers when teaching communication on day one, as identified in the section above. There is evidence of three exercises that teach this. One exercise introduces the concept of demeanour and how that can be perceived by others, and this is taught as an interactive exercise. The second teaching session is designed to help participants identify what style of interaction they have when they are under duress. This is taught in fun group activity. The third session is more detailed to identify how as individuals each person copes when stressed; what are their triggers and what are their coping strategies. This is included in the participant workbook. Analysis would indicate that current SPEC curricular is strong in this element.

Summary of analysis

The literature identified 18 elements as essential to be included in SPEC. Of these 18 elements, 17 were then analysed using a rubric and established a measure of strong, adequate, and weak for each. One element was excluded but considered as meeting the expectation as identified in the literature. SPEC aligned strongly with 11 elements, it aligned adequately with 2 elements and 5 elements demonstrated weak alignment.

The analysis of SPEC showed strong evidence of teaching and promotion of de-escalation skills, self-awareness of staff, and effective communication. All of these are considered as primary prevention initiatives and relevant in the time period 'before a personal restraint event'. SPEC also was deemed strong in the areas related to the elements identified as being needed 'during

a personal restraint'. These include the personal restraint 'holds', the trained team response, no pain compliance, no prone positioning and promotion of standing restraint. SPEC was designed to include a person with lived experience as a trainer and this element was considered as meeting the expectation that current literature sets out.

The two areas that were deemed as adequate are physical health monitoring and communication after an event of personal restraint. The areas that were considered weak are use of an evidence-based tool to support assessment and targeted interventions, teaching culturally appropriate de-escalation strategies, evidence of Māori staff to support de-escalation, ensuring staff have high level of cultural awareness and understanding and use of Māori Tikanga.

Conclusion

This chapter presents findings from phase 1 of the research. It considered the content of the SPEC training programme in Aotearoa New Zealand and examined how it aligns with best practice, as identified in the literature. The analysis led to the identification of many strengths in the training, but also four areas where the content could be further strengthened. These areas relate to improving outcomes for Māori, updating the content knowledge regarding physical health risks that are compounded if a person is personally restrained, considering the use of an evidence-based tool to support objective identification of escalating behaviours with associated interventions, and making efforts to learn from events of personal restraint to be able identify the triggers and put measures in place that would be preventative in the future. These areas for refinement and associated recommendations are discussed further in Chapter 7. The following chapter will present findings for phase 2 of this research and will explore how SPEC came about, specifically how it came to be adopted as a nationally consistent de-escalation and aggression management training.

Chapter 5: Development of SPEC as a National Training Approach

Introduction

The aim of this thesis was to create an understanding of the unique development of a national approach to staff training for de-escalation and aggression management in acute mental health services in Aotearoa New Zealand. There are three key areas of inquiry; (1) an examination of the current training content compared to international evidence for a training that supports de-escalation and improved skills for the management of aggression, (2) to describe how a decision was made to endorse the same de-escalation and aggression management workforce training programme across mental health and addiction services nationally, and (3) to provide an in-depth review of how one DHB moved from their existing approach to the agreed national de-escalation and aggression management training.

This chapter offers the results from phase two of this research. SPEC is a single, nationally consistent training for de-escalation and aggression management, the achievement of which is unique internationally. The uniqueness of this achievement is worthy of acclaim and inquiry, as there are lessons to be learned that will be useful for other jurisdictions, clinical areas, and clinical applications.

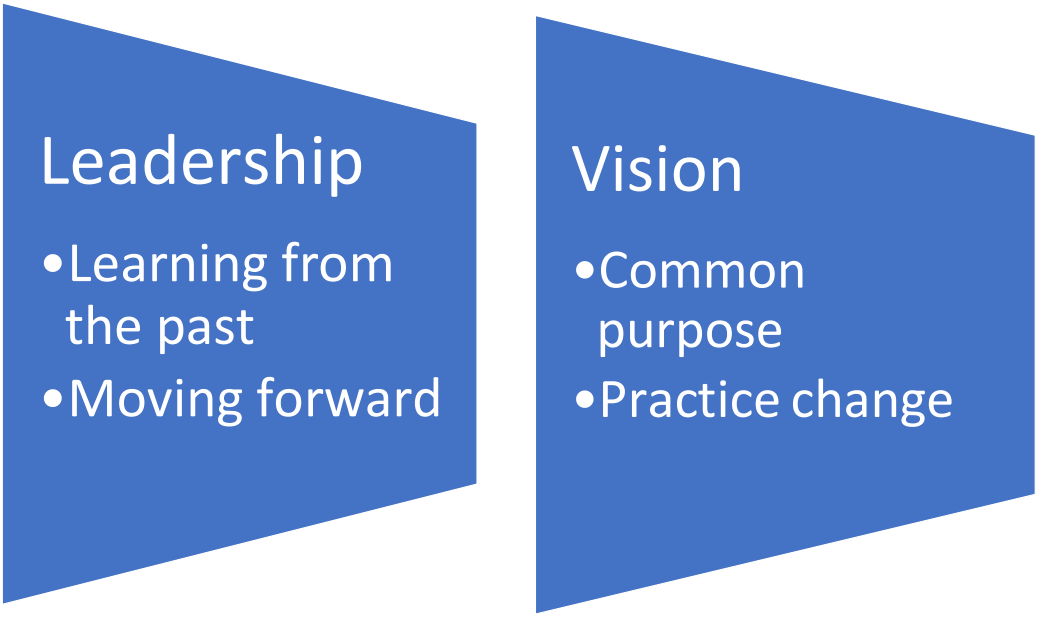
As described in the study design (Chapter 3), this phase of the research is based in descriptive qualitative methodology and uses thematic analysis of semi-structured interviews to provide insights into the process of developing a nationally consistent programme. Thirteen interviews were conducted with key stakeholders and the recorded interviews transcribed, read, re-read, coded, and further analysed for themes (Braun et al., 2017). The reflection process and refinement of themes continued into the writing process bringing into sharp focus the two primary themes of ‘Leadership’ and ‘Vision’.

The overarching themes

‘Leadership’ and ‘Vision’ featured strongly and frequently in the interviews when considering the national endorsement of SPEC. These are diagrammatically represented in Figure 2 below. There were lesser prominent subthemes, and these are presented within the narrative of the relevant broader theme.

Figure 1

Themes From Phase 2 of the Research



As I reflected on how to present this chapter, I was continually drawn to a Māori whakataukī (proverb), *Ka mua, Ka muri – use knowledge from our past to guide our future*. The interviewees were generous with their time and insights and were also clear that the learning from the past needed to be recorded to help ensure that all the good work to bring about this practice change was not lost. To me, this was a clear example of using knowledge of the past to guide our future. This chapter captures how SPEC came to be developed and what was so 'good' about SPEC that led to it being introduced as a nationally consistent programme.

Leadership

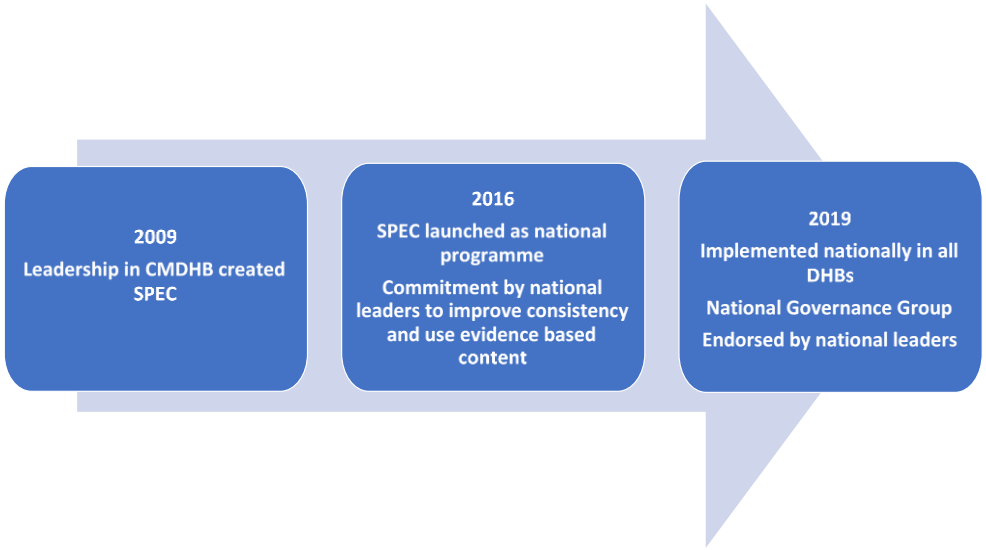
Throughout the 13 interviews, as informants discussed the development of the national SPEC training, the word *leadership* and reference to *leadership activity* was significant. Statements such as the following were common: "*like minded leadership led change"* (Person C); "*leadership was needed at all levels*" (Person F); *"clinically led collaboration with ministerial support"* (Person E); and *"the national DOMHNs* [Directors of Mental Health Nurses] *group showcased great courage and leadership"* (Person F).

Such references to leadership focused specifically on nursing leadership, through the collective efforts of the Directors of Mental Health Nurses (DOMHNs) who lead the mental health nursing workforce in each of the 20 different DHBs.

The interviewee accounts revealed a timeline of the progress from the initial development of the potential for SPEC to its adoption (see Figure 2). This allowed the development of two subthemes within the leadership theme. The first sub-theme relates to the period leading up to 2009, when leadership was concentrated on the efforts within one specific district health board. This sub-theme is called 'Learning from the past'. The second sub-theme reflects collective action by the Directors of Mental Health Nursing across the country, as a combined effort and is called "Moving Forward". This occurred from 2016 to the present.

Figure 2

Progress from Development to Adoption of Safe Practice Effective Communication



Learning from the past

Initial efforts to develop a new de-escalation and aggression management training occurred in one DHB. A nursing leader who had arrived to work at Counties Manukau District Health Board (CMDHB) from the United Kingdom (UK), in 2005, had not experienced using seclusion in acute mental health service delivery. A personal desire to understand what could be done differently in the local context led the nursing leader to explore if there were alternatives to the existing aggression management training called 'Calming and Restraint' (C&R), that existed in CMDHB, to assist reduction of seclusion use. Additionally, there was a strong desire from this nursing leader to cease using any form of personal restraint that used pain compliance. The nursing leader recalled that there was a growing unease with the regular use of prone positioning, because, at this time, there were highly publicised cases in the UK with deaths related to prone positioning (Riley et al., 2006).

> *There was a lot of focus on taking people into seclusion and how you left them* [in seclusion] *and exited, there was a lot of focus on holds, which were all the*

> *traditional holds that everybody was using... and there was almost no focus on de-escalation of clients, or debriefing, or recognising the cycle of aggression or using any other approach. So, the staff were basically doing what they'd been trained to do, which was bring people to the floor, restrain them and take them to seclusion and seclude them for safety.* (Person C)

The nurse leader sought and obtained organisational support to review the use of restrictive practices. This review coincided with similar concerns occurring in the mental health sector about the use of restrictive practices. Te Pou was seeking to understand what international options could be delivered nationally to support reducing restrictive practices, such as seclusion and restraint. The exploration of these issues and potential solutions were presented in a number of documents published at the time (O'Hagan et al., 2008; Te Pou o Te Whakaaro Nui, 2008).

In 2006, Te Pou promoted and supported an international expert in this area, Kevin Ann Huckshorn, to visit Aotearoa New Zealand. Huckshorn is the author of the Six Core Strategies©(6CS) (Huckshorn, 2005b), which as identified earlier in the thesis, is an evidence-based multi-intervention approach that can be useful with reducing restrictive practices. The potential for the use of the 6CS resonated with the developmental work on which the DHB had already embarked; specifically, as highlighted in the quote below, the promotion of trauma-informed care principles, as one enabler of change.

> *They* [Te Pou] *also did a two-day workshop, which almost, well about 80% of the inpatient workforce attended, which was really giving people the foundations of trauma-informed care knowledge. And at the end of that, we had staff who kind of had their awareness raised. Some staff who had already done some work around trauma-informed care, we had a couple of senior nurses, they spent more time with them.* (Person C)

The 6CS endorses and advocates for the service user voice and participation at all levels to develop a deeper sense and meaning of the impact of restrictive practices, such as restraint/seclusion and liberty impacting legislation (Huckshorn, 2005a). This ideology resonated with the nurse leader spearheading the changes at CMDHB, who demonstrated leadership, by actively recruiting a consumer to be part of the training team:

> *We had specifically interviewed and recruited and selected, looking for somebody who had, obviously somebody who'd lived the experience, that was important. But we were also looking for somebody with a very specific skill set… so the person that*

> *we recruited,* [name]*, had training qualifications, had worked, kind of managing small teams, so understood how people behaved in the workplace.* [Name] *had a really good understanding of adult learning processes, and how change needs to happen over time, and we'd also recruited, looking for resilience. And this person, the first in a role like this for NZ, came with like, the full package. The person was tremendous. This person just became integral to what we did.* (Person C)

Furthermore, the nurse leader requested that the CMDHB nurse educators undertake a scoping exercise, looking for literature and evidence for alternate de-escalation and aggression management training options.

> *One of our nurse educators,* [name] *did literature searches, found a whole lot of evidence and eventually found a provider over in the UK, who was delivering training that seemed to be a lot more focused on what we were wanting, which was, far more consumer focused, far more preventative… like de-escalation and preventing seclusions, and also promoting pain free.* (Person L)

> *CMDHB, in collaboration with* [name] *DHB brought out the facilitators* [from the UK]*. I can't remember whether other DHBs were involved in that or not, but anyway, brought out the facilitators and they ran some trainings that we were part of. There was a real commitment by Counties at that time that actually they were going to buy into it. They wanted to bring the training in…they wanted to make sure that, that our staff, were being trained by people who understand, understood our people who were coming into services, rather than being delivered by people who had no understanding of the complexities that we were facing… so there was a massive investment in the development of the course to make it relevant to Counties and to make it client, consumer focused… eventually, that commitment led to every single member within our inpatient unit being trained in SPEC over a 2-month period.* (Person L)

By 2009, the development of SPEC was completed. This was developed by the CMDHB nurse educators as the above quote explains and was fully embedded in CMDHB and the training package was being shared with regional colleagues.

It was reported that in the early years of SPEC training at CMDHB, neighbouring DHBs attempted to replicate SPEC as the preferred training approach for de-escalation and aggression management. However, there was no formalised agreement to ensure change was embedded. It was described that this occurred out of the spirit of wanting to share innovative practices.

> *What happened with that is that* [name] *DHB had a lack of resources, so we went over to deliver train the trainer. So again, the same, we used exactly the same process which was insisting that* [name] *DHB came on board with a consumer educator, and we developed up a train the trainer programme for them with one of the other nurse educators and from there we pushed out train the trainer. So a train the trainer course was put together.* (Person J)

> *I think the culture was one of, if people want to share then share. If people want to learn these things and then decide for themselves, then come and learn...and so there was then a calendar which was more a regional training calendar, put together with our staff and* [name] *DHB staff and then other staff joining in* [name] *DHB staff eventually did come down and were trained as trainers as well. Yeah, so it kind of began to have a wee little life of its own. But not governed by anything.* (Person C)

Leadership was demonstrated in the efforts made towards expansion of the training regionally, highlighting the collaboration and willingness to share information in a context where resources were limited.

Moving forward

The above section reveals the gradual evolution from individual DHB to collective effort in developing regional SPEC training, which was crucial in the further development of SPEC. The National Directors of Mental Health Nursing were meeting several times a year. In these fora, there were opportunities to share practice improvements in each DHB. In these meetings, the advantages of SPEC and the drive for improvement and national consistency emerged, as Person B comments *"…having a national programme that minimised variation and promoted reduction in coercion was compelling".*

The interviewees all described aspects of leadership that recognised and progressed a good idea into a *national training programme*. It was highlighted that this was not the first time that efforts had been made to establish a national approach for de-escalation and aggression management training. Participants reported that around 1999 there had been an approach led by an influential nurse leader at a rural DHB, to promote a nationally consistent workforce training. *One of the DOMHNs* [Directors of Mental Health Nursing] *group had tried many years ago to get national consistency with the older style calming and restraint* (Person B). However, this was not progressed at this time.

Notably, not all members of the DOMHNs were in immediate agreement to use SPEC as the preferred option. Interviewees recalled the robust discussions regarding the whole country moving to one programme. As Person B recalled; "*There were two DOMHNs who were unsure about the benefits to SPEC and expressed reluctance to change".* It was recalled that the process of decision making was to take the scoping review that Te Pou had completed and consider which programme had the key elements that the nursing leaders wanted in a training programme. "*Using the benchmarking that* [name] *did for Te Pou was our decision and SPEC was the top measure"* (Person B).

The scoping review provided the DOMHNs with evidence of the range of different kinds of de-escalation and aggression management training, which included identifying the array of content and differing depth of information taught.

Once a preferred programme was agreed on, the mental health nursing leaders needed to be instrumental in influencing the implementation of SPEC in all their respective DHBs, to achieve one nationally endorsed programme. They needed to become champions within their own DHBs. The DOMHNs were meeting several times a year, and, in these fora, there were opportunities to share practice improvements in each DHB. It was in these meetings, that the advantages of SPEC and the drive for improvement and national consistency emerged. There were discussions with ministerial level colleagues about the possibility of a nationally consistent approach which was supported, as identified by Person B "*having the support of* [name of Ministry of Health official] *at the early stage was invaluable".*

The clinical nursing leaders of the time were in leadership roles and had to convince their individual DHB management teams of the reasons to change. Some had to develop fiscal evidence and business cases to create the change to SPEC training.

> *The nurse manager on our training unit demonstrated payback time of 3-5 years based on taking four days as against five days of our previous calming and restraint training.* (Person B)

The interviewees reflected on the need for courageous leadership conversations with DHB leadership teams, as well as bold conversations with education teams, who were going to be required to change from their existing programmes to SPEC. Embedding the training within their own DHB required supporting nursing leadership at all levels. Leadership was needed at all levels to bring about change, as the following quote reflects.

> *…leadership at both the frontline floor level, because this SPEC would not work without senior nurses on the floor reminding people about how to do it and what they should do and, addressing issues as they arise…* (Person F)

As well as driving changes in their own DHBs, the nurse leaders needed to be cognisant of the political environment interfacing with the desire to create a nationally endorsed training programme in de-escalation and aggression management. A confluence of factors occurred within a similar timeframe that supported the process of change and highlighted the leadership that was required. The Health Quality and Safety Commission and Te Pou o Te Whakaaro Nui (Te Pou) were working together to promote the elimination of seclusion and focusing on reducing restrictive practices.[8] Two of the interviewees who were members of the DOMHNS collective were invited to speak at a national quality improvement forum of the benefits of a nationally consistent de-escalation and aggression management training programme. Both interviewees indicated this action further supported the acceptance and implementation: *"Managers who attended that forum went back to their respective DHBs to check on their engagement with the process"* (Person B).

There was also the need to influence the Ministry of Health and interviewees recalled discussions with ministerial level colleagues about the possibility of a nationally consistent approach. There was general support in this regard, as it was perceived that a national approach to training would better facilitate national monitoring of the use of restrictive practices, as indicated by Person F: "*I am interested now in a national reporting scheme*".

This collective mental health nurse leadership for the development of SPEC became more formalised with the establishment of the National SPEC Governance Group SPEC in 2016. The group comprised of representatives from two of the national workforce centres, regional DOMHNs, lived -experience experts, Māori, a SPEC trainer, a general manager, Chief Advisor to Chief Nurses Office and the Director of Mental Health from the Ministry of Health.

Many DHBs were making the transition to SPEC and were doing so within their own budgets, as there was no additional resourcing. The national governance group set out an ambitious programme that promoted the concept that DHBs should share SPEC trainer resource, which had relied on a lot of good will as summarised by Person B, *"the change itself was done on a wing and prayer-with a lot of good will and flexibility".*

---

[8] https://www.hqsc.govt.nz/assets/Mental-Health-Addiction/Resources/Zero_seclusion_infographic_Mar_2018.pdf
Te Pou is a non-government organisation (NGO) funded to support the mental health and addiction workforce, therefore a key agency supporting workforce improvement initiatives.

Later, a business case was put to the Ministry of Health funders from the National SPEC Governance Group that then enabled Te Pou to support the implementation: *"some funding* [was made available] *for this, for a few years and that will run out and so we needed to be able to show the Ministry that this is having an impact, and what difference it's doing"* (Person E). However, this was one-off funding, and it did not extend to funded trainers. It remained the purview of DHBs to share the small pool of trainers.

The attributes of clinical leadership that led to the decision by the DOMHNs to adopt and introduce SPEC as a national training is strongly evident in the interview data. The origins of SPEC lay in the passion and leadership of a nurse leader in a single DHB, who leveraged the growing focus on reducing restrictive practice nationally. Building on the initiative of one DHB, the DOMHNs group reflected a strong commitment to a values-based approach to this change process. The DOMHNs knew that there was limited resource, so they needed to work collaboratively to be successful. The group understood the harms that the current practices were doing to service users and staff, and they used their collective expertise in local and national networks to build the momentum for change. The governance for this remained with the existing structure of the national DOMHNs until the creation of the national governance group. The National SPEC Governance Group drew on additional support and resources with the inclusion of other key stakeholder groups. Interviewees described that there was positive hope for a different future, a vision, which helped maintain motivation through the process of change. This shared vision of a better future is the second theme and is described below.

Vision

The interviewees described, in varying ways, a 'vision' for the future of mental health nursing practice, specifically in acute mental health response. They voiced common purpose, and that they wanted substantive change to support a preventative approach. They were also unified in their belief that the existing variations of training were contributing to unintentional harm. The vision was for a training programme that was safer and consistent, no matter where a person practised, and that the training promoted the concepts of 'prevention' that would in turn create a practice change. Furthermore, the vision included having a training approach that contributed to better outcomes for Māori. The following section uses relevant quotes from the interviews to present this theme along with subthemes of common purpose and practice change.

A common purpose: 'Safety for all'

Central to the shared vision, or common purpose, expressed by the participants was a shared desire to make practice safe and reduce the unintentional harm associated with the use of restrictive practices. For example, Person H stated: *"The emphasis is on safe practice, so that*

means that we do all that we can for the safety of our consumers and for the safety of our clinicians". Within the overarching concept of making the practice area safe, three elements were further identified as enablers to achieving a safer practice area, namely, 'Creating a safe environment', 'Supporting physical health and safety', and 'Supporting a safe transition'.

Creating a safe environment

First, there was reference to safety in a broad sense within the ward culture. This broad sense of safety involved creating a 'safe environment' for consumers; free from victimisation, free from loss of control and free from the harms experienced through engagement with mental health services.

According to the interviewees, a 'safe environment' involves a culture which maximises consumers' autonomy and minimises opportunities for the consumer to feel confronted or feel out of control. It is an environment which focuses less on 'rules'. The following quote described the benefits that SPEC offers of a greater tolerance of emotional and behavioural expression without moving to coercion: "*I think that the SPEC training encourages that too, a higher tolerance before a restrictive practice is used"* (Person I).

This emphasis on a 'safe environment' connects with the principles of trauma-informed care and is strongly related to the concept of prevention. A 'safe environment' helps to prevent an incident of aggression from occurring, supporting consumers to feel safe, and equipping staff to confidently use engagement and de-escalation skills. In this regard a 'safe environment' is about safety for everyone.

Supporting physical health and safety

The second area identified the need to ensure that when personal restraint was needed, that it was used with a specific focus on the immediate physical safety for people involved (i.e. that attention was always paid to the physical effects of the restraint). This related to the desire to move away from the historical practice where the use of restraint approaches that used wrist flexion to create compliance, which caused pain. In endorsing SPEC, the common purpose was to avoid such infliction: as Participant B outlined: *"no pain or flexion was used, it was a no brainer".*

All interviewees commented that the use of personal restraint should be taught as a practice of *last resort* (in line with legislation[9]) and used in the safest way possible for the least amount of

[9] Standards New Zealand (2008) NZS8134.2:2008 Health and Disability Services (restraint minimisation and safe practice) Standards.

time as possible. The participants in this phase of the research were experienced clinical leaders and conscious of the physical risks posed with use of personal restraint:

> *The huge variance across the country … showed the areas of risk and where pain compliance and the old control and restraint, or calming and restraint, was still very much in active use.* (Person D)

The techniques of personal restraint (in SPEC) were appealing to participants due to the move away from pain compliance. SPEC offered a viable alternative, as it promoted the safe use of personal restraint. Furthermore, as one interviewee commented, once SPEC started being taught, there were no longer injuries being sustained in the training programme; something that had been an issue in the past:

> *Ironically quite a number of staff injuries used to occur during restraint training, this has reduced to zero since introducing SPEC.* (Person K)

Other safety features that appealed to the participants included the avoidance of the use of prone positioning, and the associated risk of positional asphyxia. Furthermore, there was an explicit reference in the SPEC training to observe for the potential risk of positional asphyxia throughout the use of physical restraint. As Person D stated there is a *"strong emphasis on safety, with particular risk points, covering off identification of positional asphyxia"*.

Supporting a safe transition

The third aspect pertaining to safety in the shared vision of the nursing leaders related to the transition from the existing training to SPEC training. There were concerns expressed regarding the risk to safety when the total workforce was unlearning previous methods and learning the new SPEC approach. There was an expressed need to mitigate a 'mixed approach' for de-escalation and aggression management, which could compromise safety. Interviewee reflections highlighted that for those DHBs who were embarking on an entirely new training programme, the unlearning and relearning of new personal restraint holds was a massive undertaking.

> *The biggest part was the unlearning. You know, if you go in fresh and you've never done any physical techniques, you don't have to do any unlearning. Most of these people, throughout NZ, had to unlearn the old stuff.* (Person A)

The following quote was from an interviewee who had already transitioned their entire workforce to SPEC, which highlights the concerns regarding this issue.

> *We chose to train everyone in a one-year timeframe, we were worried that during the time there were different methods might result in confusion and patient harm, thankfully that never happened.* (Person B)

Practice change

The vision the leaders developed was values driven and involved a common purpose of creating safety for all. Achieving this common purpose required directing practice change, which the leaders perceived could be achieved through two key elements, which were 'Consistency in training' irrespective of locality, and 'A focus on prevention' in de-escalation and aggression management training and practice.

Consistency in training

The participant interviews highlighted that regardless of geographical location or service type it was important that consumers receive the same de-escalation and aggression management response. The interviewees were cognisant of the outcome of the scoping review document that Te Pou completed in 2014[10]. This document concluded that there were marked differences in the way that de-escalation and aggression management were being taught across Aotearoa New Zealand at that time. This realisation galvanised the vision of nurse leaders to bring about practice change centred on consistency in training.

> *I think a really key part was seeing how they (each DHB) individually stacked up nationally. Like, did they have consumer involvement in their training? No? Okay, well ,6 out of 20 DHBs do. So that's how you compare with the rest of the country. So that made some quite big shifts. Just that one page document was a big shift for* [named DHB] *They could see exactly how they lined up with everybody else, that was a, a game changer.* (Participant D)

There was consensus that the wide variations in training were unacceptable and the national DOMHNs meetings were the launch-pad for discussions about the nature of consistency in training. It was perceived that consistency in training, and the ability to compare against common standards would assist in monitoring of training and practice quality:

> *Being able to make it, almost auditable so that you would have consistent quality processes that sit round it…you know my hopes around some of that too was about the fidelity to the original thing.* (Participant I)

[10] Unpublished document by Te Pou o Te Whakaaro Nui referenced by DOMHNs and participants.

The push for a nationally consistent approach was also supported by the Ministry of Health who perceived that it would enable more consistent oversight and monitoring of best practice.

A focus on prevention

Another major focus in the vision for practice change, highlighted in the interviews, was the need to shift from reacting to distress and aggression with coercive practices to preventing escalation of distress and the use of coercion. Participants indicated that a consistent approach would allow a focus on prevention to be achieved nationally, where previously it had varied or was not apparent at all in the training. The following quote from Participant B highlights this focus on prevention: "*it was the quality of the training and the emphasis on de-escalation and avoiding conflict and coercion that really convinced the executive to move to SPEC"*. The nursing leaders turned to evidence and values- based approaches to training, as indicative of the desired practice change. It was believed that if such contemporary practices were taught, then restrictive practices would be prevented and this in turn would make the practice areas safer for everyone. The contemporary practices that would support a preventive approach were identified as; consumer participation in the training; emphasis on whanaungatanga; effective communication and de-escalation skills, trauma-informed care; and learning from post-event debriefing. The following will present some key principles for practice change, which focus on prevention and were highlighted in the interviews.

Consumer participation

One of the essential factors for the vision of practice was identified as the inclusion of consumer participation as a partner in the delivery of the training. This required a lived experience expert (consumer) to be involved as an equal partner in the training: *"…a co-led approach that has equal power and equal respect"* (Participant I). This partnership teaching approach meant that SPEC training attendees were privy to reflections delivered from the consumer trainers of the impact of practice on consumers. Person E further elaborated on the benefit of increased empathy for the lived experience perspective, as a motivator for change:

> *It's the right thing to do and it gives it a lot more power if consumers are involved and that helps nurses and others to understand and to see their perspective and walk in their shoes…and to be committed to doing away with* [use of personal restraint]. (Person E)

However, it was reported that there are diverse opinions about consumer involvement in de-escalation and aggression management training that, despite an emphasis on prevention, ultimately teaches clinical staff how to restrain a person. Two interviewees noted differing

opinions from national consumer groups regarding the consumer trainer participation and it was identified that the dilemma remains unresolved at the time of writing. This quote from Person D is an example of this, "*there is an ethical debate among consumer trainers about their involvement".*

The interview data identified that consumer trainers may have a personal experience of the use of restrictive practices that could influence their full participation. Given the possible experience of past trauma in this regard, support mechanisms need to be built in at every stage of involvement in the training. This is indicated in the following comment from Person I:

> *We have a responsibility to ensure we safeguard the integrity and mana of our consumer trainers and to ensure that they have provision for supervision. That they have provision for access, open door access, to any of the trainers so that they can have a debrief and talk about what's going on.*

There were other concerns raised regarding how consumers can be fully supported in their consumer role without losing the independence of their consumer voice. As Person G noted "*there is a risk for consumer educators that they can get colonised into their DHB".* In summary, interviewees outlined that the advantages of having consumer trainers are many, particularly in emphasising the importance of preventative practice. However, there are unresolved issues within the consumer network regarding preserving trainer safety and independence from the system.

Emphasis on whanaungatanga and engagement

The government of Aotearoa New Zealand has expressed a commitment to improving the health of Māori (Ministry of Health, 2020c), and the DOMHNs group recognised that a workforce training such as SPEC had a great opportunity to influence better outcomes for Māori. As one participant stated: *"we need to address the inequity for Māori better"* (Person A).

There was evidence, within SPEC, of a negotiated attempt to incorporate Māori values into the vision for practice change, including an emphasis on whanaungatanga as a prevention strategy. Whanaungatanga is a concept in Te Ao Māori that refers to a sense of family connection. Increasingly it refers to the efforts made to establish connection with a person. In a practice setting, this means time taken to talk through where you live, who your family are, and being interested in the other persons kinship.

> *It's being able to change one's thinking... it's all about relationships that's key with any project or anything that you do within the context of working with Māori*. (Person H)

Taking the time to make connections enhances a reciprocal relationship, by finding commonality of understanding that supports engagement. The participants highlighted that good engagement and knowing how to communicate authentically can prevent an escalation of distress, and therefore prevent the need to use of a restrictive practice. This focus on relationships was a key value in the collective vision for SPEC.

Effective communication and de-escalation skills

In developing the SPEC training a strong emphasis in the vision was placed on practice change which guaranteed effective communication, primarily in the context of teaching of de-escalation skills. As noted by Person B "*SPEC promoted de-escalation and communication strategies; it was a no-brainer to me"*.

One interviewee stressed: "*the heart of mental health nursing is communication"* (Person E) and that effective de-escalation depends on well- honed communication skills. However, it was not taken for granted that such skills were as comprehensive as they possibly could be amongst mental health nurses. Therefore, the further development of these skills to support de-escalation was included as a necessary component of the training. As Person F stated:

> *I think it gives a greater way of potentially engaging meaningfully with the people coming through the service and in many respects that should be the goal; increased engagement, increased listening, increased understanding of where the person's coming from, so you respond on their terms…*

This focus on communication was a precursor to position the centrality of de-escalation as the key preventative strategy in the practice change.

Trauma-informed care

Trauma-informed care (TIC) was also identified in the interview data as an essential factor to promote prevention and contribute to the vision of supporting changing practice. Person I commented: *"keep it human"*, as in, keep the focus on the person who is experiencing the event and stay focused on their needs, not on the needs of the ward, or rules that then mean the person's needs are somehow less important. Interviewees identified that the inclusion of TIC principles in SPEC was an attraction in the decision to adopt the training. It was expressed how important it was for staff to be fully aware of the high likelihood that service users may have

trauma in their personal history and there is a real need to avoid re-traumatisation through restrictive practices: "*Every time a restraint is avoided by the use of improved communication skills… is trauma-informed care in practice"* (Participant F). Participants also highlighted that staff wanted to find alternatives to using personal restraint as there is greater awareness of how negatively this can be perceived by service users: Participant H commented:

> *No one wants to personally restrain a person, and definitely don't want to personally restrain a person who has a background of trauma … no one wants to lay their hands on someone who has had a traumatised background, unless the ointment is applied to the maemae, to the scab, then well, it's just not going to go away.*

Learning from post event debriefing

The concept of post event debriefing was introduced by the interviewees in a common vision to work toward practice change. They described this as; the process that can occur *after* there has been an event of personal restraint. After an event, where a restrictive practice occurs, there is an opportunity to hear from the consumer about the event from their perspective. Learning from post event debriefing can be a very powerful way to learn from consumers about how to prevent further restrictive practices. Several interviewees reflected that SPEC should include a focus on post personal restraint debriefing, as the following quote indicates.

> *Gaining the patient perspective* [is very different to] *reading somebody's notes. You need to try putting that bias on…that's part of the reason I never read those incident reports. Because then, when I met the guy, I can see the fear… he was in the seclusion room.* (Person I)

Post event debriefing is a concept that is also supported in the literature and will be further explored in the final chapter on summary and recommendations.

Values driven vision

The creation of a shared vision for new training and practice change required a strong belief that change was possible. What sustained this common purpose was a set of underlying, mutual values. For example; *"It plays such a part in all of the reducing restrictive practices and sits so well with my personal values and how I like to practice".* (Person C)

A common purpose arising from shared values revealed itself as the SPEC evolved and was manifest in a great deal of pride for those involved, in terms of what had been achieved. This

sense of pride was a frequent revelation in the discussion by participants as indicted in the following interviews:

> *I think of all the things I've done as a nurse, since I trained, it's one of the things I'm most proud of… I was fortunate to be in a place where it kind of had fertile ground.* (Person C)

> *I personally feel proud of my involvement and participation in this national programme…I feel a bit pleased that I have left the workforce in a better place due to my involvement in this.* (Person B)

> *it's just such a phenomenal achievement by, you know, so many, so many people, and so many systems, departments, entities had to come together at a certain point to achieve that.* (Person I)

The mutual values and key principles, as identified above, helped to cement the common purpose, and supported the momentum for change.

Conclusion

This chapter describes the results from phase 2 of the research; an examination of how clinical leaders in Aotearoa New Zealand came to agree on one nationally consistent training approach. The themes of leadership and vision have been presented in this chapter and are diagrammatically presented in Figure 1 on page 72.

The reason SPEC was developed was due to a clinical leader (in one DHB), using their leadership skills; identifying a gap within the existing aggression management training (called Calming and Restraint); and supporting and enabling nurse educators to develop and establish SPEC. The advantages of using SPEC to promote reducing restrictive practices, was shared at a national nursing forum. In this forum, committed and courageous leadership was evident to bring about the adoption of SPEC as the consistent approach for the workforce nationally.

The second major theme related to the evolution of a shared vision for the future, within this leadership group. This vision was values based and stemmed from a common purpose to maintain and improve safety. This common purpose created a momentum for practice change. To bring this vision to realisation, all interviewees concurred that significant practice change was needed towards more contemporary practices. The thematic analysis identified two key areas to achieving practice change: consistency of training curricula and a focus on prevention.

In summary, the previous chapter identified the essential features necessary for SPEC to be up to date and evidence based. The findings in this chapter offer insights into what influenced the national clinical nursing leaders, along with ministerial level support, to commit their respective DHBs to introduce and implement a common national training programme. The following chapter presents findings from phase 3 of the study; specifically, an in-depth review of how one DHB moved from their existing approach to implement the SPEC training and related practice change.

Chapter 6: One District Health Board's Experience of Implementing SPEC

> *What I'm hearing back from people coming and talking* [about SPEC]*, you know I'd say who's used SPEC and these hands would go up I'm thinking "that many?"* [They reply] *"I've done like 6 or 7 de-escalations in the last week" so* ***people are accepting that SPEC is de-escalation (it's not just restraint)*** *and are really proud of themselves and they tell me stories about how I talked this person down. It took me an hour. I'm like, good for you that's exactly what we should be doing.* (Person 3C)

Introduction

The preceding chapters presented findings for the first two of three phases in this research. Chapter 4 identified how SPEC aligns to current evidence by comparing it with recent literature. Chapter 5 presented the factors that influenced clinical nursing leaders with adopting SPEC as a nationally consistent de-escalation and aggression management training programme. This chapter captures findings from the third phase of the research and provides insights drawn from a detailed review of one DHB's experience of implementing SPEC.

For this phase of the research, as described in the study design, the DHB was selected based on feedback provided in phase 2 of the research. This specific DHB was mentioned by many interviewees for several reasons. It was chronologically early in its decision to adopt SPEC; it transitioned its clinical workforce from its previous program of aggression management training to SPEC within a defined and discrete timeframe; and has a wide-ranging service delivery model that includes child and adult mental health, addictions, forensic mental health, and intellectual disability services across a geographically widespread, urban community.

The methodology and methods used for this part of the thesis are detailed in Chapter 3. Three semi-structured interviews with purposeful sampling of participants were undertaken and the questions used in the interviews were designed to elicit pertinent considerations for implementation. Thematic analysis was used following review and re-review of the transcriptions (Braun et al., 2017). This analysis revealed consistent themes related to barriers and enablers that were experienced during the implementation. These are explored and presented in this chapter, using a framework from the field of implementation science, as a way to structure the themes arising from the interviews. Relevant quotations are used to evidence findings and the quotations are presented using anonymised reference to Person 3A, Person 3B and Person 3C (a more detailed description of these participants is included in Chapter 3.

As mentioned above, this is a large urban DHB and they trained their entire staff, of approximately 800, in SPEC across an eighteen-month timeframe[11]. They did this using a detailed scheduling process and negotiation with the clinical leadership. They also secured agreement from the senior leadership team that SPEC training would take precedence, this was so that they could get all the clinical staff proficient with SPEC in the least amount of time possible. This was to avoid having two types of de-escalation and aggression management training in play at the same time. The scheduling process was designed to maximise attendance and completion within an eighteen-month time period. Each person received a single four-day block of SPEC training delivered in groups of approximately 18 people, and this was delivered as an 'in person' training. The training occurred for three consecutive weeks with one week off across 18 months. One key DHB trainer facilitated all of the trainings in this time, supported by clinical trainers and overseen by the national SPEC master trainer[12].

Implementation science framework

As I began this part of the research, I was curious to discover if elements of implementation science methodology were used during this DHB's implementation of SPEC. Implementation science is the scientific study of methods used to promote the systematic uptake of evidence-based practices and improve the quality and effectiveness of health services (Nilsen, 2015; Proctor et al., 2009).

This chapter presents the findings using the Consolidated Framework for Implementation Research (CFIR) (Damschroder et al., 2009; Higgins et al., 2020). This framework is useful, as it provides consistent definitions and terminology that enables implementation to be more easily described and understood. The framework is used as a helpful way to present the enablers and barriers to implementation identified through the thematic analysis.

The CFIR framework consists of five domains:

1. Outer setting. This entails the wider social, political, and economic context in which the organisation is embedded.

2. Inner setting. This involves the structural and cultural characteristics of the organisation/service where the change is implemented. This domain includes the readiness of the service to receive the practice change.

[11] Confirmed by document review.
[12] Master trainer as defined by the National SPEC Governance Group.

3. SPEC (as the Intervention) characteristics. This considers the stakeholders' views about the quality of the evidence about the intervention.

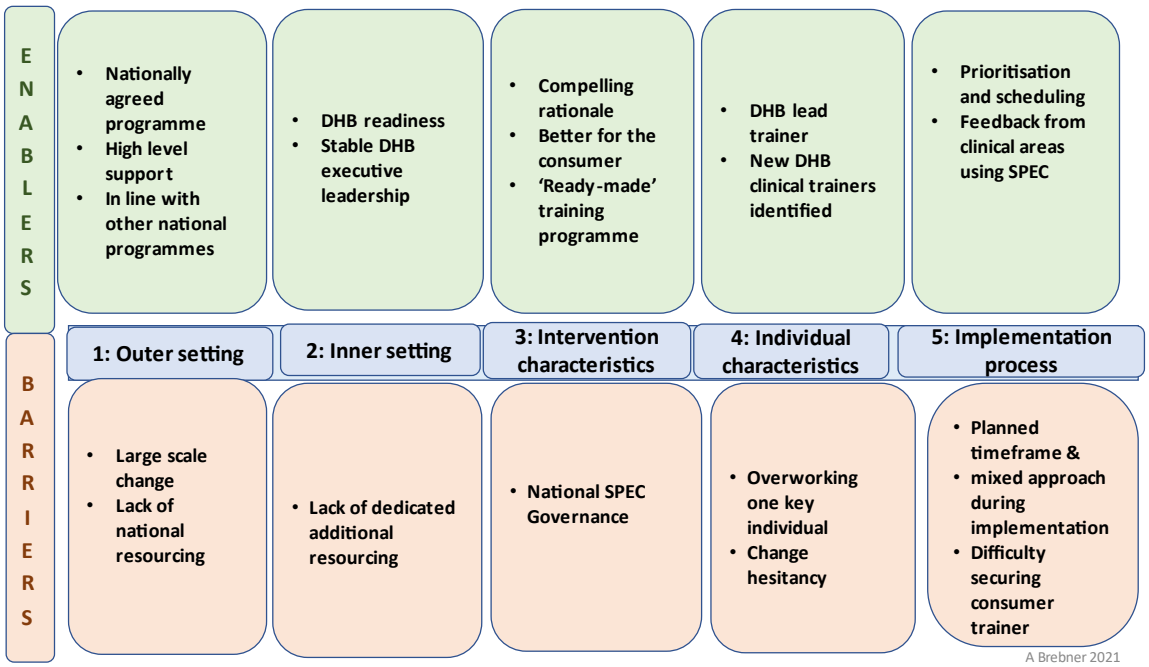
4. Individual characteristics. This refers to the ability of the individuals within the DHB to implement the change.

5. Implementation process. This attempts to determine the planning and execution of the implementation process.

Figure 3 presents the findings as enablers and barriers of implementation using the CFIR framework (Damschroder et al., 2009; Higgins et al., 2020). The text that follows this diagram will present the findings with more detail and supporting quotes.

Figure 3

Enablers and Barriers Drawn from the Interviews and Presented Using the CFIR Framework



Results

Domain 1: Outer setting

The outer setting focusses on the wider background issues and context within which the DHB is situated. The interview data highlighted how both enablers and barriers to implementation were located within this outer setting.

Enablers

The key enablers in this wider context were that SPEC was a nationally agreed programme and that it was being led by nursing clinical leaders; that there was interest and support from high level national agencies such as the Ministry of Health; and that the SPEC training program was aligned to and in synchronicity with national quality improvement programmes focused on reducing restrictive interventions.

SPEC was nationally agreed

The mandate to change to SPEC was led and promoted by national nursing leaders. This made sense to the interviewees, as most of the workforce who needed to be trained in SPEC were nurses (or support staff, who work under the direction and delegation of nurses). Having the backing and support of the national professional leaders for mental health nursing added credibility and mandate for this change. There was a 'good fit' and 'credibility' factor that was described. Person 3A commented:

> [There was] *agreement from the key people who were responsible in the main standards of practice around restraint minimisation and communication in the frontline, which was the directors of nursing.*

High level support and interest

There was interest and support from national agencies such as the Ministry of Health, HQSC and Te Pou o te Whakaaro Nui (Te Pou)[13]. It was believed that this interest also added further credibility and supported the implementation. The following quote illustrates the context.

> *…it had agreement from directors of nursing…and the Ministry of Health backing as well and Te Pou and consumers. So basically, there was a compelling argument that we were to implement this nationally and that had been agreed…I think we were fortunate that we had the Ministry of Health and Te Pou as two key national affirmations … I think that's a critical piece.* (Person 3A)

The above quote highlights the importance of the shared vision and united leadership nationally, which was presented in the preceding chapter.

[13] Health Quality Safety Commission – The Commission has a project specifically focused on eliminating seclusion in New Zealand, Zero seclusion: Safety and dignity for all | Aukatia te noho punanga: Noho haumanu, tū rangatira mō te tokomaha.
https://www.tepou.co.nz/initiatives/reducing-seclusion-and-restraint

National programmes for reducing restrictive practices

The interviewees identified that SPEC training was considered complementary to other national campaigns such as the HQSC Zero Seclusion 2020 and the Reducing Restrictive Interventions programme of work from Te Pou.

> *The work that Te Pou had been doing, had been going since about 2008, so you know, there was a lot of discussion around least restrictive care and all that stuff and the seclusion minimisation. All of that work was happening in the background too, so you know there was a bit of a lead up.* (Person 3A)

These other national programmes had initiated a process of culture change in the wider sector, which made the use of restrictive practices less acceptable and the introduction of new ways of working, such as SPEC, more desirable. This influencing factor strongly correlates with the DHB readiness for change outlined in domain 2 (Inner setting).

Barriers

Barriers in the wider socio-political context were also identified from the interview findings. The introduction of SPEC training was a large-scale practice change with 19 other DHB leadership groups making the change at roughly the same time. However, there was no national resourcing for the implementation.

Large scale change

The scale of the change across the country was identified as a barrier as it created bottlenecks by reducing access to experienced trainers. The identified 'experts' in the field of teaching SPEC were located within one DHB and therefore access to practical supervisory and teaching support was delayed, as other DHBs were also implementing the training. This placed a lot of demand on a few key people, as Person 3B highlights "[Name] *did a lot of helping the smaller DHBs who haven't got a trainer … but that's down to* [name's] *energy and resource and willingness to do that".*

No national resourcing

It was identified that there was no resourcing or funding from central government or national governance for the transition from existent training to SPEC. Therefore, the implementation process needed to be fiscally cost neutral, as the following quote highlights:

> *The Board agreed that we could go ahead with it, provided it was cost neutral. Which you know, we have anywhere between 650 and 800 people at any given time, that need access to restraint training.* (Person 3B)

Superficially, fully exchanging one training for another could look like a fiscally neutral process. However, that was not the case, as SPEC is a four-day initial training and the clinical staff who were trained in the previous training were required to do annual updates, which was for two days. In practice, what this meant was that for this DHB, there were approximately 800 frontline staff that required the four-day initial training resulting in all other workforce training, for the eighteen-month implementation time, being deferred. This had resourcing impacts that included room bookings, delays to other mandatory trainings, and dedicated trainer reallocation to be able to implement SPEC.

> [We] *hit the ground running with training. So had to adjust things like booking out our room you know we, it's a multipurpose room it's mostly for SPEC, but we use it for* [a] *million other things. So, the bookings for that year just went through the roof we were about 98%* [usage of the room for SPEC] *for the whole year.* (Person 3B)

This practice change occurred despite lack of additional dedicated resourcing. Training approximately 800 people in 18 months was a significant undertaking requiring detailed attention to scheduling, training room allocation, trainers, release time for clinicians to attend and backfill resourcing. This occurred within the limitations of current funding within the DHB and with the leaders of clinical areas in support of this process.

Domain 2: Inner setting

The inner setting relates to the internal structural and cultural characteristics of the DHB. In this domain two key enablers and two barriers to implementation were highlighted in the interviews.

Enablers

The two key enablers identified were the DHB's readiness for change, including their desire to be early adopters, and the presence of a consistent leadership team.

DHB readiness for change

The DHB leadership recognised the opportunity for SPEC to complement other national programmes of work regarding reducing restrictive interventions. The opportunity to positively improve outcomes for consumers was seen as hugely important and was a strong driver of the DHB wanting to be early adopters. The importance of the change was captured in a quote from Participant 3A "[This is] *the most significant practice change in 20 years of clinical practice".* and

"We wanted to change practice… there was so much aggression and violence happening… that was impacting on recruitment and retention".

As previously described the national mental health landscape was focused on reducing restrictive practices and the DHB recognised that the time was right to embark on a change process that would support the wider system changes as the following quote emphasises.

> *I think you can't underestimate the work that Te Pou had done around enculturating change because I think, I think the sector was ready for that too – so people were ready.* (Person 3A)

In addition to the having an organisational culture that was ready for change, the DHB leadership were using data to help divisional clinical leaders understand the benefits of SPEC, and to help illustrate the need to adopt SPEC early, as the following quote illustrates;

> *…we were at the highest level bringing in the leadership and consumer advisors and some direct staff from units, individually meeting monthly to go through the overall trends and stats and then taking it back to their areas to actually say, this is us…* (Person 3A)

Adopting the features that are associated with supporting change such as using data to illustrate change, leadership and workforce development are features embedded in the 6CSs[14], which was a familiar process Te Pou[15] had previously promoted for many years to the wider mental health sector, to address reducing restrictive practices.

Stable leadership

A change programme of this magnitude required strong organisational leadership. The interviewees reflected that the senior leadership across the DHB had been established for some time. This stability of leadership indicated that a high trust environment ensued, which was a significant enabler. As Person 3A stated:

> *The leadership was stable. …It's the same as the six core strategies…show that leadership from above, so I had that support, absolute support … I had the highest-level support… and then I had the medical director's support as well. You know, so as a triumvirate. There was no question.* (Person 3A)

[14] Six Core Strategies.
[15] https://www.tepou.co.nz/initiatives/reducing-seclusion-and-restraint/the-six-core-strategies-service-review-tool

The stability of leadership meant that there wasn't a need to keep readdressing the rationale for change with multiple audiences. Once key leaders had approved the change to SPEC, this did not need to be revisited.

> *The professional leader for nursing was stable so that was* [name's] *position. The trainer was stable. The manager of the learning and development was stable, the general manager hadn't changed, the Chief Medical Officer hadn't changed, so we had all of the executive team behind it and no changes in position for that period of two years, which was incredibly helpful.* (Person 3A)

The findings demonstrated the importance of leadership at all levels, and notably stable leadership that was able to maintain momentum and hold the common vision for introducing SPEC.

Barriers

The key structural barrier was the lack of dedicated additional divisional resourcing to support this implementation. There were two key parts to this barrier; lack of resourcing for the teaching of SPEC and lack of additional backfill resourcing for the clinical area to support clinical staff to attend the training.

Lack of additional organisational resources to support SPEC

In addition to a lack of resource provision at a national level, the absence of training resources and a dedicated budget for SPEC training within the education team in the DHB was also identified as a barrier.

> *We didn't get a lump of funding from anywhere to say 'here do this' or 'here's some promo about SPEC', so we put together a lot of that ourselves and put together flyers etc.* (Person 3B)

The resourcing challenge was not only in how to resource the actual training programme but included how operational managers would backfill the clinical areas while staff attended a four-day training event. This is indicated in the following quote:

> *Nobody had talked to the operations managers about the fact that their staff have to retrain in a four-day programme, which means they've got to be backfilled while they're doing it. You know, so there were huge financial implications for the organisation.* (Person 3B)

The interviews elicited that a lot of work went into trying to make sure that the costs associated with the commitment to SPEC were able to be managed. It was noted by one interviewee that this had fiscal impact on one area of the divisional budget.

> *The cost projections weren't quite as dire as we first thought from the learning and development perspective, but they were still substantial, so the budget was completely out for that year.* (Person 3C)

Although there was no additional resourcing, there was evidence that the trainers and managers achieved attendance at the SPEC training, doing the best with what they had and being flexible with how they manoeuvred rosters for attendance and reallocated educational resource to support the implementation of SPEC.

Domain 3: Intervention (SPEC) characteristics

This domain describes characteristics of an intervention that influence implementation. In this case, the intervention is the SPEC training and refers specifically to principles within SPEC, which were either considered implementation enablers or barriers. These are presented below.

Enablers

The key intervention enablers include; the presence of a compelling rationale that SPEC would reduce intended harms from occurring, the understanding that SPEC is better for consumers and that the SPEC training came 'readymade' (it came as a pre-prepared teaching package).

Compelling rationale – Reducing unintended harms

It was revealed that SPEC had a compelling rationale. SPEC was considered as one way to promote practice change, as it promoted a preventative approach and taught alternatives to the existent personal restraint methods of using wrist flexion and prone positioning. The following quotes illustrate the compelling rationale.

> *This was the most significant practice change, in the last 20 years. So that, so the way I was looking at it, was that it was so significant, that if we didn't get on board with it, we were losing an opportunity to change practice right across the board. So that's what, drove my motivation to get it.* (Person 3A)

> *…inflicting the pain moves actually makes consumers worse and, threatens the therapeutic relationship more than any other thing… I've been wanting better stuff for 20 years and striving for excellence.* (Person 3A)

Reducing the unintended harms that were occurring was seen a strong attractant and a key part of the compelling rationale and also reflects the results from phase 2 in the preceding chapter.

SPEC is better for consumers

There was accord in the interviews that SPEC strongly emphasised principles of engagement and de-escalation and these principles promote least restrictive practices, and this was going to be better for the consumers.

> *Because the quality and safety part can't be argued. You know, if we are providing a better quality of outcomes for service users and we had safety for them plus staff, isn't that a win-win?...I'm sure that everybody would say that it was balancing that tension between the financials, it's a significant investment. But if you look at the downstream effect of that with the use of less restraint, the use of less seclusion, less complaints having to be managed through Health and Disability Commission, the less reportable events related to harm or unsatisfied people.* (Person 3A)

Reducing unintentional harms is reflected in this quote, moreover the use of a programme that reduces the unintentional harms makes it safer for everyone.

A ready-made training programme

The four-day training package was already developed and used in other DHBs. This training package included associated videos and participant workbook as the following quote reveals "*we could use the established SPEC training package*" (Person 3B). However, the training package was not able to be viewed in advance of teaching it, which is explained below as a barrier.

Momentum for change was maintained due to a desire to progress a training programme that did not inadvertently create harms and that the training was ultimately better for the consumer. The implementation was made easier as the training content and package was already developed and could be implemented with no additional delay.

Barriers

There was one key barrier identified for this domain. The barrier has two main parts but related to the governance of SPEC; how the national programme would be governed and the of lack of detailed information about SPEC in advance of implementation.

SPEC national governance

The national approach for implementation was being led out by the National SPEC Governance Group. The National SPEC Governance Group had set out an identified process for a DHB to implement SPEC, and this included a train the trainer pathway to ensure that the DHB clinical trainers received the requisite support and training. However, the master trainer pathway was perceived as being quite stringent in its expectations and required the presence of a master trainer at critical points to ensure fidelity to the training and to support attainment of capability with teaching SPEC. At the time that this DHB was implementing SPEC, there was only one identified master trainer (across the country), and this individual was also needed in many other DHBs. This led to some frustrations and bottlenecks. At this point in time the pathway to becoming a master trainer was still in development and this was commented on by one of the interviewees; "*...the pathway to master trainer was really messy and the goal posts kept shifting and it didn't seem like there were clear determinations about the pathway"* (Person 3B).

Moreover, this process involved goodwill and required strong collegial intra-DHB relationships. At the time that this DHB was undergoing this implementation process, other DHBs were also requiring support from the limited national expertise with SPEC facilitation. All interviewees in this part of the research commented that there was an over-reliance on this goodwill.

The interviewees identified that the paucity of detailed information about the SPEC programme in advance of implementation, was a barrier. This was also an aspect of the implementation that was a principle set out by the national governance group and related to a desire to ensure fidelity to the original SPEC training, which wasn't available in advance of implementation.

> *We were wanting to see the full curriculum and, and all the details around the programme before we were committed totally to it... the programme wasn't available publicly. It was only available to people who were training it and also to participants.* (Person 3A)

Not being able to review training content in advance was perceived as a barrier as the following quote illustrates;

> *Very difficult to be clear about something where you know very little about it and that's kind of what we found all along was we hadn't seen it and yet we were having to present and sell it to people.* (Person 3C)

SPEC was a new programme and national expertise was limited and focused in one DHB primarily. This and the centralised governance meant delays of both information and access to

training support. This barrier was overcome with the use of goodwill and the existence of strong intra-DHB relationships.

Domain 4: Individual characteristics

This domain relates to the characteristics of the people involved in the change process, the enablers and barriers for this domain are presented below.

Enablers

The interviewees concurred that there were two key enablers that were essential for successful implementation; the presence of a DHB lead trainer who had the ability to champion the change, and the growth of a cohort of local clinical trainers who demonstrated the right values and attitudes to be able to counter the resistance to change.

DHB lead trainer characteristics

This DHB had an individual already in an educator role whom the leadership had confidence to be able to be the DHB lead trainer and who had the requisite organisational skills to be able to coordinate and fully implement SPEC. As stated by Person *3A; "I put my total trust in* [name] *to do the delivery".*

It was recognised by the team that implementing a change of this scale within this timeframe would require a specific skillset. The interviewees agreed that they had that person in situ already, who demonstrated the characteristics that would be needed to support that individual in the role of lead trainer. The following quote further reinforces this;

> *The trainer, their personality, passion and commitment was a critical success factor…their commitment was the biggest enabler. If I didn't have a person who was so single minded and passionate, the whole thing would have fallen over…*[name] *was just a natural, we didn't have to create* [name], [name] *was the right person in the position at the right time.* (Person 3B)

This individual as lead trainer offered consistency of approach and an ability to challenge when change hesitancy was demonstrated.

> [name] *also quite rightly wanted to be there through all of the programmes with all of the instructors, just to make sure that they had got it and weren't being subversive.* [name] *would have done lots of on the ground communication and connecting in with people.* (Person 3B)

The personal characteristics, in additional to adult educational skills, that were identified as enabling success included attention to detail, being highly organised, having credibility with the attendees of the course, able to tolerate resistance, believing in the end goal, having commitment and being a person with a high level of integrity and trustworthiness to get the job done.

Clinical SPEC trainers

Creating a new tranche of DHB trainers, who would be champions of change, was considered an enabler to successful implementation. The interviewees highlighted that it was necessary to recruit trainers, who reflected the values and attitudes consistent with SPEC. The DHB completed an expression of interest process to establish a new cohort of trainers who believed in and wanted to promote SPEC. The following quote from Person 3A.

> *We went through a process of selection of new trainers. We put a process together for brand new trainers or existing trainers who wanted to move to SPEC. Some people dropped off. They just didn't want to train SPEC.*

The personal characteristics, as identified above, of the lead trainer was a key enabler for this domain. This leadership was combined with the development of clinical champions who were the clinical SPEC trainers. They had the values and attitudes consistent with the SPEC principles and were described as essential features for success.

Barriers

As noted above a key enabler for implementation was the unique personal characteristics of the lead trainer, but the over-reliance on this individual was also conversely considered a potential barrier as noted below. The second barrier noted in this domain relates to 'some' of the frontline workforce presenting with behaviours of change hesitancy.

Overworking one key lead trainer in the DHB

In this domain, the risk of having an over-reliance on this one individual was raised. There was evidence that this one lead trainer was present for all the DHB trainings. Moreover, this person also had the responsibility for ensuring the clinical trainers were fully supported. The following comment from Person 3B highlights the concern of overworking the key lead trainer.

> *When you talk about the success of the programme,* [name] *passion is critical. I was worried about* [name] *burning out, so I tried to make sure that* [name] *took time off and had breaks when able.*

The DHB were actively supporting this person to be able to focus on SPEC solely and were aware of the need for this person to take breaks when it was possible to do so. The leadership indicated that they checked in on this workload regularly, to try to avoid overload.

Change hesitancy

The years of training in personal restraint, that had included teaching the use of wrist flexion and prone positioning, had been firmly embedded as routine practice at this DHB for a very long time. It was estimated by one participant to have been for as long as 20 years. These embedded practices proved to be challenging to shift and as Person 3B indicates, there were staff that worked against the change: "*There were these forces of insurrection going on at the same time".*

It was identified by one of the interviewees that whilst the DHBs previous training was 'like SPEC' with regards to de-escalation and communication as part of the training, the personal restraint 'holds' taught the use of a flexed wrist: "*…they still taught them with the flexed wrist, but they had long moved away from the more harmful things like deliberately flexing it"* (Person 3B). In the following comment, Person 3C describes how they responded to some of the challenges during SPEC training sessions.

> *I used to get really quite upset about people not buying into it and now I'm like I say at the beginning of courses (that I think are going to be tough), we're not going to tell you what you should think about SPEC. You are an adult who can make your own mind up and I get that change is hard... you're going to have to be accountable for your practice and one of the other things is…how do you know it doesn't work, if you refuse to use it.*

Addressing change hesitancy from the onset of the implementation was important, as it helped to surface the tensions about moving to SPEC, and then reflecting to the attendees of the session about their professional accountabilities to use the least restrictive approach possible, in addition to drawing on the notion of trying it before judging it. Successful implementation relied on having the right people leading and championing the change. In this instance, the dependence on one person, who was also the key DHB lead trainer and champion of the change, was noted as a potential risk to successful implementation and was supported as much as possible by leadership to try to mitigate this risk.

Domain 5: Implementation process

As noted previously, this DHB embarked on an implementation process that required a detailed scheduling process to train approximately 800 clinical staff in a training that consisted of four

consecutive days training for three weeks, then one week off, across an eighteen-month time. This domain refers to the key enablers and barriers in this process.

Enablers

The ability for this DHB to implement a scheduling and prioritisation process was identified as a primary enabler. The additional enabler presented in the interview data was the utilisation of early feedback from clinical areas that helped to counter the change hesitancy.

Prioritised and targeted implementation process

Leadership was required to support the prioritisation of the SPEC programme over other training needs for an 18-month period. The DHB leaders ensured that there was a sustained commitment to implementation process and reallocated existing resources accordingly. For example, they advocated for the release of the educator/trainer from other training activities to focus solely on implementing SPEC. This was not always easy as Person 3A stated: *"There was some difficult staff meetings and union meetings",* but eventually they were able to bring relevant stakeholders on board.

Prioritisation was needed to decide which of the many clinical areas to focus on first: "*We staggered it through one or two units to start with…and we targeted an area of high use first too…that was* [name] *ward"* (Person 3A). This commitment to the process and using a targeted roll out process of training across the organisation allowed the successful implementation of SPEC, using the resources available.

Feedback from the clinical area on use of SPEC

One of the interviewees recalled that there was feedback from a team /clinical manager that helped to counter hesitancy from staff. Reportedly, this team had responded positively to the training with a bonus of improving team morale, as this following quote from Person 3C illustrates:

> *When all of the staff had been through that training the team leader emailed to say, just wanted to say this is fantastic, great response people are really positive about it. Their number of incidents went down markedly, but the damage to property went up… but you know rather damage property than people and it did something about their teamliness* [sic] *and talking to each other better.*

The interviewees recalled positive feedback early in the implementation, which helped to address clinicians' hesitancy as part of the change process. However, there was evidence of

embedded negative views from the clinical staff who were trained in SPEC, as the following quote indicates.

> *Some staff didn't buy in you know, some staff will never give up C&R and their ability to apply pressure to cause pain, and others were like 'I love this, this has given me permission not to restrain people, it's given me permission to take time to talk'.* (Person 3B)

This DHB was able to schedule and train their clinical workforce in SPEC in defined time and this was due to good organisational processes that included scheduling and thoughtful consideration of which areas to train first. A noted effect from training 'teams' together was the improvement in team morale, which was identified as a bonus. Addressing clinicians' hesitancy with early feedback from other clinical areas, with examples of how it was positively influencing practice change, was considered an enabler for change.

Barriers

The barriers in this domain relate to what impeded the implementation from the DHB perspective. These included that the timeframe was ambitious, the concerns that during the implementation time there would be the presence of both SPEC de-escalation approach and the existing training approach in the same clinical areas, and the difficulty with securing a consumer trainer.

Timeframe and the risk of a mixed approach to de-escalation during implementation

The interviewees reflected on the 18-month timeframe for implementation. It was acknowledged that this was chosen, as it was the minimum length of time that was required to train the totality of the inpatient workforce in a four-day training. "…[the training] *would run three four-day courses and then have a week off, three more four-day courses and then have a week off"* (Person 3B). The interviewees concurred that they were concerned about having a mixed approach in their clinical areas.

> *…we were talking about the fact that, when the* [adverse] *situations happen and you've got a mixed model, you will inevitably revert to what you're most comfortable with…and there'll be some people who are you know in between.* (Person 3A)

It was expressed that for as long as there was a mixed approach with de-escalation and aggression management, that there would be risks (some staff would response using SPEC, and

some would respond with the existent training). The interviewees all preferred to reduce that risk as much as possible. Hence the ambitious planned timeframe for implementation.

> *We needed to consider … we've got this increasing number of people on the units who are doing SPEC and a decreasing number of people on the units who are doing C&R. How do we make sure that we minimise the amount of time that each unit has two different types of restraint? People trained in two different types of restraint?* (Person 3B)

The sense of urgency and concern for this risk was real and worrisome for the educator/trainer and for leadership. It was explained that the risk diminished as the numbers of people trained in SPEC grew. The following comment highlights this

> *… the risk was that when we started training staff in a new unit the risk was higher, but when we got to the end of it the risk wasn't so bad, so it kind of varied a wee bit from time to time.* (Person 3C)

Consumer trainer

Establishing a consistent consumer trainer was challenging. All interviewees explained that there were organisational issues that were contributing to this. It was described that these organisational barriers included differing opinions from other consumer leaders about whether consumers should be included as trainers in SPEC.

> [the consumer trainer] *had huge opposition from others in the consumer team. They had quite a standoff about it…*[name] *has said to them it's up to you what you choose to do and it's your business why, but my belief is that we can only make change from within the system.* (Person 3C)

However, it was explained that a consumer consultant employed within the DHB enquired about the course, subsequently attended the training, and thereafter asked to join the SPEC training team. The interviewees concurred that this experiential process for this consumer consultant helped to overcome the barrier with securing a consumer trainer.

> [Name] *came and asked to do the SPEC course … and commented "I don't want to do the physical stuff because of my own you know trauma". So we talked about it and talked about how* [name] *might do it in a way that feels safe, because the training says you should let people know that there's sometimes an emotional toll and if people need to step out then they need to step out. If they need to walk away and finish it on a later course, they can do that. So* [name] *did the first two days and*

> *said 'look I just love this message', which spurred* [name] *on to come back for the second two days...*[name] *loved that as well and said you know, this is what we need to be moving to.* (Person 3B)

The implementation timeframe was decided on to try to mitigate for the length of time a 'mixed' approach might be occurring in practice. This was a real concern for the leadership and for the key trainer who was charged with the change implementation process. Using targeted prioritisation in the scheduling helped to ensure that specific clinical areas were trained first. Not only did this address the risk of a mixed approach but was also able to demonstrate and showcase the reason for change. The challenge with securing the consumer trainer was identified as a barrier and the wider political context was referenced as contributing to the delays with this. However, the experiential process when an interested lived experience expert attended the training, was the deciding factor to securing consumer involvement.

Conclusion

The purpose of this part of the research was to establish if learning could be gleaned from taking an intensive look into one DHB's experience of implementing SPEC. This large urban DHB transitioned their entire mental health, addictions, forensic mental health and intellectual disability frontline clinical workforce from its previous aggression management training to be SPEC trained in an 18-month timeframe. The data from the semi-structured interviews were rich with insights from this implementation process and after careful reflection and review, it was apparent that the experiences and information from the interviews needed to be presented in a logical and systematic way.

An implementation science framework (the CFIR framework; Damschroder et al., 2009) has been used to present the findings for this phase of the research. This framework offers one way to be able to see what helped (enablers of) and what hindered (barriers to) the implementation process. These were then grouped into five domains and this chapter presented the results using these domains of the implementation process. The following and final chapter will draw together the findings from the three phases of this thesis and will present the research implications, make recommendations, offer considerations for further research, and discuss the limitations of this study.

Chapter 7: Discussion

Introduction

The initial aim of this research was to create an understanding of the unique development of a national approach to staff training for de-escalation and aggression management in acute mental health and addiction services in Aotearoa New Zealand. To achieve this, three phases of research were completed: (1) an examination of the current training content of SPEC compared to international and national evidence for a training that supports de-escalation and improved skills for the management of behaviours of aggression; (2) a description of how a decision was made to endorse the same de-escalation and an aggression management workforce training programme across mental health and addiction services nationally; and (3) an in-depth review of how one DHB moved from their existing approach to the agreed national training (SPEC).

This chapter presents a synthesis of the results from each study phase, offers implications for practice improvements, and presents considerations for further research. In addition to the immediate findings from each study phase, the synthesis and analysis across all three areas identified the relevance of safety, clinical nursing leadership, and vision as important elements that effected a change. Finally, this chapter concludes with the strengths and limitations of this research, personal reflections, and how these findings will be disseminated.

SPEC training: Strengths and potential improvements

As described above, phase 1 examined the current training content of SPEC compared to international evidence for training that supports de-escalation and improved skills for the management of behaviours of aggression. This part of the study offered new knowledge to the practice area and identified that the content of SPEC is largely evidence-based. The literature identified 18 elements essential for de-escalation and aggression management training for acute mental health staff in Aotearoa New Zealand. A rubric was developed for the analysis of the current SPEC curricula. This is detailed in Chapter 3 as there was no pre-existing rubric or analysis that suited this purpose. Chapter 4 detailed the 18 elements and their alignment with the SPEC curriculum. There were 11 elements that were deemed as strongly evidenced in SPEC, two elements were deemed as adequately evidenced, and five elements were evidenced as weak.

The areas of strength that were revealed from the analysis were that SPEC promotes the inclusion of lived experience/consumer participation in the role of trainer and that SPEC teaches a prevention approach to the need to use restrictive practices, through preventative strategies such as trauma-informed care, and developing whanaungatanga and engagement. Additionally,

SPEC is strong in the areas of communication skills and the use of de-escalation. Safety is a focus, and by using a preventative approach and avoiding personal restraint, not only does the consumer experience a psychologically safer environment, but the clinician experiences a safer workplace. The more that is done to prevent the need to use personal restraint, the safer it is for all (Price et al., 2018).

Furthermore, based on the evidence, safety was preserved in the teaching of the actual techniques when personal restraint needed to be used as a last resort. SPEC teaches a team approach, with a minimum of three people involved, but no use of wrist flexion or any pain-inducing personal restraint holds as a method of personal restraint. Nor does it promote the use of prone positioning. This is because wrist flexion and prone positioning are both techniques that can compromise safety (Ministry of Health, 2020a).

The two elements considered adequate were: 1) physical health monitoring, and 2) communication after an event of personal restraint. Maintaining the physical health and safety for the consumer is included in SPEC. However, the current literature indicates that SPEC should strengthen physical health monitoring to include understanding the health risks for consumers when being restrained, ensure that there is appropriate monitoring for clinical signs[16], and improve understanding of pre-existing health factors[17]. This monitoring needs to occur every time a personal restraint is used, irrespective of the hold or position. Additionally, the literature identified that there is no safe time period of restraint (Hollins, 2017). Therefore, it is recommended that these elements related to monitoring are incorporated into the SPEC training in sessions related to physical safety and the health risks to the consumer during an event of personal restraint.

The importance of learning from the consumer using post event debriefings was also highlighted in the recent literature (Hollins et al., 2021). Staff engagement in meaningful reflection and reflexive review with consumers can support the development of practice wisdom and more effective responses (Haugvaldstad & Husum, 2016; Hollins et al., 2021). It is recognised that teaching how and why to use post event de-briefing may not fit neatly into a training programme primarily for de-escalation and aggression management. However, debriefing can be considered a tertiary prevention measure (Goulet & Larue, 2016), because new insights gained can help prevent future escalation of distress and aggression. Therefore, the literature review identified

[16] Clinical signs may include such factors as vital signs, colour (pallor) etc.
[17] Pre-existing health factors such as weight, evidence of long-term health conditions etc.

that some discussion about the use of post event debriefing is worthy of consideration in training.

The elements of the SPEC curriculum that were considered weak included use of an evidence-based tool to support targeted interventions, and four areas that relate specifically to the Aotearoa New Zealand context to improve outcomes for Māori. These four elements were: 1) enhancing the curricula with appropriate de-escalation strategies that are mana enhancing and effective for Māori; 2) improving staff cultural awareness and understanding; 3) using strategies that help to improve the familiarity and use of whanaungatanga; and 4) although not immediately relevant for SPEC curricula, is to support and increase the number of staff who are Māori to support culturally specific de-escalation for Māori.

The literature identified that using a multimodal evidence-based assessment tool can provide objective identification of escalating behaviours, and this early identification can support associated early interventions (Hallett & Dickens, 2017; Maguire et al., 2017; Wogan, 2018). Central to this concept is the notion that early identification of the cycle of escalating behaviours can offer the opportunity to redirect and de-escalate. The SPEC curricula is strong in prevention and teaches the concepts of early identification of behaviours of aggression; however, it does not teach specific use of a tool to enhance this process. There was no evidence that the SPEC curricula promoted the use of an objective tool, and this is an area that is worthy of further consideration. This is presented here with caution, as the use of an objective tool in a practice setting is the purview and mandate of the management for each practice setting. The use of objective tools is currently not commonplace in Aotearoa New Zealand, although is beginning to emerge and has been identified in a recent master's thesis in a rural DHB (Wogan, 2018).

Improving health outcomes for Māori is a critical issue for Aotearoa New Zealand. The Aotearoa New Zealand Government has recognised the health and disability system's commitment to fulfil the special relationship between Māori and the Crown under Te Tiriti o Waitangi (Ministry of Health, 2020c). Recent policy changes have reaffirmed this commitment, and identified Pae ora as one way to support healthier futures for Māori (Ministry of Health, 2020c). Pae ora encourages the health and disability system to think beyond siloed areas of health provision and affirms and promotes Māori-led solutions and Māori models of health and wellness. Furthermore, kawa whakaruruhau (cultural safety) is a requirement for nursing competence in Aotearoa New Zealand and recognises self-determination in the maintenance of Māori health (Hunter et al., 2021). Cultural safety and cultural competency are concepts defined by the Nursing Council of New Zealand (Nursing Council of New Zealand, 2011).

The recommendation to develop practices that improve health outcomes for Māori is the responsibility of all employing organisations, not only that of a workforce training initiative such as SPEC. However, the four elements highlighted in this study should be a consistent focus in the refinement and delivery of SPEC to support cultural safety. Concerted efforts to develop clinical and consumer SPEC trainers who are Māori should be a priority. Ultimately, having staff who are culturally confident and competent with providing clinical practices that uphold mana is critical when responding to Māori (Te Pou o Te Whakaaro Nui, 2014; Wharewera-Mika et al., 2016).

Developing and endorsing a national training programme: Clinical leadership in action

Phase 2 of this research explored how a decision was made to endorse the same de-escalation and aggression management workforce training programme across mental health and addiction services nationally. As described in Chapter 5, SPEC was initially developed by one DHB in 2009. By 2016, national clinical nursing leaders, alongside Ministry level colleagues, had agreed to promote SPEC as *the* national programme for de-escalation and aggression management. This was fully implemented in adult mental health services in all 20 DHBs by the end of 2019. Achieving consistent training of this nature across an entire nation is remarkable and remains unique internationally.

The challenges and difficulties with embedding and sustaining change in healthcare are well documented. There are many reasons for this, including the complex context that healthcare is sited within and the many stakeholders that need influencing (Augustsson et al., 2019; Damschroder et al., 2009). Furthermore, evidence suggests that practice change in healthcare tends to be adopted in some places and not others, irrespective of the evidence base for the change (Nilsen, 2015). Yet, Aotearoa New Zealand achieved a universal adoption and implementation of de-escalation and aggression management training with a subsequent practice change. This case study identified that the clinical nursing leaders' leadership and vision were instrumental in creating the practice change opportunity and influencing others to accept, adopt, and implement practice change that ultimately supports safer practices.

Collective vision

The data synthesis of phase 2 of this research highlighted the importance of a united collective vision to drive training and practice change. Nursing leaders championed this development of this vision, and at the heart of it was the desire to create a more humane approach when clinical staff are confronted with behaviours of aggression or violence. The concept of a more humane approach was further explored and identified as one that actively reduced harms from occurring, was preventative in focus, and supported better outcomes for Māori.

The vision for practice involved clinicians who would be so skilled in communication, whanaungatanga, engagement, and preventative aspects of care, that restrictive practices would not be used. This vision was described as “the right thing to do”. The notion of doing the “right thing” seemed reflective of a deeper and more meaningful concept that can be considered within a moral construct.

A moral dimension of nursing is described in the literature as human interaction in the provision of patient care, and often referred to as the caring of nursing (Scott, 2006). Much has been written about the central concept of caring in nursing (Adams, 2016; Barker, 1989; Watson, 1979) and principles such as compassion; kindness; and a desire and ability to respond to others pain, stress, and anxiety are seen as core nursing values (Heydari et al., 2020). The voice of the participants in phase 2 reiterated the intensity and force of the collective vision. Comments such as “*this is the biggest practice improvement in 20 years*”, “*it is a no-brainer*”, “*I want to leave nursing in a better place*”, and “*we want to do more to improve outcomes for Māori*” reinforced this. There was evidence of a strong and compelling moral vision for transformational change towards something better.

Interview participants identified that meeting the needs of Māori was important and that elements within SPEC provided one way to bring this vision to fruition. This is important because, as mentioned in the discussion above, the Aotearoa New Zealand Government has recognised the health and disability system's commitment to fulfil the special relationship between Māori and the Crown under Te Tiriti o Waitangi (Ministry of Health, 2020c).

Viewing the shared vision that these nursing leaders had within a moral construct offers a rationale for the strength of the vision, which seemed to create an intensity and momentum that influenced practice change. This collective response was maintained because the clinical nursing leaders shared comparable values and focused on the simple, but relevant, goal of safety for everyone. They wanted to reduce unintentional harms from occurring and achieve a safer workplace. This was a vision that not only nurses, but managers, service users, and other clinicians could buy into. This finding reinforces the importance of a shared vision and the part that it plays with “ongoing systematic practice development” (Martin et al., 2014, p. 11). It is a reminder that a shared vision is a very strong tool for transforming practice (Nanus, 1992).

Strategic leadership and advocacy

Up until SPEC was developed, training focused on teaching the use of personal restraint after an event of aggression had occurred. Crucial to initiating the SPEC training and practice change was clinical nursing leadership. The results from phase 2 of this research indicated that improving

safety and reducing harm was the key motivation of the clinical nurse leaders. The qualities of nursing leadership that became evident from the data are suggestive of the qualities espoused in the strengths-based nursing healthcare leadership (SBNH-L) leadership model (Gottlieb et al., 2021). This leadership style is defined as a "strengths based, and values driven approach that guides others to create equitable and safe workplace cultures and environments" (p. 173). It is documented that nursing leaders who exemplify SBNH-L enable change, know how to mobilise each other, and bring about compassionate and safe person-centred care (Gottlieb & Gottlieb, 2017).

This case study revealed that it was a single nurse leader who recognised that a change in de-escalation and aggression management training was needed and took the initiative to develop the SPEC training. This clinical leader began mobilising colleagues and was willing to share the training with other national nursing leaders. The national nursing leaders recognised the advantages of SPEC, specifically that SPEC promoted a preventative approach, and were able to reach an agreement to adopt and implement the training through their shared values and vision.

These nursing leaders were able to effect change and bring about adoption of evidence-based improvements within a whole service system. A primary leadership attribute demonstrated by these nurses included the ability to be strategic. The case study showcased how the nursing leaders demonstrated their agency to bring change to fruition (McCausland, 2012). Agency is defined as the capacity, condition, or state of action of individuals in asserting influence (Gottlieb et al., 2021; Pelenc et al., 2015). By combining forces, the nurses exercised their collective agency to create and maintain the momentum needed to bring about this change. Collective agency in this context relates to the increased influence that the group was able to achieve with their united approach, and this is similar to the principle of 'guiding coalition' described by Kotter (Pollack & Pollack, 2014) which refers to having a group of likeminded people who have the agency or influence that can lead the change. Although agency is infrequently mentioned in literature regarding nursing leadership, the data analysis from this thesis supports the concept of guiding coalition and identifies the impact that 'agency' had with making the difference to enabling the change to practice.

Agency is strongly correlated with strategic advocacy; advocating for healthcare improvement and promoting better consumer outcomes (Scott & Scott, 2021). The results from phase 2 are indicative of the ability of the nursing leaders to demonstrate strategic advocacy, as well as showing how the nursing leaders asserted their influence to implement the change to SPEC – locally and nationally. They lobbied for support from their respective DHB leadership groups,

demonstrated systems thinking, and had credibility with their own DHBs to move the initiative forward.

As a collective, they also demonstrated agency in influencing the central bureaucracy overseeing the mental health and addiction sector (the Ministry of Health) to align with the initiative. This included lobbying central government to create a national governance group. The nurses identified how SPEC aligned with existing government-led policies and initiatives to reduce restrictive practice (Health Quality Safety Commission, 2020). The wider context of a national push to reduce restrictive practices and meet obligations for improved health outcomes for Māori provided leverage for the introduction of a greater focus on de-escalation and prevention within SPEC, as well as the focus on effective ways of working with Māori. This advocacy at both local and national levels was key to the nurses' strategic leadership.

SPEC training as a vehicle for practice change

The clinical nursing leaders realised the potential of SPEC training to act as a key vehicle to address historical practices of responding after an event of aggression and promote engagement, prevention, and safety for all. They maximised the inherent influence they had as the DOMHNs in their respective DHBs. In these roles, they were directly responsible for the professional development of the mental health nursing and related workforces (i.e. healthcare assistants), including training and workforce development activities. By virtue of their role, they had the agency to significantly influence the adoption and implementation of training that promoted a preventative approach to reducing restrictive practices.

Using SPEC as a vehicle for changing practice was strategic, because a form of 'personal restraint training' is a mandatory workforce training requirement for all staff who work in acute mental health in Aotearoa New Zealand[18]. Adopting SPEC as mandatory training reinforced the newer, safer evidence-based practices with all staff who work in acute mental health services. Their roles also afforded the nurses some influence over resources, and they demonstrated strategic leadership by sharing the limited resources available across DHBs, including expertise and SPEC trainers.

The importance of clinical leadership is particularly relevant in Aotearoa New Zealand as the country enters a period of health transformation[19]. It is posed that clinical nursing leaders

[18] Mandatory training for mental health and addiction differs from DHB to DHB; however, a version of de-escalation and aggression management is mandated by all DHBs. This is referred to in the Ombudsman reports.

[19] https://dpmc.govt.nz/our-business-units/transition-unit/response-health-and-disability-system-review/information

exhibiting SBNH leadership qualities framed within this moral imperative and exerting their personal and collective agency has the very real possibility to effect and accelerate practice-based change across an evolving environment. This proposed way forward builds on the work of others (Hartrick et al., 2018) that suggests clinical leadership with the right skills, values, and behaviours is vital in large-scale health sector change.

Organisational implementation of SPEC

The third phase of the research provided insights drawn from a detailed review of one DHB's experience of implementing SPEC. The purpose of this part of the research was to establish if learning could be gleaned from taking an intensive look into one DHB's implementation experience. This large urban DHB transitioned their entire mental health, addictions, forensic mental health, and intellectual disability frontline clinical workforce from its previous aggression management training to be SPEC trained in an 18-month timeframe.

As outlined in Chapter 2, the methodology for phase 3 identified that the questions used in the semi-structured interviews were designed to elicit pertinent learnings about implementation. Analysis of the interviews identified factors that were then organised into enablers and barriers to implementation. These were presented using a framework to help with definitions and terminology consistent with implementation science (Damschroder et al., 2009). This framework was provided in Chapter 6 and offers the reader a way to consider the enablers and barriers across the five domains.

Leadership as enabler

The analysis of the enablers that supported the implementation revealed a significant enabler; a steady and stable leadership throughout the 18-month timeframe. What this provided was a high trust environment with the executive leadership team. Bringing key stakeholders on board with adopting SPEC, such as the unions, required a whole of executive leadership approach. These stakeholder meetings were described as challenging, as the previous training for aggression management had been in situ for approximately 20 years. Bringing practice examples of the benefits of SPEC and keeping the vision at the forefront were measures to address change hesitancy and demonstrated leadership by the executive leadership team. Similarly, when one ward sustained property damage, but personal restraint was not being used, the executive leadership team could support this due to their previously established high trust relationship.

The DHB leadership in this phase demonstrated and articulated the vision, not dissimilar to the vision demonstrated by the clinical nursing leadership with adopting SPEC in phase 2 of the research. Kotter's change management model identifies the value of and the articulation of

vision to support healthcare change (Campbell, 2008; Pollack & Pollack, 2014). For this DHB, the vision was for improved safety for everyone and better outcomes for consumers. The interviews revealed that a compelling reason to change to SPEC was to reduce the unintended harms, from the existing training, which still taught wrist flexion and prone positioning as part of the personal restraint aspect of training. It was expressed that moving to SPEC without the use of pain compliance had the ability to improve therapeutic relationships. This vision was communicated regularly and helped counter resistance and maintain the momentum with the planned timeframe of 18 months.

Additionally, safety was the reason that an ambitious timeframe of 18 months was set down. This time frame was selected to reduce the length of time that there were two techniques of personal restraint in play, as having two approaches in place was viewed as unsafe. This was achieved with co-operation from the operational managers and prioritisation of the workforce training schedule.

Resourcing as barrier

The analysis of the barriers for this DHB pointed to one primary barrier – lack of resourcing. This included resourcing to provide additional staffing, resourcing to pay for backfill for staff to attend the SPEC training, resources to enhance the SPEC training, and resourcing for additional trainer expertise. It is noted in the literature that dedicated resourcing supports successful implementation (Hinde et al., 2020; Smith & Polaha, 2017). In this instance, the DHB redirected their training budget to provide for what was required, and operational managers supported each other with staffing backfill. These were successful mitigation strategies that enabled the implementation. This barrier did not prevent the implementation from occurring; however, it was considered that implementation might have been enhanced if this element was present.

As detailed in Chapter 4, I was curious to see if this DHB applied implementation science to this process. Implementation science is the scientific study of methods used to promote the systematic uptake of evidence-based practices and improve the quality and effectiveness of health services (Nilsen, 2015; Proctor et al., 2009). Moreover, the literature identified the advantages when using an implementation science methodology, as this can increase the likelihood of sustained delivery of evidence-based practices (Smith & Polaha, 2017).

The synthesis of the data identified that there was no formal or planned implementation process used; however, there was an organic aspect within the implementation process. This organic nature included having a compelling reason for the change, winning the hearts and minds of influential leaders with this reasoning, having a clear goal/vision, ensuring the right people as

champions were identified at the outset, and using data early to address resistance. These features are consistent with features of implementation science processes (Brownson et al., 2018; Mount & Anderson, 2015; Smith & Polaha, 2017).

The conclusion drawn is that the organic nature of the implementation was grounded in leadership and pragmatism with features consistent with implementation science. This may be because across Aotearoa New Zealand, within this timeframe, there was significant influence from the Health Quality Safety Commission in areas of quality improvement[20] and this influence permeated into other areas such as the SPEC implementation processes. It is also noted that a formal and planned implementation process that was appropriately resourced may have enhanced the rigour for this implementation (Smith & Polaha, 2017). This will have relevance for ongoing change processes that are likely as part of the Aotearoa New Zealand health and disability reforms in the coming years

Summary of all three phases of this research: Achieving safety for all

The enormity of what has occurred and the ongoing change resulting from implementing SPEC nationally cannot be underestimated. Across the three phases of this research, safety has been central. Improving de-escalation and communication skills to prevent the use of personal restraint promotes safer outcomes for everyone. The use of personal restraint techniques that do not use any form of pain compliance and do not teach regular prone restraint is safer for everyone. A nationally consistent workforce training programme across the country ensures that the same type of de-escalation and aggression management training can be taught and delivered. This creates efficiencies as well as increasing safety, as no matter what the setting, the same response will occur. Safety featured strongly in phase 3 with the intention to train everyone in the shortest period possible (for 800 staff) to reduce unintended harms from occurring.

This emphasis on safety signifies a substantial practice change. Embedding and sustaining such change is challenging in complex healthcare systems and requires the support of diverse stakeholders (Augustsson et al., 2019; Damschroder et al., 2009). Such practice change can be sporadic and piecemeal (Nilsen, 2015). However, in Aotearoa New Zealand, there was unity amongst the clinical nurse leaders throughout the country to adopt SPEC; consistency was obtained through national agreement of the content and method of the training; and the

[20] https://www.hqsc.govt.nz/our-programmes/mental-health-and-addiction-quality-improvement/projects/mental-health-and-addiction-quality-improvement-facilitator-initiative/

momentum for change was signalled through the implementation processes demonstrated in one large metropolitan DHB.

This research indicates that change in practice toward a safer approach happened organically and with no additional centralised organisation or resourcing. This change occurred within three years and across an entire jurisdiction. A common vision and strategic clinical nurse leadership were critical success factors for the national adoption and implementation of SPEC.

Study strengths and limitations

This study was a qualitative, descriptive, intrinsic case study with three phases of inquiry that used pragmatism as the philosophical framework. Case study design is suited to educational and health innovations, such as the focus on SPEC in this thesis (Merriam, 1988). Using case study in an applied field, such as nursing, offers the researcher the opportunity to examine processes and programmes that can increase understanding and has the potential to improve practice. Case study as a methodology suited this professional doctoral level thesis as it was intended to be immediately relevant to mental health nursing practice.

Descriptive case study as a research methodology can be critiqued based on its narrow focus on describing phenomena, rather than being predictive in nature (Yin, 2018). However, its use does create the opportunity to offer rich and thick description that can allow the reader to understand the nuances of the issues being investigated in depth (Merriam, 1998).

This research findings are not generalisable in quantitative terms, as the study design precludes this. However, the methods used for this qualitative research can support the concept of transferability (Astin, 2009; Polit & Beck, 2010). Transferability is also described as external validity and this concept considers how well readers of this research can make judgments from the findings into other settings (Lincoln & Guba, 1985; Merriam, 1988). This case study provides enough detail of the research context and process for readers to determine if the findings have relevance to their own context. Additional to transferability, this research has methods that can demonstrate trustworthiness, believability, and consistency with the use of multiple participant perspectives, which demonstrated consensus. The diversity of opinion was achieved with purposeful sampling which afforded the opportunity to investigate a range of views. Furthermore, snowball participant sampling created the opportunity for three additional interviews of people, whom the original participants considered would have useful insights. This further extended the range of participant insights supporting the consistency of information. The participant sampling included Māori participants; however, given this research is based in

Aotearoa New Zealand, this research would have been enriched with additional Māori participants.

The three phases of this case study research used different methods of analysis. Phase 1 involved content analysis, and phases 2 and 3 used thematic analysis. Using three areas within the case study methodology provided rich data from the three areas, that when put together, showed consistency of findings, and therefore strengthened the final conclusions.

I was aware of the risk of researcher bias at the outset and completed a pre-supposition interview with my second supervisor at the very beginning of this research. I also participated in reflexive processes to consider my own views on the topic. These processes clarified my assumptions and reduced the risk of these assumptions overshadowing participants' views in the interviews and subsequent data analysis. In addition, to reduce the risk of researcher influence on participants, participants were offered the option of having their interview completed by a third person. (Merriam, 1988, p. 79). Considerable efforts were made in the writing of this thesis to maintain anonymity both with the participants and the DHB in phase 3 of the research. Every effort was made to maintain anonymity; however, participants were aware of the possibility that due to their unique roles, total anonymity was unable to be guaranteed.

This research was undertaken to fulfil the requirements for a professional doctorate in health science, and as such, contributes to the practice area, specifically critiquing and updating knowledge of the essential elements required for a de-escalation and aggression management training programme, notably taking into the consideration the socio-political context for Aotearoa New Zealand. This thesis identified a unique practice change that occurred because of clinical nursing leadership, and advances knowledge about the implementation of evidence-based practices. However, the limited scope of a professional doctorate did preclude greater depth in theoretical analysis and exploration of philosophical underpinnings.

In addition, this research represents a snapshot in time, and as such, recognises that Aotearoa New Zealand, as previously mentioned, is in the process of large-scale health and disability reforms. These reforms are likely to result in legislative changes that may alter the references to standards and mental health legislation that were identified in this thesis.

Finally, and not insubstantially, this research was conducted during the international COVID-19 pandemic. The effect of working full-time during the pandemic at the same time as completing this level of academic inquiry affected the timeframe for completion. Moreover, as the researcher, I was based in a city that spent a considerable amount of time in stringent lockdown.

In the latter part of this thesis writing, I continued to work full-time from home for a long period of time. Whilst I could still meet with supervisors using video technology, the informal discussions that occurred with likeminded colleagues that help with formulating analysis, were limited.

Dissemination of findings

It is anticipated that there are national groups within Aotearoa New Zealand that will be interested in the findings of this research. This will include the national projects that support reducing restrictive interventions led by the Health Quality & Safety Commission New Zealand (2021) and Te Pou o Te Whakaaro Nui (2019), the National SPEC Governance Group, and the Ministry of Health. I will follow up with relevant national and international conference opportunities and publish in a peer-reviewed journal.

Personal reflections and learning

This doctoral journey has been one of immense learning and one of opportunity. I have progressed in my understanding and competence regarding research rigour and have been gifted with insights from the participants regarding one of the most challenging aspects of mental health care. My hope is that this thesis will provide up to date information about de-escalation and aggression management training. Additionally, I hope this thesis can showcase the relevance and importance of clinical nursing leadership with supporting significant practice change that ultimately can make training in the use of personal restraint redundant.

This research timeframe included the time that COVID–19 affected Aotearoa New Zealand, and during this time of doctoral study, I was in a senior nursing leadership role within a DHB. Despite the external challenges of a pandemic and the commitment I had to my employer to continue to work full-time, I felt energised by the subject matter and driven to want to honour the contributions from the participants. I hope this contribution will be useful across other jurisdictions that are considering making large-scale practice change.

Conclusion

This research presented an opportunity to understand elements of the unique development of a national approach to staff training for de-escalation and aggression management in acute mental health and addiction in Aotearoa New Zealand. It also identified some areas of improvement within the training. Furthermore, this thesis identified the influence that clinical nursing leaders could have with supporting practice change and has identified the key enablers with implementing practice change.

The use of restrictive practices in mental health and addiction services is a sensitive area. People with lived experience remind us that any reduction of liberty requires careful consideration of ethical and moral principles. I conclude with a quote that kept the dream of this thesis alive throughout this endeavour:

> *Any practice which is inherently dangerous and which denies liberty in the most sense warrants scrutiny (Haimowitz et al., 2006).*

References

Adams, L. (2016). The conundrum of caring in nursing. *International Journal of Caring Sciences*, *9*(1), 1–8.

Astin, F. (2009). A beginners guide to appraising a qualitative research paper. *British Journal of Cardiac Nursing*, *4*(11), 530–533. https://doi.org/10.12968/bjca.2009.4.11.44957

Augustsson, H., Churruka, K., & Braithwaite, J. (2019). Mapping the use of soft systems methodology for change management in healthcare: A scoping review protocol. *BMJ Open*, *9*(4), Article e026028. https://doi.org/10.1136/bmjopen-2018-026028

Baker, M. (2015). *He kai i nga Rangitira He korero o nga whanau whaiora*. Te Rau Ora. https://terauora.com/wp-content/uploads/2019/05/He-kai-i-te-rangatira-o-nga-whaiora-whanau-August-2015.pdf

Baker, M. (2017). *Seeking solutions to being restricted: A Māori-centred grounded theory of Māori, mental illness and health services* [Doctoral thesis, Massey University]. https://mro.massey.ac.nz/bitstream/handle/10179/14622/02_whole.pdf?sequence=3&isAllowed=y

Barker, P. (1989). Reflections on the philosophy of caring in mental health. *International Journal of Nursing Studies*, *26*(2), 131–141. https://doi.org/10.1016/0020-7489(89)90029-1

Baumann, A. A., & Cabassa, L. J. (2020). Reframing implementation science to address inequities in healthcare delivery. *BMC Health Services Research*, *20*(190). https://doi.org/10.1186/s12913-020-4975-3

Bentham, J. (1791). *Panopticon or inspection house*. Thomas Byrne, Gale Group.

Bigwood, S., & Crowe, M. (2008). 'It's part of the job, but it spoils the job': A phenomenological study of physical restraint. *International Journal of Mental Health Nursing*, *17*(3), 215–222. https://doi.org/10.1111/j.1447-0349.2008.00526.x

Blumer, H. (1935). Reviewed work: The Wild Boy of Aveyron by Jean-Marc-Gaspard Itard, George Humphrey, Muriel Humphrey. *American Journal of Sociology*, *40*(4), 540–541. https://doi.org/10.1086/216854

Bowers, L. (2014). Safewards: A new model of conflict and containment on psychiatric wards. *Journal of Psychiatric & Mental Health Nursing*, *21*(6), 499–508. https://doi.org/10.1111/jpm.12129

Bowers, L., James, K., Quirk, A., Simpson, A., Stewart, D., & Hodsoll, J. (2015). Reducing conflict and containment rates on acute psychiatric wards: The Safewards cluster randomised controlled trial. *International Journal of Nursing Studies*, *52*(9), 1412–1422. https://doi.org/10.1016/j.ijnurstu.2015.05.001

Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development*. SAGE.

Bradshaw, C., Atkinson, A., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research*, *4*, 1–8. https://doi.org/10.1177/2333393617742282

Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2017). Thematic analysis. In C. Willig & W. Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (pp. 17–36). SAGE. https://doi.org/10.4135/9781526405555.n2

Brophy, L. M., Roper, C. E., Hamilton, B. E., Tellez, J. J., & McSherry, B. M. (2016a). Consumers' and their supporters' perspectives on barriers and strategies to reducing seclusion and restraint in mental health settings. *Australian Health Review*, *40*(6), 599–604. https://doi.org/10.1071/AH15128

Brophy, L. M., Roper, C. E., Hamilton, B. E., Tellez, J. J., & McSherry, B. M. (2016b). Consumers and their supporters' perspectives on poor practice and the use of seclusion and restraint in mental health settings: Results from Australian focus groups. *International Journal of Mental Health Systems*, *10*(1), Article 6. https://doi.org/10.1186/s13033-016-0038-x

Brownson, R. C., Colditz, G. A., & Proctor, E. K. (2018). *Dissemination and implementation science in health: Translating science to practice* (2nd ed.). Oxford University Press. https://doi.org/10.1093/oso/9780190683214.001.0001

Callaghan, S., & Ryan, C. J. (2012). Rising to the human rights challenge in compulsory treatment – New approaches to mental health law in Australia. *Australian & New Zealand Journal of Psychiatry*, *46*(7), 611–620. https://doi.org/10.1177/0004867412438872

Campbell, R. J. (2008). Change management in healthcare. *The Health Care Manager*, *27*(1), 23–39. https://doi.org/10.1097/01.hcm.0000285028.79762.a1

Cedervall, Y., & Aberg, A. C. (2010). Physical activity and implications on well-being in mild Alzheimer's disease: A qualitative case study on two men with dementia and their spouses. *Physiotherapy and Practice*, *26*(4), 226–239. https://doi.org/10.3109/09593809903423012

Chambers, D., Pintello, D., & Juliano-Bult, D. (2020). Capacity-building and training opportunities for implementation science in mental health. *Psychiatry Research*, *283*. https://doi.org/10.1016/j.psychres.2019.112511

Creswell, J. (2013). *Qualitative inquiry & research design* (3rd ed.). SAGE.

Cusack, P., Cusack, F. P., McAndrew, S., McKeown, M., & Duxbury, J. (2018). An integrative review exploring the physical and psychological harm inherent in using restraint in mental health inpatient settings. *International Journal of Mental Health Nursing*, *27*(3), 1162–1176. https://doi.org/10.1111/inm.12432

Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science*, *4*, Article 50. https://doi.org/10.1186/1748-5908-4-50

De Chesnay, M. (2017). *Nursing research using case studies: Qualitative designs and methods in nursing*. Springer. https://doi.org/10.1891/9780826131935

Denscombe, M. (1998). *The good research guide for small-scale social research projects*. Buckingham University Open Press.

Denzin, N. K., & Lincoln, Y. S. (2018). *The SAGE handbook of qualitative research*. SAGE.

Doody, O., & Noonan, M. (2016). Nursing research ethics, guidance and application in practice. *British Journal of Nursing*, *25*, 803–807. https://doi.org/10.12968/bjon.2016.25.14.803

Drown, C., Harding, T., & Marshall, R. (2018). Nurse perceptions of the use of seclusion in mental health inpatient facilities: Have attitudes to Māori changed? *The Journal of Mental Health Training, Education and Practice*, *13*(2), 100–111. https://doi.org/10.1108/JMHTEP-12-2016-0055

Duxbury, J. (2015). The Eileen Skellern lecture: Physical restraint: In defence of the indefensible? *Journal of Psychiatric and Mental Health Nursing*, *22*, 92–101. https://doi.org/110.1111/jpn.12204

Duxbury, J., Thomson, G., Scholes, A., Jones, F., Baker, J., Downe, S., . . . McKeown, M. (2019). Staff experiences and understandings of the REsTRAIN Yourself initiative to minimize the use of physical restraint on mental health wards. *International Journal of Mental Health Nursing*, *28*(4), 845–856. https://doi.org/10.1111/inm.12577

El-Badri, S., & Mellsop, G. (2008). Patient and staff perspectives on the use of seclusion. *Australian Psychiatry*, *16*(4), 248–252. https://doi.org/10.1080/10398560802027302

Finch, T., Rapley, T., Girling, M., Mair, F., Murray, E., Treweek, S., . . . May, C. (2013). Improving the normalisation of complex interventions: Measure development based on normalisation process theory (NoMAD): Study protocol. *Implementation Science*, *8*(43). https://doi.org/10.1186/1748-5908-8-43

Fletcher, A., Crowe, M., Manuel, J., & Foulds, J. (2021). Comparison of patients' and staff's perspectives on the causes of violence and aggression in psychiatric inpatient settings: An integrative review. *Journal of Psychiatric and Mental Health Nursing*, *28*(5), 924–939. https://doi.org/10.1111/jpm.12758

Foucault, M. (1967). *Madness and civilisation: A history of sanity in the age of unreason*. Vintage Books.

Gaynes, B. N., Brown, C. L., Lux, L. J., Brownley, K. A., Van Dorn, R. A., Edlund, M. J., . . . Lohr, K. N. (2017). Preventing and de-escalating aggressive behaviour among adult psychiatric patients: A systematic review of the literature. *Psychiatric Services*, *68*(8), 819–831. https://doi.org/10.1176/appi.ps.201600314

Gooding, P., McSherry, B., Roper, C., & Grey, F. (2018). *Alternatives to coercion in mental health settings: A literature review*. https://socialequity.unimelb.edu.au/__data/assets/pdf_file/0012/2898525/Alternatives-to-Coercion-Literature-Review-Melbourne-Social-Equity-Institute.pdf

Gottlieb, L., & Gottlieb, B. (2017). Strengths-based nursing: A process for implementing a philosophy into practice. *Journal of Family Nursing*, *23*(3), 319–340. https://doi.org/10.1177/1074840717717731

Gottlieb, L. N., Gottlieb, B., & Bitzas, V. (2021). Creating empowering conditions for nurses with workplace autonomy and agency: How healthcare leaders could be guided by strengths-based nursing and healthcare leadership (SBNH-L). *Journal of Healthcare Leadership*, *13*, 169–181. https://doi.org/10.2147/JHL.S221141

Gough, D., Oliver, S., & Thomas, J. (2017). *An introduction to systematic reviews* (2nd ed.). SAGE.

Goulet, M.-H., & Larue, C. (2016). Post-seclusion and/or restraint review in psychiatry: A scoping review. *Archives of Psychiatric Nursing*, *30*(1), 120–128. https://doi.org/10.1016/j.apnu.2015.09.001

Guba, E. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*, *29*(2), 75–92. https://doi.org/10.1007/BF02766777

Haimowitz, J. D., Urff, J. D., & Huckshorn, K. (2006). *Restraint and seclusion: A risk management guide*. National Association of State Mental Health Programme Directors. https://www.nasmhpd.org/sites/default/files/R-S%20RISK%20MGMT%2010-10-06.pdf

Hallett, N., & Dickens, G. (2017). De-escalation of aggressive behaviour in healthcare settings: Concept analysis. *International Journal of Nursing Studies*, *75*, 10–20. https://doi.org/10.1016/j.ijnurstu.2017.07.003

Halm, M. (2017). Aggression management education for acute care nurses: What's the evidence? *American Journal of Critical Care*, *26*(6), 504–508. https://doi.org/10.4037/ajcc2017984

Happell, B., & Harrow, A. (2010). Nurses' attitudes to the use of seclusion: A review of the literature. *International Journal of Mental Health Nursing*, *19*(3), 162–168. https://doi.org/10.1111/j.1447-0349.2010.00669.x

Hartrick, O., Maynard, V., & Ravenscroft, J. (2018). Reporting the evidence of clinical leadership strategies used in large-scale change in NHS England: A scoping review. *BMJ Leader*, *2*(Suppl. 1), A1–A45. https://doi.org/10.1136/leader-2018-FMLM.5

Haugvaldstad, M., & Husum, T. (2016). Influence of staff's emotional reactions on the escalation of patient aggression in mental health care. *International Journal of Law and Psychiatry*, *49*, 130–137. https://doi.org/10.1016/j.ijlp.2016.09.001

Health and Disability Commission. (1996). *Code of Health and Disability Consumers' Rights Regulations*. http://www.hdc.org.nz/media/383705/code%20of%20rights.pdf

Health Quality & Safety Commission New Zealand. (2021). *Aukatia te noho punanga: Noho haumanu, tū rangatira mō te tokomaha: Zero seclusion: Safety and dignity for all*. https://www.hqsc.govt.nz/our-programmes/mental-health-and-addiction-quality-improvement/projects/zero-seclusion-safety-and-dignity-for-all/

Health Quality Safety Commission. (2020). *Mental Health and Addiction Quality Improvement Programme*. https://www.hqsc.govt.nz/our-programmes/mental-health-and-addiction-quality-improvement/programme/

Heydari, N., Torkaman, M., & Torabizadeh, C. (2020). The relationship between nurses' perceptions of caring behaviours based on Watson's theory and of professional ethics: A cross sectional study. *Research Square*. https://doi.org/10.21203/rs.3.rs-31487/v1

Higgins, A., Murphy, R., Downes, C., Barry, J., Monahan, M., Hevey, D., . . . Gibbons, P. (2020). Factors impacting the implementation of a psychoeducation intervention within the mental health system: A multisite study using the consolidation framework for implementation research. *BMC Health Services Research*, *20*(1), Article 1023. https://doi.org/10.1186/s12913-020-05852-9

Hinde, J. M., Bray, J. W., & Cowell, A. J. (2020). Implementation science on the margins: How do we demonstrate the value of implementation strategies? *Families, Systems, & Health*, *38*(3), 225–231. https://doi.org/10.1037/fsh0000535

Hollins, L. (2017). The NICE 10 minute physical restraint rule: A discussion of the relative risks. *Journal of Psychiatric and Mental Health Nursing*, *24*(9), 719–726. https://doi.org/10.1111/jpm.12414

Hollins, L., Seagrave, L., & Stubbs, B. (2021). What are the most common restraint techniques taught by expert practitioners? *Journal of Psychiatric and Mental Health Nursing*,29(2),274-286. (https://doi.org/10.1111/jpm.12761

Huckshorn, K. (2004). Reducing seclusion & restraint use in mental health settings: Core strategies for prevention. *Journal of Psychosocial Nursing and Mental Health Services*, *42*(9), 22.

Huckshorn, K. (2005a). *Six core strategies to reduce the use of seclusion and restraint planning tool*. National Association of State Mental Health Program Directors. https://www.nasmhpd.org/sites/default/files/Consolidated%20Six%20Core%20Strategies%20Document.pdf

Huckshorn, K. (2005b). *A snapshot of six core strategies for the reduction of S/R©*. National Technical Assistance Centre. http://164.156.7.185/parecovery/documents/Snapshot_Six_Core.pdf

Hunter, K., Roberts, J., Foster, M., & Jones, S. (2021). Dr Irihapati Ramsden's powerful petition for cultural safety: Kawa whakarurhau. *Nursing Praxis*, *37*(1), 25–28.

Jacob, S., Munro, I., Taylor, B. J., & Griffiths, D. (2017). Mental health recovery: A review of the peer-reviewed published literature. *Collegian*, *24*(1), 53–61. https://doi.org/10.1016/j.colegn.2015.08.001

Jalil, R., Huber, J. W., Sixsmith, J., & Dickens, G. L. (2017). Mental health nurses' emotions, exposure to patient aggression, attitudes to and use of coercive measures: Cross sectional questionnaire survey. *International Journal of Nursing Studies*, *75*, 130–138. https://doi.org/10.1016/j.ijnurstu.2017.07.018

Lai, J., Jury, A., Long, J., Fergusson, D., Smith, M., Baxendine, S., & Gruar, A. (2019). Variation in seclusion rates across New Zealand's specialist mental health services: Are sociodemographic and clinical factors influencing this? *International Journal of Mental Health Nursing*, *28*(1), 288–296. https://doi.org/10.1111/inm.12532

Lawrence, D., Bagshaw, R., Stubbings, D., & Watt, A. (2021). Restrictive practices in adult secure mental health services: A scoping review. *International Journal of Forensic Mental Health*, 1–21. https://doi.org/10.1080/14999013.2021.1887978

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. SAGE.

Long, C., Afford, M., Harris, R., & Dolley, O. (2016). Training in de-escalation: An effective alternative to restrictive interventions in a secure service for women. *Journal of Psychiatric Intensive Care*, *12*(1), 11–18. https://doi.org/10.20299/jpi.2016.008

Maguire, T., Daffern, M., Bowe, S., & McKenna, B. (2017). Predicting aggressive behaviour in acute forensic mental health units: A re-examination of the dynamic appraisal of

situational aggressions predictive validity. *International Journal of Mental Health Nursing*, *26*(2), 472–481. https://doi.org/10.1111/inm.12377

Maguire, T., Daffern, M., Bowe, S., & McKenna, B. (2018). Risk assessment and subsequent nursing interventions in a forensic mental health inpatient setting: Associations and impact on aggressive behaviour. *Journal of Clinical Nursing*, *27*(5–6), e971–e983. https://doi.org/10.1111/jocn.14107

Manago, A. M. (2013). Negotiating a sexy masculinity on social networking sites. *Feminism and Psychology*, *23*(4), 478–497.

Mann-Poll, P. S., Smit, A., Van Doeselaar, M., & Hutschemaekers, G. J. M. (2013). Professionals' attitudes after a seclusion reduction program: Anything changed? *Psychiatric Quarterly*, *84*(1), 1–10. https://doi.org/10.1007/s11126-012-9222-6

Martin, J., McCormack, B., Fitzsimmons, D., & Spirig, R. (2014). The importance of inspiring a shared vision. *International Practice Development Journal*, *4*(2), 1–15. https://www.fons.org/Resources/Documents/Journal/Vol4No2/IPDJ_0402_04.pdf

McCausland, M. (2012). Opportunities and strategies in contemporary health system executive leadership. *Nursing Administration Quarterly*, *36*(4), 306–313. https://doi.org/10.1097/NAQ.0b013e3182669300

McKenna, B., Daffern, M., Maguire, T., & Roberton, T. (2016). *A literature review and policy analysis on the use of physical restraint in Victoria*. Swinburne University of Technology.

McKenna, B., Furness, T., & Maguire, T. (2015). *A literature review and policy analysis on the practice of restrictive interventions*. State Government Victoria.

McKenna, B., McEvedy, S., Maguire, T., Ryan, J., & Furness, T. (2017). Prolonged use of seclusion and mechanical restraint in mental health services: A statewide retrospective cohort study. *International Journal of Mental Health Nursing*, *26*(5), 491–499. https://doi.org/10.1111/inm.12383

McLeod, M., King, P., Stanley, J., Lacey, C., Cunningham, R., & Simmonds, S. (2013). *The use of seclusion for Māori in adult inpatient mental health services in New Zealand*. Te Pou o Te Whakaaro Nui. https://www.tepou.co.nz/uploads/files/resource-assets/the-use-of-seclusion-for-Maori-in-adult-inpatient-mental-health-services-in-New-Zealand.pdf

McSherry, B. (2017). Regulating seclusion and restraint in health care settings: The promise of the Convention on the Rights of Persons with Disabilities. *International Journal of Law and Psychiatry*, *53*, 39–44. https://doi.org/10.1016/j.ijlp.2017.05.006

Merriam, S. (1988). *Case study research in education: A qualitative approach*. Jossey-Bass.

Merriam, S. (1998). *Qualitative research and case study applications in education* (2nd ed.). Jossey-Bass.

Merriam, S., & Tisdell, E. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Wiley.

Ministry of Health. (2010). *Seclusion under the Mental Health (Compulsory Assessment and Treatment) Act 1992*. https://www.health.govt.nz/publication/seclusion-under-mental-health-compulsory-assessment-and-treatment-act-1992

Ministry of Health. (2012a). *Guidelines to the Mental Health (Compulsory Assessment and Treatment) Act 1992*. https://www.health.govt.nz/publication/guidelines-mental-health-compulsory-assessment-and-treatment-act-1992

Ministry of Health. (2012b). *Rising to the challenge: The mental health and addiction service development plan 2012–2017.* https://www.health.govt.nz/system/files/documents/publications/rising-to-the-challenge-mental-health-addiction-service-development-plan-v2.pdf

Ministry of Health. (2014). *The health of Māori adults and children, 2011–2013*. https://www.health.govt.nz/publication/health-maori-adults-and-children-2011-2013

Ministry of Health. (2015a). *Nationwide Service Framework Library*. https://www.health.govt.nz/new-zealand-health-system/key-health-sector-organisations-and-people/district-health-boards/accountability-and-funding/nationwide-service-framework-library

Ministry of Health. (2015b). *Office of the Director of Mental Health annual report*. https://www.health.govt.nz/publication/office-director-mental-health-annual-report-2015

Ministry of Health. (2016). *Office of the Director of Mental Health 2016 annual report*. https://www.health.govt.nz/publication/office-director-mental-health-annual-report-2016

Ministry of Health. (2017). *Office of the Director of Mental Health and Addiction Services annual report 2017*. https://www.health.govt.nz/publication/office-director-mental-health-and-addiction-services-annual-report-2017

Ministry of Health. (2019). *Wai 2575 Health Services and Outcomes Kaupapa Inquiry*. https://www.health.govt.nz/our-work/populations/maori-health/wai-2575-health-services-and-outcomes-kaupapa-inquiry

Ministry of Health. (2020a). *Guidelines to the Mental Health (Compulsory Assessment and Treatment) Act 1992*. https://www.health.govt.nz/publication/guidelines-mental-health-compulsory-assessment-and-treatment-act-1992

Ministry of Health. (2020b). *Human Rights and the Mental Health (Compulsory Assessment and Treatment) Act 1992*. https://www.health.govt.nz/publication/human-rights-and-mental-health-compulsory-assessment-and-treatment-act-1992

Ministry of Health. (2020c). *Whakamaua: Māori Health Action Plan 2020–2025*. https://www.health.govt.nz/publication/whakamaua-maori-health-action-plan-2020-2025

Ministry of Health. (2021). *Office of the Director of Mental Health and Addiction Services annual report 2018 and 2019*. https://www.health.govt.nz/publication/office-director-mental-health-and-addiction-services-annual-report-2018-and-2019

Mount, A., & Anderson, I. (2015). Driving change—Not just a walk in the park: The role of the nurse champion in sustained change. *Nurse Leader*, *13*(4), 36–38. https://doi.org/10.1016/j.mnl.2015.06.003

Muir-Cochrane, E. (1995). An exploration of ethical issues associated with the seclusion of psychiatric patients. *Collegian*, *2*(3), 14–20. https://doi.org/10.1016/s1322-7696(08)60111-0

Muskett, C. (2014). Trauma-informed care in inpatient mental health settings: A review of the literature. *International Journal of Mental Health Nursing*, *23*(1), 51–59. https://doi.org/10.1111/inm.12012

Nanus, B. (1992). *Visionary leadership: Creating a compelling sense of direction for your organisation*. Jossey-Bass.

National Institute for Health and Care Excellence. (2015). *Violence and aggression: Short-term management in mental health, health and community settings NICE Guideline NG10*. https://www.nice.org.uk/guidance/ng10

Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation Science*, *10(1)*, 53. https://doi.org/10.1186/s13012-015-0242-0

Nursing Council of New Zealand. (2011). *Guidelines for cultural safety, Ti Tiriti o Waitangi and Maori health in nursing education and practice*. https://www.nursingcouncil.org.nz/Public/Nursing/Standards_and_guidelines/NCNZ/nursing-section/Standards_and_guidelines_for_nurses.aspx

NZS 8134.2:2008 Health and Disability Services (Restraint minimisation and safe practice) Standards, (2008). https://shop.standards.govt.nz/catalog/8134.2:2008(NZS)/scope

O'Hagan, M., Divis, M., & Long, J. (2008). *Best practice in the reduction and elimination of seclusion and restraint: Seclusion: Time for change*. Te Pou o Te Whakaaro Nui. https://www.tepou.co.nz/uploads/files/resource-assets/Best-Practice-in-the-Reduction-and-Elimination-of-Seclusion-and-Restraint.pdf

Oakley-Browne, M., Wells, J. E., & Scott, K. M. (2006). *Te Rau Hinengaro: The New Zealand Mental Health Survey: Summary*. Ministry of Health. https://www.health.govt.nz/publication/te-rau-hinengaro-new-zealand-mental-health-survey

Obi-Udeaja, J., Crosby, K., & Ryan, G. (2017). Involving service users in teaching healthcare professionals about physical restraint. *Mental Health Practice*, *21*(4), 36–39. https://doi.org/10.7748/mhp.2017.e1238

Oster, C., Gerace, A., Thomson, D., & Muir-Cochrane, E. (2016). Seclusion and restraint use in adult inpatient mental health care: An Australian perspective [Article]. *Collegian*, *23*, 183–190. https://doi.org/10.1016/j.colegn.2015.03.006

Patton, M. (2015). *Qualitative research and evaluation methods: Integrating theory and practice* (4th ed.). SAGE.

Pelenc, J., Bazile, D., & Ceruti, C. (2015). Collective capability and collective agency for sustainability: A case study. *Ecological Economics*, *118*, 226–239. https://doi.org/10.1016/j.ecolecon.2015.07.001

Pettit, S. A., Bowers, L., Tulloch, A., Cullen, A. E., Moylan, L. B., Sethi, F., . . . Stewart, D. (2017). Acceptability and use of coercive methods across differing service configurations with and without seclusion and/or psychiatric intensive care units. *Journal of Advanced Nursing*, *73*(4), 966–976. https://doi.org/10.1111/jan.13197

Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, *47*(11), 1451–1458. https://doi.org/10.1016/j.ijnurstu.2010.06.004

Pollack, J., & Pollack, R. (2014). Using Kotter's eight stage process to manage an organisational change program: Presentation and practice. *Systemic Practice and Action Research*, *28*(1), 51–66. https://doi.org/10.1007/s11213-014-9317-0

Price, O., Baker, J., Bee, P., & Lovell, K. (2018). The support-control continuum: An investigation of staff perspectives on factors influencing the success or failure of de-escalation techniques for the management of violence and aggression. *International Journal of Nursing Studies 77*, 197–206. https://doi.org/10.1016/j.ijnurstu.2017.10.002

Proctor, E. K., Landsverk, J., Aarons, G., Chambers, D., Glisson, C., & Mittman, B. (2009). Implementation research in mental health services: An emerging science with conceptual, methodological and training challenges. *Administration and Policy Mental Health*, *36*(1). https://doi.org/10.1007/s10488-008-0197-4

Riahi, S., Thomson, G., & Duxbury, J. (2016). An integrative review exploring decision-making factors influencing mental health nurses in the use of restraint. *Journal of Psychiatric and Mental Health Nursing*, *23*(2), 116–128. https://doi.org/10.1111/jpm.12285

Riley, D., Meehan, C., Whittington, R., Lancaster, G., & Lane, S. (2006). Patient restraint positions in a psychiatric inpatient service. *Nursing Times*, *102*(3), 42.

Rubenstein, L. V., & Pugh, J. (2006). Strategies for promoting organisational and practice change by advancing implementation research. *Journal of General Internal Medicine*, *21*, Article 58. https://doi.org/10.1007/s11606-006-0276-8

Schneebli, C., O'Brien, A., Lampshire, D., & Hamer, H. P. (2010). Service user involvement in undergraduate mental health nursing in New Zealand. *International Journal of Mental Health Nursing*, *19*(1), 30–35. https://doi.org/10.1111/j.1447-0349.2009.00642.x

Scott, P. A. (2006). Perceiving the moral dimension of practice: Insights from Murdoch, Vetlesen and Aristotle. *Nursing Philosophy*, *7*(3), 137–145.

Scott, S. M., & Scott, P. A. (2021). Nursing, and advocacy and public policy. *Nursing Ethics*, *28*(5), 723–733.

Shaw, E., Sivananthan, A., Wood, D. P., Partington, J., Reavy, A. P., & Fishwick, H. J. (2017). Use of prone position restraint within a mental health trust: A clinical audit of psychiatric practice and methods for improvement. *International Journal of Health Governance*, *22*(1), 52–60. https://doi.org/10.1108/IJHG-08-2016-0043

Smith, J. D., & Polaha, J. (2017). Using implementation science to guide the integration of evidence-based family interventions into primary care. *Families, Systems, & Health*, *35*(2), 125–135. https://doi.org/10.1037/fsh0000252

Stake, R. E. (2006). *Multiple case study analysis*. Guilford Press.

Te Pou o Te Whakaaro Nui. (2008). *Survey of seclusion and restraint reduction initiatives in New Zealand acute mental health services*. http://www.tepou.co.nz/

Te Pou o Te Whakaaro Nui. (2013). *Reducing Māori seclusion*. https://www.tepou.co.nz/resources/reducing-m%C4%81ori-seclusion-a-summary-report-with-recommendations-for-managers-and-leaders-of-mental-health-services

Te Pou o Te Whakaaro Nui. (2014). *Supporting seclusion reduction for Māori: Taiheretia tatou kia puta te hua*. https://www.tepou.co.nz/uploads/files/resource-assets/supporting-seclusion-reduction-for-maori-taiheretia.pdf

Te Pou o Te Whakaaro Nui. (2015). *Towards restraint-free mental health practice*. https://www.tepou.co.nz/uploads/files/resources/towards-restraint-free-mental-health-practice-may-15-web.pdf

Te Pou o Te Whakaaro Nui. (2017a). *Safe practice effective communication*. https://www.tepou.co.nz/news/safe-practice-effective-communication-launch/911

Te Pou o Te Whakaaro Nui. (2017b). *Variation in DHB seclusion rates: Mental health services*. https://www.tepou.co.nz/uploads/files/resources/Variation-in-DHB-seclusion-rates_web-version.pdf

Te Pou o Te Whakaaro Nui. (2019). *Literature themes in least restrictive practice*. https://www.tepou.co.nz/resources/six-core-strategies-literature-review

Tolli, S., Kontio, R., Partanen, P., & Haggman-Laitila, A. (2021). Conceptual framework for a comprehensive competence in managing challenging behaviour: The views of trained instructors. *Journal of Psychiatric and Mental Health Nursing*, *28*(4), 692–705. https://doi.org/10.1111/jpm.12722

Tucker, J., Whitehead, L., Palamara, P., Rosman, J. X., & Seaman, K. (2020). Recognition and management of agitation in acute mental health services: A qualitative evaluation of staff perceptions. *BMC Nursing*, *19*(1), Article 106. https://doi.org/10.1186/s12912-020-00495-x

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, *15*(3), 398–405. https://doi.org/10.1111/nhs.12048

Watson, J. (1979). *Nursing: The philosophy and science of caring*. Little, Brown and Company.

Webster, S. (2013). *Health professional's experiences of implementing seclusion and restraint reduction strategies in an acute mental health unit* [BHSc thesis, Auckland University of Technology]. https://www.tepou.co.nz/uploads/files/resources/dissertation-health-professionals-experiences-of-implementing-seclusion-and-restraint-reduction-strategies.pdf

Wharewera-Mika, J. (2008). Mental health inpatient services: Improving our understanding of the needs of Maori when acutely unwell. In M. Levy, L. W. Nikora, B. Masters-Awatere, M. Rua, & W. Waitoki (Eds.), *Claiming spaces: Proceedings of the 2007 National Maori and Pacific Psychologies Symposium* (pp. 92–96). https://hdl.handle.net/10289/1550

Wharewera-Mika, J., Cooper, E., Wiki, N., Field, T., Haitana, J., Toko, M., . . . McKenna, B. (2016). Strategies to reduce the use of seclusion with tāngata whai i te ora (Māori mental health service users). *International Journal of Mental Health Nursing*, *25*(3), 258–265. https://doi.org/10.1111/inm.12219

Wieman, D. A., Camacho-Gonsalves, T., Huckshorn, K., & Leff, S. (2014). Multisite study of an evidence-based practice to reduce seclusion and restraint in psychiatric inpatient facilities. *Psychiatric Services*, *65*(3), 345–351.

Wilson, C., Rouse, L., Rae, S., & Kar Ray, M. (2017). Is restraint a 'necessary evil' in mental health care? Mental health inpatients' and staff members' experience of physical restraint. *International Journal of Mental Health Nursing*, *26*(5), 500–512. https://doi.org/10.1111/inm.12382

Wilson, C., Rouse, L., Rae, S., & Kar Ray, M. (2018). Mental health inpatients' and staff members' suggestions for reducing physical restraint: A qualitative study. *Journal of Psychiatric and Mental Health Nursing*, *25*(3), 188–200. https://doi.org/10.1111/jpm.12453

Wogan, E. T. (2018). *An evaluation of the DASA tool in an acute inpatient unit in New Zealand* [Unpublished master's thesis]. University of Auckland.

Wolfaardt, T. (2013). *An evaluation of the six core strategies intervention to reduce seclusion and restraint episodes in an acute mental health unit* [BHSc thesis, Auckland University of Technology]. https://www.tepou.co.nz/resources/dissertation-an-evaluation-of-the-efficacy-of-the-six-core-strategies

Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam and Stake. *The Qualitative Report*, *20*(2), 134–152. http://www.nova.edu/ssss/QR/QR20/2/yazan1.pdf

Yin, R. (2018). *Case study research and applications* (6th ed.). SAGE.

Appendix A

Participant Information Sheet

20 February 2019

The development and implementation of a national programme for aggression management for mental health services in Aotearoa: A case study.

You are invited to take part in research that is aiming to describe the development and implementation of a national programme for aggression management for mental health services in Aotearoa New Zealand.

This research intends to improve practice and seeks to describe the process of developing and implementing a new national practice framework. The aim is to gather information and explore participant experiences. This is to produce a clear description of what a national training should contain and how organisations and people have supported its introduction in practice.

I am a student in the Doctor of Health Science programme at AUT and work as Clinical Nurse Director and Director of Mental Health Services at Counties Manukau District Health Board.

Your participation in this research would be highly valuable and would contribute to new knowledge in managing aggression and supporting de-escalation in acute mental health services in Aotearoa New Zealand. Should you wish to withdraw or change your mind during the process of participation, there will not be any disadvantage to you in any way.

What is the purpose of this research?

Achieving agreement of clinical leaders for a standardised training approach for aggression management in all acute mental health across the nation is unique and remarkable. Using descriptive case study as a methodology, this study intends to answer the following primary question:

How did mental health services in Aotearoa develop and implement a national training for aggression management and de-escalation?

Secondary questions to be examined in the case study include:

- How does the training content and process align with international best practice guidelines for aggression management?
- How did the national clinical leaders achieve consensus on one evidence-based training package?
- How have the training and new aggression management practices been implemented in one DHB?

Traditionally in Aotearoa New Zealand, workforce development that teaches strategies in managing highly challenging behavioural situations has been left up to individual employers in the District Health Boards (DHBs). Variance in the rates of restrictive intervention use across DHBs is indicative of the mixed success of localised responses (Te Pou o Te Whakaaro Nui, 2017b). To address this there has been the development of a standardised training programme focusing on preventing restrictive interventions and the safe application of restraint when use of force is deemed necessary. This programme is called Safe Practice, Effective Communication (SPEC) (Te Pou o Te Whakaaro Nui, 2017a). Achieving national agreement for this approach is unique and remarkable. However, there is little understood about the how this training was adopted across the country and how it has been implemented at both nationally and at a local DHB level.

This research, using a case study methodology, intends to a) review the SPEC training content and process using international best practice guidelines for aggression management, b) describe the development of SPEC from twenty separate and disparate trainings to one evidence-based national training package and c) explore how this initiative is being accepted, implemented and supported at a local level.

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

You have been identified as an expert in this area and a person who will have valuable knowledge that will help this research.

How do I agree to participate in this research?

Your participation in this research is voluntary (it is your choice) and whether 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?

This project involves one to one semi- structured interviews with a range of identified experts, combined with document analysis drawn from a DHB that has experienced full implementation and review of the content of the national training to determine the best practice content for aggression management and de-escalation training.

What are the discomforts and risks?

Every effort will be made to ensure your contribution is anonymised however given the unique nature of the subject matter and the small pool of experts to draw on, it cannot be guaranteed. Every effort will be made to ensure any direct quotes will be checked with you prior to final thesis submission to seek your permission.

What are the benefits?

This research will contribute to new knowledge identifying critical success factors for implementation of a national approach for clinical training. It is expected that it will explain and describe the local level challenges when delivering a nationally consistent approach. In addition, it is anticipated that research conclusions will be useful for other jurisdictions who are attempting to standardise clinical trainings and will influence the ongoing national implementation.

This research intends to improve practice and seeks to describe the process of developing and implementing a new national practice framework. The aim is to gather information and explore participant experiences. This is to produce a clear description of what a national training should contain and how organisations and people have supported its introduction in practice. The focus is on producing a practical and clear report to inform future practice development.

How will my privacy be protected?

Please be reassured that confidentiality agreements are signed with the typist who will be transcribing the audio recording of our interview, I will check the transcription with you for accuracy before analysis will take place. All data collected will be kept securely in a locked cupboard in line with AUT guidelines. Any questions regarding this can be directly to me at the contact details below.

What are the costs of participating in this research?

There are no costs to you and you will be offered a small voucher as a token of appreciation for your time.

What opportunity do I have to consider this invitation?

I want to offer you the opportunity for the interview to occur at a time and place that is most suitable to you, and you will have up to three months to consider this opportunity.

Will I receive feedback on the results of this research?

Yes, and at the interview we will discuss how you would like that occur.

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 Brian McKenna, brian.mckenna@aut.ac.nz 09 921 9999 ext 7507

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, *ethics@aut.ac.nz* , 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:

Anne Brebner. Tel: 021970062. Email: annebrebner@xtra.co.nz

Project Supervisor Contact Details:

Dr Brian McKenna. brian.mckenna@aut.ac.nz 09 921 9999 ext 7507

Appendix B

Consent Form

For use when interviews are involved.

Project title: The development and implementation of a national programme for aggression management for mental health services in Aotearoa: A case study.

Project Supervisor: ***Dr Brian McKenna***

Researcher: ***Anne Brebner***

- ○ I have read and understood the information provided about this research project in the Information Sheet dated 20th February 2019 .
- ○ I have had an opportunity to ask questions and to have them answered.
- ○ I understand that notes will be taken during the 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○

Participant's signature: .....

Participant's name: .....

Participant's Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 20th February 2019 AUTEC Reference number 19/23

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