Evaluation for Kia Ora Hauora

National Workforce Development Programme



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EXECUTIVE SUMMARY

The Kia Ora Hauora Māori health workforce development programme is strategically important in Aotearoa. The national programme aims to promote careers for Māori in the health and disability sector and increase Māori health workforce capability.

Kia Ora Hauora was established in 2009 in response to the national and international shortage of health sector workers and the demand for more Māori health professionals. A core element of He Korowai Oranga, the Māori Health Strategy, is Māori workforce development, including increasing cultural capability and capacity. The importance of Kia Ora Hauora in realising these goals cannot be understated.

Kia Ora Hauora is led by four District Health Board (DHB) hubs which actively deliver the programme within their rohe. They are, Northern, Midlands, Central and Te Waipounamu. The continued funding since 2009 has enabled the programme to embed continuous improvement practice and significantly impact the recruitment and retention of Māori into health career pathways.

A priority focus is to increase Māori employment in District Health Boards to reflect their local populations by 2025. According to the Kia Ora Hauora website "this means 6,500 new Māori health workers in the next seven-years across the health sector."

Over the next few years Kia Ora Hauora aims to:

 Recruit over 2,400 new Māori onto a health study pathway

- Support at least 600 new Māori to enter first year, health-related tertiary study
- Support 400 new Māori graduates to successfully transition into health-sector employment.

Ihi Research undertook an evaluation to better understand the effectiveness and impact of Kia Ora Hauora, and its value and significance, with the aim of providing information for continuous programme improvement. The evaluation methodology utilised a kaupapa Māori approach through an exploratory sequential mixed-method design that employed both qualitative and quantitative data and analyses. A published, peer reviewed literature review (Curtis, Wikaire, Stokes & Reid, 2012) exploring best practice for recruitment of Māori and other indigenous students into tertiary health programmes provided a framework from which to analyse the evaluation evidence.

This evaluation builds on previous evaluations, that have found Kia Ora Hauora makes a vital contribution to realising the best health outcomes for Māori through workforce development.

The programme provides an essential kaupapa Māori approach, that strengthens Māori engagement and

success in health-science related careers. Kia Ora Hauora is delivered by Māori for Māori, utilising te reo Māori, Māori role models, networked events, health career experiences and supported pastoral care, which motivate and engage students. The programme contributes to a positive personal and collective identity for students. Career aspirations and expectations rise because of engagement and a sense of belonging to a network of Māori health professionals is evident.

Kia Ora Hauora staff are a key to the success of the programme. Kia Ora Hauora leadership and staff are embedded in their local communities, working in partnership with local institutions and health providers. They provide a bridge from school, through to tertiary study and into the workforce. The quality of the relationships are a key feature of support and success. Staff are passionate about the Kia Ora Hauora kaupapa and are continually refining their approaches to ensure the programme meets its potential.

Evidence highlighted the contribution Kia Ora Hauora is having on the health and education sectors, particularly in relation to increasing the number of Māori engaging in health-science related career pathways. The 2019 Kia Ora Hauora National Coordination Centre Quarterly Report noted that the following contract outcomes had been achieved:

3,189
students currently registered with Kia Ora Hauora

428
new Māori recruited onto a health study pathway this quarter

491
employed in health sector, 305 clinical roles
roles and 104 in non-clinical roles

1,685
tertiary students registered with Kia Ora Hauora

Kia Ora Hauora has enabled students to engage in their studies, raised career expectations and options, and better prepared students for job applications and interviews. There was a protective element of Kia Ora Hauora, that enabled students to believe they can succeed as Māori in health-science related careers and challenged negative stereotypes of Māori as underachievers. Student and alumni consistently reported they were highly motivated and committed to serving the Māori community through a health career

Kia Ora Hauora alumni report increased confidence, supportive transitioning to employment and positive changes in their personal lives because of being engaged in the programme.

Evaluation evidence highlights the many interrelated benefits of Kia Ora Hauora and the considerable impact it is having on those engaged. To build on this success, continuation and extension of Kia Ora Hauora is strongly recommended.

KIA ORA HAUORA

Kia Ora Hauora is a national Māori health workforce development programme aimed at promoting careers for Māori in the health and disability sector.

The programme was established in 2009 in response to the national and international shortage of health sector workers and the demand for more Māori health professionals. Addressing the underrepresentation of indigenous health professionals is recognised internationally as being an integral component of the overall response to overcoming indigenous health inequities (Ratima, Brown, Garrett, Wikaire, Ngawati, Aspin, Potaka, 2008). Throughout the world indigenous students face significant barriers to participation and success in health education and the situation is no different within Aotearoa (Curtis, Wikaire, Stokes, Reid, 2012). For example, while Māori make up 15 percent of New Zealand's general population, they are considerably under-represented in primary care health professional roles (Curtis et al, 2012). Ethnic proportions of health professionals in 2012 showed 2.6 percent of doctors are Māori, seven percent are nurses and 2.1 percent are dentists (Curtis et al, 2012). New Zealand employs a high number of overseas trained doctors. Evidence suggests a lack of cultural concordance between patients and health professionals (Jansen et al., 2008) may reduce patient satisfaction, access, and adherence to treatments (Cooper et al., 2004; LaVeist, 2003). As Curtis et al explain "under-representation of indigenous peoples within health professions reduces the potential of the health sector to provide a diverse, capable and culturally appropriate workforce that meets the needs of indigenous communities" (2012, p. 2). Understanding how best to achieve indigenous health workforce development has been identified as a

challenge internationally and within Aotearoa (Curtis et al., 2012).

Under Te Tiriti o Waitangi the Ministry of Health, as steward and kaitiaki of the health and disability system (under Article I), has a responsibility to enable Māori to exercise their authority (under Article II) and ensure the health system achieves equity in health and wellness for Māori (Article III) in ways that enable Māori to live and thrive as Māori (the Ritenga Māori Declaration¹). These obligations are reflected in the principles of Te Tiriti as they apply to the health and disability sector, specified in the Waitangi Tribunal's recent Hauora report (Waitangi Tribunal 2019; Whaanga, 2020).

He Korowai Oranga: Māori Health Strategy (Ministry of Health, 2014) sets the overarching framework that guides the Government and the health and disability sector to achieve the best health outcomes for Māori. Originally published in 2002, the refreshed framework was strengthened in 2014 by the addition of core components. Under consultation in 2020, The Draft Māori Health Action Plan proposes eight priority areas. One of these priority areas is workforce development, with the aim of enabling a hauoracompetent workforce along with more Māori in the health and disability workforce (Whaanga, 2020). A key component in achieving health equity for Māori and Pacific peoples includes the development of a diverse health workforce that reflects the population and society it aims to serve (Curtis et al., 2015).

¹ The Ritenga Māori declaration (often commonly referred to as the 'fourth article') was drafted in te reo Māori and read out during discussions with rangatira concerning Te Tiriti o Waitangi. It provided for the protection of religious freedom and the protection of traditional spirituality and knowledge.

Consequently, Kia Ora Hauora is strategically important for the Ministry of Health and to New Zealand. Kia Ora Hauora is led by four District Health Board (DHB) hubs which actively deliver the programme within their rohe. They are:

- Northern
- Midlands
- Central
- Te Waipounamu

Kia Ora Hauora provides support and programmes to motivate, engage and recruit Māori secondary and tertiary students, current Māori health workers, and Māori community members in health-careers, both clinical and non-clinical. Kia Ora Hauora provides information that highlights knowledge, tools, and resources to enable Māori to get started and/ or advance along a health career pathway. Once engaged, Kia Ora Hauora provides opportunities for students to see the 'health sector in action' through mentoring and local events including; hospital visits, open days, science days, workshops, wānanga, and tertiary events supporting a better understanding of professions across the health and disability sector. Kia Ora Hauora also offers scholarship support for Māori participants to support health related studies.

The Kia Ora Hauora programme is underpinned by a clear logic. There are five workstreams:

- Recruit more Māori into health
- Support science achievement
- Support tertiary success
- Transition to work
- Deliver results

Kia Ora Hauora has key objectives and performance targets outlined in its current programme logic. Over the next few years Kia Ora Hauora aims to:

 Recruit over 2,400 new Māori onto a health study pathway

- Support at least 600 new Māori to enter firstyear, health-related tertiary study
- Support 400 new Māori graduates to successfully transition into health-sector employment.

The programme aims to achieve this through:

- Increasing access to Māori health career information nationally, regionally and locally
- Increasing uptake and achievement by Māori students in secondary school science
- Increasing recruitment of Māori tertiary students studying a health or health related qualification
- Increasing retention rates for Māori tertiary students studying for a health or health related qualification.

These objectives and specific performance targets are essential for tracking and monitoring purposes, and to focus improvement work. In addition, the programme logic identifies key actions aligned to programme workstreams, such as, 'work with employers to achieve equitable employment outcomes' and 'build on relationships to accelerate programme performance'. These are important to achieve key performance targets. Kia Ora Hauora has a priority focus to increase Māori employment in District Health Boards to reflect their local populations by 2025. According to the Kia Ora Hauora website "this means 6,500 new Māori health workers in the next seven-years across the health sector."

The following section explains the evaluation design. The report is structured to respond to the following research objectives:

- Evaluate the effectiveness of the programme
- Ascertain impact, value, and importance
- Provide information to continually improve national coordination.

EVALUATION DESIGN

The evaluation design utilised a kaupapa Māori approach applying an exploratory sequential mixed-method design that included both qualitative and quantitative data collection and analyses.

The methodology was guided by the following evaluation objectives:

- Evaluate the effectiveness of the programme.
 - Ascertain impact, value, importance, as well as enablers and barriers.
- Provide information to continually improve national coordination.

The evaluation was undertaken in different phases and triangulated findings from different groups of stakeholders and information/data sources through analysis.

Phase 1

Document review

Phase 2

Interviews & surveys

Phase 3

Data analysis & synthesis

PHASE 1: DOCUMENT REVIEW

The first phase of this investigation was a document review. The purpose was to gain a picture of the programme across the regions it operates in, to ascertain the impact, and build on the research and evaluation work undertaken over the past 10 years. A total of 10 evaluation reports were reviewed. These included national evaluations of Kia Ora Hauora, National Coordination Centre (NCC) Quarterly Reports, Kia Ora Hauora Regional Quarterly Reports, as well as a research article on the Kia Ora Hauora programme impact. In addition to this information,

individual participant workshop evaluations were analysed for Kia Ora Hauora workshops delivered in the Northern and Midlands regions. Other Kia Ora Hauora documents that were reviewed included the Kia Ora Hauora programme logic model, Kia Ora Hauora Iwi Engagement Strategy and Plan, Pūhoro Kia Ora Hauora Strategy, and Kia Ora Hauora Connect Information Paper. Overall findings were then used to construct stakeholder interviews and two national surveys.

PHASE 2: INTERVIEWS AND SURVEYS

Phase 2 involved semi-structured interviews with 21 participants. These included tertiary students, Kia Ora Hauora alumni, whānau, Kia Ora Hauora staff and other stakeholders (such as tertiary lecturers and DHB representatives). Participants were located across the four regions. Key themes emerging from both document analysis and interview findings informed the development of two national surveys. The first survey was for Māori tertiary/university students currently enrolled in Kia Ora Hauora and

the second was for Kia Ora Hauora alumni who had graduated from their studies. The aim was to establish trustworthiness of interview and document findings associated with the impact of Kia Ora Hauora, as well as identify key enablers and barriers. Eighty-six participants responded to the tertiary student survey with 68 participants completing the survey to the end. Fourteen participants engaged with the Kia Ora Hauora alumni survey, with 10 completing it.

PHASE 3: DATA ANALYSIS AND SYNTHESIS

The third phase incorporated analysing the findings across phase 1 and 2. A literature review exploring 'best' practice² for recruitment into tertiary health programmes provided a framework from which to analyse the data collected. This literature review was part of a larger PhD study investigating best practice for recruitment of indigenous Māori secondary school students into tertiary health programmes

in a New Zealand context. A Kaupapa Māori Research methodological approach was utilised to review literature (Curtis et al., 2012). A total of 70 articles were included. The literature clearly frames recruitment activity as occurring across a pipeline that extends from secondary through to tertiary education contexts and in some instances vocational (postgraduate) training.



² According to Curtis (2012) best practice can be a contentious and potentially value laden term, for the purpose of this evaluation the framework provided a structure from which to understand the complexity of running a large scale, national workforce development programme.

Six broad principles, to inform and enhance the potential of indigenous recruitment programmes to achieve success for indigenous health workforce development, were identified.

- Frame recruitment initiatives within an indigenous worldview that considers indigenous rights, realities, values, priorities, and processes.
- Demonstrate a tangible institutional commitment to achieving indigenous health workforce equity via the development (and proactive support of) a mission statement/vision and appropriate policies and processes.
- dentify the barriers to indigenous health workforce development and use these to frame recruitment initiatives within your
- Conceptualise and incorporate recruitment activity within a comprehensive and integrated pipeline model that operates across secondary and tertiary education sectors via the provision of early exposure, transitioning, retention/completion and postgraduation activities.
- Increase engagement with parents, families, and indigenous communities (including tribal groups) within all recruitment activities, but particularly early exposure.
- Incorporate high quality data collection, analysis, and evaluation of recruitment activities within programmes with the publication of results where possible.

In the next section these six board principles have been used as a national evaluation framework to determine the success of Kia Ora Hauora. To ascertain value, impact and importance data was analysed to look for positive impacts, and areas of value added. This report presents a synthesis of the findings across both phases.

For further information on the evaluation methodology, including characteristics of participants, ethical considerations and data collection and analyses refer to Appendix 1.

LIMITATIONS

It is important to note that the two surveys were delivered for students and alumni at a time that coincided with the COVID-19 virus pandemic. Participation rates for the two surveys were modest, however the overall survey findings related to impact were consistent with the document and interview analyses, and these data sources complemented each other.

CHAPTER 1

Outcome Data

This chapter examines outcome data, particularly whether Kia Ora Hauora is meeting its targets in relation to supporting Māori on health study pathways, recruiting, and supporting into tertiary as well as transition into employment.

As identified earlier, Kia Ora Hauora has key objectives and performance targets outlined in its programme logic. Over the next few years Kia Ora Hauora aims to:

2,400

Recruit over 2,400 new Māori onto a health study pathway 600

Support at least 600 new Māori to enter first-year, healthrelated tertiary study 400

Support 400 new Māori graduates to successfully transition into healthsector employment

In addition, Kia Ora Hauora has a priority focus to increase Māori employment in District Health Boards to reflect their local populations by 2025. According to the Kia Ora Hauora website "this means 6,500 new Māori health workers" across the health sector. This is an ambitious and important target. The following section explores outcome data that demonstrates how Kia Ora Hauora is tracking against these goals.

INCREASED NUMBERS

There is clear evidence that Kia ora Hauora is making a significant difference to the number of tertiary students engaged in health-related study over time. Table 1 identifies the number of new tertiary students registered to Kia Ora Hauora each year (from 1st Jan - 31st Dec) across the four regions. Since 2009 there has been a significant increase of tertiary students registered with Kia Ora Hauora. No students were registered in 2009. Thirty-six students were registered in 2010 and by 2019 the number had grown to 1302. At the time of writing this report (May 2020) Kia Ora Hauora had registered 532 new tertiary students. The total number of new tertiary students registered with Kia Ora Hauora over the past 11 years, has been dramatic. There are now 3557 tertiary students who have been registered with the programme.

Regional variations suggest some regions have been more successful than others. Since 2017 the Northern region has consistently registered the most tertiary students and by 2020 had registered the highest total of 1240. The Northern region practices could be further investigated to learn why their numbers have increased so dramatically. In 2012 they registered eight new tertiary students and by 2019 this number had risen to 453.

The number of alumni registered with the programme has also increased, though not as dramatically as the numbers of new tertiary students. The number of alumni registered in 2009 was 0, and in 2010 this number had risen to 21. By 2015, the number of alumni grew to 124. Since 2015 there has been a slight drop off in alumni registrations and by 2019 the number had fallen to 87. The reasons for this decline are not known. However, the total numbers of alumni registered have risen to close to 700 from 2009 – 2020. This outcome data is explored in the following table.



Year	N	Total			
Region	Nor	Cen	Mid	TeW	
2009	0	0	0	0	0
2010	15	5	4	12	36
2011	14	9	2	9	34
2012	8	19	4	23	54
2013	18	24	11	25	78
2014	37	19	19	36	111
2015	46	39	61	64	210
2016	39	36	40	92	207
2017	154	49	102	92	397
2018	267	84	127	118	596
2019	453	301	248	300	1302
2020	189	129	118	96	532
Total	1240	714	736	867	3557
Year		Number of alu	mni registere	i	Total
2010	8	1	3	9	21
2011	13	6	2	8	29
2012	7	10	2	16	35
2013	11	11	9	19	50
2014	21	8	14	19	62
2015	30	20	48	26	124
2016	9	20	20	25	74
2017	36	13	41	17	107
2018	37	17	15	18	87
2019	18	26	13	30	87
2020	2	7		10	19
Total	192	139	167	197	695

Table 1: Numbers of new tertiary students registered to Kia Ora Hauora per region

Year	Male %	Female %
2009		
2010	23	77
2011	36	64
2012	19	81
2013	27	63
2014	17	83
2015	12	88
2016	18	82
2017	21	79
2018	17	83
2019	17	83
2020	16	84

Table 2. Gender Percentages of Registered Tertiary Students (2010-2020)

Data analysis provided by Kia Ora Hauora also shows the breakdown of tertiary students registered to Kia Ora Hauora by gender from 2010-2020. The table below indicates most registered tertiary students are female with numbers slightly increasing over time. However, the number of male students has been slowly declining over time. The highest percent of male tertiary students (36 percent) was recorded in 2011, by 2018 this number had dropped to 17 percent. Sixteen percent of tertiary students registered in 2020 are male, with the majority (84 percent) recorded as female.

There are economic benefits and added value related to increased numbers of female tertiary students engaging in the programme. A discussion of the return on investment is provided later in this report under an examination of benefits to wahine. However, the slow decline and underrepresentation of males in the programme requires further investigation. Research undertaken by Kidd (2013) into Māori men's experiences of chronic illness has highlighted the importance of tāne having access to Māori male professionals.

SUMMARY

The outcome data demonstrates that Kia Ora Hauora has exceeded its overall objective of supporting at least 600 new Māori to enter first year, health related study as well as succeeding its overall objective of supporting 2,400 new Māori onto a health study pathway. Data shows that 1797 tertiary students are registered with Kia Ora Hauora, and the programme can track how many of these students are completing their studies and when they will graduate with health-science related degrees. Although Kia Ora Hauora has set itself ambitious performance targets, these performance targets cannot be achieved without the support of key stakeholders, particularly secondary schools, universities and other tertiary institutions and employers.

Stakeholders within some tertiary institutions have reported increased numbers of Māori students

graduating in health science degree programmes. For example, a historic milestone was reported by the University of Otago (December 6th, 2018) when 76 Māori university students graduated with health professional degrees. The graduating cohort included 40 Māori doctors, 13 Māori physiotherapists and five Māori pharmacists³.

Otago University in partnership with Kia Ora Hauora provides access to 'See the Solutions' (STS) programme for Māori First-Year Health Science students and Year 11-13 high school students. University staff noted the increase in students as below.

"The National Coordination Centre (NCC) with Te Huka Mātauraka, Otago University Māori Centre have agreed to a service agreement for a better coordinated approach to programme

³ See https://healthcentral.nz/historic-number-of-maori-health-professionals-graduating/

developments, design and delivery to enhance the acceleration of programme outcomes. The purpose of this collaboration is to better support Māori to attain the required results in the Health Sciences First-Year (HSFY) curriculum to pursue their health career. We currently have 65 Māori HSFY students signed up for Semester One STS." (University stakeholder)

Evidence gathered through this evaluation highlights that Kia Ora Hauora undertakes significant partnership work with institutions such as Otago University to support Māori students to be successful in their studies.

OPPORTUNITIES

Kia Ora Hauora is a nationally significant programme that is achieving dramatic results. There is clear evidence that Kia ora Hauora has exceeded its performance target of recruiting over 2,400 new Māori onto a health study pathway. By May 2020, the number of tertiary students registered with Kia Ora Hauora increased to 3557. Data highlights that the number of Kia Ora Hauora alumni has dramatically increased since 2010. Nearly 700 (695) alumni are registered with the programme. This data would suggest that Kia Ora Hauora could well be exceeding its target of supporting 400 new Māori graduates to successfully transition into health-sector employment.

However, there is continued investment and ongoing refinements in the database and tracking of data when students enter institutions. Kia Ora Hauora can track how many of these students are completing their studies and when they will graduate with healthscience related degrees. The number of registered alumni suggest increasing numbers of tertiary students are completing their studies. However, is not yet clear how many of these graduates have taken up health-sector employment. Little is also known about the types of employment opportunities open to them. The enablers and inhibitors to male tertiary student engagement in Kia Ora Hauora also warrants further investigation. Improving the recruitment of tane is important to the strategic vision of ensuring the health workforce reflects the communities it serves. Longitudinal research is also recommended to track the experiences of Kia Ora Hauora alumni, the enablers, and barriers to successful transition into health-sector employment as well as career advancement.



CHAPTER 2

Best practice recruitment into tertiary health pathways

The aim of Kia Ora Hauora is to increase the overall number of Māori working in the health and disability sector.

The purpose of this chapter is to evaluate the 'best practice' aspects of the programme to better understand the quality of the programme and the opportunities for programme improvement. The data in this section is organised using the framework from Curtis et al. (2012). The principles provide a way in which to systematically organise and understand the evidence collected from previous evaluation work, and the data gathered in this national evaluation.

1. FRAMED WITHIN INDIGENOUS WORLDVIEWS

The first principle recommends that recruitment initiatives are framed within an indigenous worldview that considers indigenous rights, realities, values, priorities, and processes.

Kaupapa Māori programmes are culturally grounded, and weave tikanga Māori (Māori principles, values, and practices), mātauranga Māori (Māori knowledge), te reo Māori (Māori language) and te ao Māori (Māori perspectives/worldview) throughout all aspects of their programmes. They embrace and expect to see ngā kaupapa tuku iho (values gifted by tūpuna (ancestors) Māori) given expression within programme delivery, services, and support. Taonga Tuku Iho, the principle of cultural aspiration asserts the centrality and legitimacy of Te Reo Māori, Tīkanga and Mātauranga Māori. Within a Kaupapa Māori paradigm, these Māori ways of knowing, doing, and understanding the world are considered valid in their own right (Smith, 1992, pp. 13-14).

"It's Kaupapa Māori and it's facilitated by Māori for Māori and that makes a difference." (Kia Ora Hauora regional coordinator)

Results from participant interviews and analysis of the two national surveys demonstrated that Kia Ora Hauora supports identity and belonging, not just being Māori, but being part of a Māori health workforce. This is a significant strength of Kia Ora Hauora. Survey participants were asked to indicate which features of the Kia Ora Hauora programme had been most important in enabling them to stay engaged in studies. The tertiary student and alumni surveys indicated widespread agreement that key enablers were:

75%

The programme was facilitated by Māori for Māori.

66%

The programme operates from a Māori worldview and kaupapa.

58%

It provides a safe and inclusive space for students to be Māori regardless of their previous experiences, background, and connection to te ao Māori.

Survey results also indicated that participation in Kia Ora Hauora had strengthened some students' identity as Māori, increasing their confidence in te ao Māori and enabling participants to be Māori in health contexts

Importantly, Kia Ora Hauora is delivered through kaupapa Māori approaches and has cultural value (King & Associates, 2015). It is delivered by Māori for Māori and this has been identified as a key enabler of success (King, Pipi, Wehipeihana, 2012; King et al., 2015).

"Kia Ora Hauora has made me become far more in-tune with my Māori culture as it has allowed me to grow in so many aspects with the opportunities it provides." (Student)

Information, communications and support services are provided in Māori specific ways. Connections are able to be made with rangatahi and other target groups through the use of te reo Māori, Māori role models, Māori places and events (King et al., 2012; King et al., 2015). Regardless of the connections, skills and capabilities that students bring, they are valued. The data gathered in this evaluation noted five key cultural

values that underpinned all activity; kaupapa whānau and whanaungatanga, kotahitanga, manaakitanga and tuakana teina.

Whanaungatanga

Whanaungatanga is evident within the programme planning structure. Kia Ora Hauora actively supports connection and relationship development through a wider social support network for students and alumni. The social support network was an important structure of support for students throughout the pathway.

"It's hard to describe but Kia Ora Hauora, it's really a whānau thing, like feeling. Being amongst your peers and with people who are supporting you. That really ticked boxes for me with being able to be comfortable in a setting that I aspire to be in with like-minded people. Just feeling that being Māori is sort of normalised and that family feeling, whakawhanaungatanga relationship building." (Student)

Kia Ora Hauora activities and events respond to the diverse needs of the students who attend. They report feeling included and safe. This was particularly important for those who felt disconnected from their Māori culture. There was personal encouragement and support, including help with cultural events when needed.

"I wasn't really connected to my Māori side, and I don't speak the language, but Kia Ora Hauora has always been really welcoming and I always felt included." (Student)

The value the Kia Ora Hauora staff place on relationships with students and stakeholders is evident in the data. Past evaluations have noted the importance of Kia Ora Hauora staff (King et al., 2012). They are committed to the kaupapa and understand the importance and impact that a strengthened Māori health workforce will make on Māori health services. They connect to and understand the Māori world (King et al., 2012). They relate well to rangatahi and other participants.

Analysis of participant evaluation forms made available to Ihi Research indicate that Kia Ora Hauora staff

were valued by the participants attending programme workshops and activities. Regional co-ordinators note that relationships are central to all activity, with stakeholder relationships an important part of enabling access for students, as described here:

"It's my relationships with my stakeholders that get my students' hospital exposure or mentor exposure or anything they need. But it is 100 percent about my relationships. You need to go the extra mile to connect with people inside the institution, whether that's high schools or tertiary institutions, and if people didn't like me, they wouldn't work with me, which meant my students would miss out. And I have seen that with a tertiary provider I worked with. My key contact left, and a new person has come in, and the new one just hasn't engaged with me. Which means my students miss out... so you just have to keep working at it." (Kia Ora Hauora regional coordinator)

The staff at Kia Ora Hauora, particularly regional coordinators, set the tone and provide the cultural and social supports which enable success. The effort staff put into relationships with students and stakeholders was particularly noted across interview and survey analysis. Whanaungatanga, led by the passionate and committed staff, is evident in the programme planning, noted in the evaluation data and a key enabler accross the Kia Ora Hauora network.

Manaakitanga

The relationships established through the programme extended to manaakitanga. Literally, manaakitanga means to "care for a person's mana" their wellbeing, in a holistic sense. Rather than Kia Ora Hauora being a viewed as a recruitment programme, university/tertiary staff and lecturers noted the additional care and support provided to students by the Kia Ora Hauora staff, and the environment they created.

"In terms of the impact, I've seen the students who have engaged with Kia Ora Hauora feel a wrap-around service. There has been that lovely feeling of whanaungatanga. There is somewhere else I can go for support. Obviously, the physical

assistance for filling in scholarship applications and financial support is huge as well. But it is so much deeper than that. That is what I've seen. It's that feeling of pastoral care too." (University/tertiary lecturer)

Students were particularly grateful for the care and support they received through Kia Ora Hauora. Seventy-four percent of students believed that engagement in Kia Ora Hauora had led to positive changes in their personal lives. Pastoral care extended to practical help with scholarship and work-place applications, as well as advice and guidance when students faced specific challenges that threatened their engagement. Fifty-seven percent of surveyed students believed the practical support offered by Kia Ora Hauora was a key enabler of engagement

"Kia Ora Hauora has just been an absolute lifesaver for me. Honestly, I couldn't even thank them enough for everything they've done, from helping me with my scholarship application to supporting me with summer internship positions." (Student)

Kia Ora Hauora regional coordinators were viewed as 'going the extra mile' for their students and extra efforts were appreciated.

"I could call them 24/7, and they're always there and just giving me opportunities that I never would've had if I hadn't gotten it from them." (Student)

In addition, almost 30 percent of students (29%) identified that the personal assistance received from Kia Ora Hauora, for cultural events, such as noho marae or mihi whakatau had enabled them to say engaged.

Kotahitanga

Being part of a wider kaupapa whānau, a larger network of Māori health professionals dedicated to making a difference, was particularly motivating for student and alumni. In te ao Māori, kotahitanga, is the feeling of belonging, and a sense of collective action. Becoming part of the Kia Ora Hauora social

network of Māori health professionals was enabling for students and alumni. It spoke to their sense of belonging to a group of professionals dedicated to making a difference to Māori health and wellbeing. Students were able to 'imagine their future selves' as role models and see themselves becoming part of a dedicated Māori health workforce.

"Knowing that I have the support of other Māori health professionals has been immensely valuable and has increased my pride of being Māori." (Student)

The purposeful social networking opportunities and internships extended to student and alumni created a sense of belonging for many of the students.

Seventy-two percent of student survey participants indicated the vision of Kia Ora Hauora and its focus on improving health inequities was an important enabler for their engagement. Kia Ora Hauora's vision of transformation was particularly motivating, creating a sense of belonging and encouraging collective action.

"Kia Ora Hauora showed us the health and equities between the Māori and non-Māori population and some of the reasons behind those inequities and how we could help turn that around.... And then we got involved with some Māori high school students through Kia Ora Hauora. We were able to tell them, 'this is what they've (Kia Ora Hauora) helped us with, this is how you guys, as professionals can help'. If the population in the workforce matched the demographic in New Zealand, we would see more changes." (Student)

Tuakana Teina

The creation of a social network and engaging Māori health students as role models is an example of the tuakana (older person) teina (younger person) relationship. This style of mentoring is specific to the cultural traditions of Māori teaching and learning. A recurring theme in the interview and survey data from this evaluation was the importance of meeting Māori role models and engaging with other Māori health students. This was keenly observed by lecturers, as described here:

"I think a key enabler of Kia Ora Hauora is giving Māori students increased opportunities to meet their role models, it's actually seeing Māori professionals who are working in the workforce, and also the tikanga, the protocols involved in the programme and all those sorts of things that are having an impact." (University/tertiary lecturer)

Māori students engaged in the programme noted the importance of meeting and working alongside Māori health professionals.

"Just having access to Māori role models is hugely important... because there are so few Māori in the health sector. So having those idols, those role models to look up to is definitely a confidence booster and something that lets you know that yep, you know you can get this mahi done, and if you get this work done, it will be your leadership one day, you will be up there being a role model for the next lot to come through and it's a chance to give back." (Student)

Survey results highlighted the network, access and connection to Māori role models working in health-science related careers as an important feature of the programme that enabled students to stay engaged in their studies. For example, 42 percent of students identified the Kia Ora Hauora network that connected Māori students studying health-science related subjects as an important enabler of engagement. Thirty-four percent of students selected access and connection to Māori role models as a key enabler.

Evaluation evidence confirms that Kia Ora Hauora reflects the first principle of best practice for recruitment initiatives as identified by Curtis et al. (2012). Kia Ora Hauora is framed within an indigenous worldview that takes into account indigenous rights, realities, values, priorities and processes. Findings demonstrate that importance of Kaupapa Māori values and processes within Kia Ora Hauora. Importantly results show that Kia Ora Hauora supports identity and belonging, not just being Māori, but being part of a Māori health workforce. This is a significant strength of Kia Ora Hauora. The findings from this evaluation confirms previous studies that have highlighted the cultural value of the programme (King et al., 2012; King et al., 2015).

Opportunity

Evaluation results have emphasised the importance and impact of Kaupapa Māori values and approaches within the Kia Ora Hauora programme. These findings contribute to a growing body of knowledge that highlights the importance of recruitment initiatives for indigenous health professionals being framed within an indigenous worldview. There is an opportunity for Kia Ora Hauora to share its framework and success

more widely, both in Aotearoa and internationally. Kaupapa Māori priorities and processes are firmly embedded within Kia Ora Hauora and contribute to its success. Such findings need to be widely shared with key stakeholder groups, particularly within secondary schools, tertiary institutions and with employers who also are responsible for ensuring equitable access and success for Māori within health-science related career pathways.

2. DEMONSTRATING A TANGIBLE COMMITMENT TO EQUITY

The second principle recommends that programmes demonstrate a tangible institutional commitment to achieving indigenous health workforce equity via the development (and proactive support of) a mission statement/vision and appropriate policies and processes.

Kia Ora Hauora clearly articulates the programme vision (moemoeā) as,

Whakamau, Whakau, Whakaora i te Ao Māori! Recruit, Retain and Revitalise the Māori health workforce!

and the goals (whāinga),

- To support Māori into a health career
- To increase the workforce numbers of Māori health and disability employees at all levels and professions

Kia Ora Hauora communicates a clear vision for improving health inequities for Māori communities and this is motivating for students and their whānau. Students talked about how they felt part of a movement dedicated to making a difference in whānau health. 'Making a difference' has been noted as an important personal impact for students as they realise the challenge to redress Māori health inequities within the system.

Rather than developing an institutional commitment to equity, Kia Ora Hauora has developed a programme of addressing health inequity across the pipeline. This was a recurring theme in the interview and survey data indicating it was important to students to be part of the solution towards achieving Māori health equity. Student and alumni consistently reported they were highly motivated and committed to serving the Māori community through a health career.

"It has given me the opportunity to further develop myself with Māori health where my aim is to better serve my people." (Tertiary student)

"Being involved in Kia Ora Hauora really opened my eyes to Māori health statistics and the need for more Māori working in medicine. This was hugely motivating for me – just developing that awareness and that belief about what Māori can do for their own communities." (Student)

The challenge for Kia Ora Hauora is that they operate outside institutions spanning the education and health sectors. As a sector wide workforce development programme, the influence they have over the stakeholders is variable. There is evidence of Kia Ora Hauora Regional Coordinator interactions with the tertiary sector, both in challenging stereotypical assumptions about Māori students, and introducing new concepts and curriculum to institutions. This tertiary lecturer describes how Kia Ora Hauora staff have influenced the content of the programme.

"I found the Kia Ora Hauora regional coordinator to be spectacular. She goes over and above for our midwifery students, and she has absolutely reached out to me and engaged with me when there have been scholarships coming up. She's also made herself available to come through to hui that we've had here at (tertiary/university institution) about the curriculum in relation to Māori achievement and cultural responsiveness within the profession. So, she's come out of her way to attend those and offered support for us and ongoing learnings. Kia Ora Hauora has been incredible for that." (University/tertiary lecturer)

The survey and interview data from this evaluation indicates some students experienced racism and discrimination within the institutions. This had an impact on Māori student success and retention. During interviews students described these experiences and believed it was important for Kia Ora Hauora staff to have influence within the institutions. As described by this student:

"I think they (Kia Ora Hauora) need to work more inside the institutions.... I need someone to fight the system in the system.... The retention rate in midwifery across the country is poor, but for Māori the statistics are worse, yet in the healthcare system, we need more Māori midwives and they are always questioning why don't we have any? I'm like because there's no support inside the tertiary provider... some of the lecturers don't even know how to pronounce my name correctly." (Student)

There is evidence the Kia Ora Hauora staff are committed to equity and proactively support this in their interactions. Staff members discussed their role in challenging deficit assumptions and negative stereotypes throughout the pipeline from secondary schools and into the workforce. As this staff member describes.

"At times I have had to challenge people's assumptions about students and their ability to engage in health-science related study. One of the teachers/career advisers who I contacted about the Kia Ora Hauora programme said, 'We don't have any Māori students who could be doctors or medical professionals, but do you organise

sessions for hospital orderlies?' I had to gently challenge that person's assumption, because you need to keep the relationship open otherwise the students loses that opportunity to learn what's out there for them... but that negative stereotype is a threat to our students." (Kia Ora Hauora staff member)

The challenge for Kia Ora Hauora staff is to maintain positive relationships within schools and tertiary institutions while also challenging the deficit notions of Māori students.

"Our students at degree level, at tertiary level, are often struggling in the second year of their study. Retaining them in that space is out of our control. I am finding the tertiary institutes are not culturally responsive to Māori. It's a big issue I'm facing across my area and I get that directly from students telling me that, and they email me that and say, 'Are you able to influence or make this change?' and I'm unable to do that. Our students are still engaging with us, seeking support, and asking how they get around all of this. They want help with their studies, but they are not getting that support. We continue to support them, but our hands are tied, we just cannot make change in that tertiary space... there is no cultural responsiveness around supporting our students culturally, let alone academically... So, there isn't often a lot of support for our Māori students." (Kia Ora Hauora staff)

It is apparent that Kia Ora Hauora has been remarkably successful at increasing recruitment into health courses. The ability of the institutions to meet the needs of these students and increase the cultural capability of their staff, is a continued need. Several students noted that they were looked upon as a 'cultural resource' within their course, rather than the course increasing Māori students' cultural capabilities it drew from them. As described here.

"As a Māori student at a tertiary institute that does not have enough resources to support bicultural/kaupapa Māori training, I am constantly being looked at as a 'resource' and end up having to support the education of my peers. When we do get to a point where we are provided with bicultural training, it is never at a level that

is beneficial to me because we have to continually go over the basics for everyone else." (Student)

This appears to occur within tertiary institutions and the workplace. It is important to acknowledge the additional load these institutions place on Māori students and alumni as they progress through the system and into the workplace.

"It's a nice idea that the DHB is supportive, but I think there's a lot of variability. Like with my DHB, there are extra demands because I am Māori ... so our GM Māori says, 'It's in all of your contracts. It's in our strategic plan that all Māori staff should be able to make this meeting. 'Oh, this hui of Māori staff members at one o'clock every Monday once a month'... but you're still expected to go to all the other hui the DHB holds. Two-years ago I was the first doctor to attend despite having other Māori doctors employed at the DHB over a period of time. One, because they didn't know about it, two because the DHB didn't have any data on who were their Māori doctors, and three that actually our job doesn't allow time for us to do that

because of workload issues. So, that's the sort of pressure we are under." (Alumni)

Opportunity

These findings indicate that Kia Ora Hauora has a clear expressed commitment to equity. However, key partners, from schools and tertiary institutions through to workplaces, need to commit to equity and address marginalisation and discrimination occurring within their institutions. While students see a role for Kia Ora Hauora staff as advocates within institutions, this has implications for the relationships with their stakeholders. In addition, it would likely have minimal impact on changing institutional attitudes and practices. There is an opportunity for the institutions to delve into the experiences of Māori students within their health pathways and intervene by implementing culturally responsive approaches to support retention and success.

3. FRAMING INTERVENTIONS TO ADDRESS BARRIERS TO INDIGENOUS HEALTH WORKFORCE DEVELOPMENT

The third principle recommends programmes identify the barriers to indigenous health workforce development and use these to frame recruitment initiatives within local contexts.

Indigenous students face significant barriers to participation success in health education and understanding how best to achieve indigenous health workforce development still remains a challenge (Curtis et al., 2012). The data from this evaluation identified a series of barriers for Māori students engaging in health pathways and the response to these barriers by the Kia Ora Hauroa programme and staff.

Life challenges and pastoral care

Students and alumni reported personal life challenges that made studying difficult. These included transport and child-care issues and juggling family demands while engaging in health-science studies that carried heavy workloads. Heavy study workloads and financial demands appear to compromise the health and wellbeing of some students. There is considerable evidence that Kia Ora Hauora staff are aware of the financial and personal barriers that students face and are actively working to mitigate these barriers for students.

"Many of our students are struggling in the second year of their study. Retaining them in that space is out of our control because of the social issues they face within their immediate whānau. Study is way down the track because they're trying to put food on the table. They're trying to pay their bills; they're trying to put petrol in their car to get to study." (Kia Ora Hauora staff member)

Students and alumni reported they have received support from Kia Ora Hauora during their study. This support had encouraged them to stay engaged in study and achieve.

"It is great to know that support is there when needed. Regardless of how frequently I do or don't get in contact with Kia Ora Hauora, I know they are there for me whenever. It is very comforting." (Alumni)

"I have appreciated the aroha and tautoko that I have received from Kia Ora Hauora Staff." (Student)

Students and alumni reported Kia Ora Hauora staff members went 'the extra mile' and were accessible at any time. Responsive and timely communication was viewed by this student as being particularly helpful.

"I think the level of communication with the Kia Ora Hauora staff is huge and always really, really helpful. I was always kept in touch with everything that is going on, for instance whether it's phone calls, text messages, emails, just letting you know about the opportunities out there for you and being really encouraging." (Student)

Whānau members were also appreciative of the extra efforts Kia Ora Hauora regional coordinators gave to their work.

"Our Kia Ora Hauora regional coordinator is a dynamo. She is just so responsive and conscientious. She works all hours that God gives her. She is always there for us. We are so appreciative of her support. Can we have 10 more of her in our rohe please?" (Whānau)

The evaluation data suggests Kia Ora Hauora pastoral care is extremely important to students and whānau

alike, however it appears to be variable across the regions. While some students report consistent engagement and support, there were some who had not engaged at all with the pastoral support.

"As an individual who is a distance student my personal engagement with Kia Ora Hauora has been very limited." (Student)

"I have had no contact from anyone." (Student)

Staff workload issues and data were noted in a previous evaluation (King et al., 2012). Workload demands have increased over time and staff need to be able to reflect on data collaboratively so programme adjustments are made when needed. Interview comments with Kia Ora Hauora regional coordinators indicated that workload challenges and stakeholder relationships impacted on their ability to provide comprehensive and continuous pastoral support.

"We do our best with limited resources... and it also comes down to whether the DHBs fully support us and our role... and that's really variable." (Kia Ora Hauora regional coordinator)

Financial hardship and scholarship support

Financial challenges were related to the high costs and financial demands associated with engaging in health-related study. Barriers linked with finances are common for students studying in New Zealand. However, health related study is often more expensive than other courses adding additional financial pressure, particularly for those studying within professional health career pathways such as medicine and dentistry. Results from the tertiary student survey highlighted that 87 percent identified financial costs associated with study as a challenge or barrier to engagement. Similar results were found in the alumni survey. The effort put into addressing financial barriers by Kia Ora Hauora staff recognises the significance of financial barriers for many students.

"One of the biggest barriers our students face is related to personal finances. They have costs associated with their studies and everything else, transport, childcare... we need more scholarships available for our students." (Kia Ora Hauora staff)

"Taking off financial stress helps me to spend more time and energy on my studies rather than worrying." (Student)

Kia Ora Hauora provides much needed financial support, by enabling participants to apply and gain scholarships, internships, and work placements. Practical support was given to participants to develop robust applications, and this was viewed as particularly helpful.

"I received a lot of help with my application for scholarships and without that financial support I know I wouldn't have been able to continue with my studies." (Student)

"They have helped me with scholarships through hard times." (Alumni)

Fifty-seven percent of the students who responded to the survey indicated they had accessed support to apply for financial assistance and scholarships. Kia Ora Hauora scholarships and support to apply for scholarships meant students from lower socioeconomic backgrounds were able to access courses that are traditionally expensive, such as medicine, dentistry, and physiotherapy. Forty-two percent had accessed financial support from Kia Ora Hauora directly and 26 percent had received help to complete applications and access other opportunities. Practical assistance extended to supporting students to find summer employment and access internship positions over the holiday period. Sourcing income over this period is critical for students who are supporting themselves through study.

"Kia Ora Hauora has been an absolute lifesaver for me. Honestly. I couldn't even thank them enough for everything they've done, like helping me with my scholarship application to supporting me with summer internship positions." (Student)

"I have truly appreciated the support and involvement from Kia Ora Hauora and feel that without your help I may not have received the scholarships I was successful with last year." (Student)

The financial assistance provided by Kia Ora Hauora meant whānau were not burdened with the cost of health-related study.

"Kia Ora Hauora has made my study possible without burdening my whānau. Without it, it could have been difficult to succeed in study that I already find challenging. This removes a few barriers." (Student)

"It is so expensive to send your child to university and many whānau within our area can't afford to do that. It is not just the study fees, but it's the hostel fees and the transport fees. Kia Ora Hauora has been able to provide help with scholarships and internships and work placements over the summer, which has really helped with the costs." (Whānau)

Workload and study challenges and pastoral support

While a majority of those surveyed reported they handled the university/tertiary workload, 30 percent of students surveyed found the workload to be the most common barrier or challenge which compounded feelings of stress.

"Workload. It's a challenging workload. I am doing bio-med and hoping to get into medicine. It's very competitive so the workload is a challenge." (Student)

There is evidence that Kia Ora Hauora staff are well versed in the stress associated with studying health-science and provide considerable support to students. Many of the stressors related to the intensity of the health-science courses students were studying. This is a common theme with most students studying professional health related courses. Interviews with students and alumni indicated that Kia Ora Hauora staff, particularly regional coordinators, were encouraging, approachable and supportive.

Finding employment and career support

Finding employment post-study in their chosen area appears to be challenging for some students. This added additional stress for students who were under significant financial pressure. Previous relationships, scholarships, and internship experiences with the DHB for example, raised the expectations of students for employment post-study.

"It was quite frustrating for me because I just assumed that I would get a job there (at the DHB) and I'm actually bonded to the DHB because of my scholarships and my time working with them, and when they didn't have a job for me I thought, okay, wasn't I supposed to come and work for you guys when I graduated? I talked with my Kia Ora Hauora coordinator and she's tried to advocate for me, and I've done my own advocating at the DHB but I've just kind of given up." (Alumni)

Finding employment post-study was also an issue raised by Kia Ora Hauora staff.

"The DHBs, they don't have the FTEs. They don't have the positions to employ them. Not all Māori even get the opportunity to have an interview once they have graduated. It's not a given that they're going to find a job once they graduate, and they'll come out with a huge student debt." (Kia Ora Hauora staff member)

There is evidence that several of the students interviewed and surveyed had been recruited for summer internships through Kia Ora Hauora. The work experience was highly valued by students and provided an income over the semester break.

"Kia Ora Hauora has provided various opportunities for me to find work which was really important as well. So, like having paid work with them over the summers was really helpful and linking into scholarships and the pastoral support that Kia Ora Hauora has provided for me and other students has been immense and we're very thankful for that." (Alumni)

The need to strengthen the transition from tertiary to the workplace has been recognised by Kia Ora

Hauora. Strenghtening partnerships with employers of health-science graduates has been identified as a key strategic area. This was noted in minutes from the Kia Ora Hauora Operations Hui, 26-27th September 2019, held in Christchurch. Background was provided on the Kia Ora Hauora Connect programme and its key objectives:

- To work with employers to achieve equitable employment outcomes for Kia Ora Hauora health graduates
- To develop talent acquisition strategies and processes to match Kia Ora Hauora graduates to potential employers
- To create a brokerage service which connects with the respective District Health Board Human Resources teams to build a programme that meets their needs and builds the efficacy of Kia Ora Hauora graduates to convert to employment successfully.

Over the past year Kia Ora Hauora has put considerable effort into supporting the transition from tertiary to workplace, through the Kia Ora Hauora Connect.

Personal expectation and beliefs and support

During interviews, some students spoke about experiencing negative self-talk, undermining their belief that they could succeed. Related to this was their concern about how to improve their grades if they were struggling, particularly if they had not taken the pre-requisite subjects at high school. Several students referred to commonly held stereotypes of Māori as impacting on their belief in their abilities to be successful in their studies. This is commonly referred to as stereotype threat (Steele, 1999) as described here by a student.

"I struggled when I first enrolled, thinking I was not smart enough to make it into these professional programmes. I was like, 'Oh, I can't do that because I'm not really smart enough.' I think that's a mentality that a lot of Māori students have, and there can be that peer pressure not to do well. Māori aren't clever enough. They are not

supposed to be doctors or dentists... at school I wasn't thinking about my future... I just wanted to hang out with my mates... and I didn't have all of the subject knowledge, so I was very apprehensive going into health sciences. That was probably my biggest barrier, and that's probably the same for a lot of other students." (Alumni)

However, belonging to Kia Ora Hauora and the support from Kia Ora Hauora staff had a positive impact on student self-belief.

"I particularly remember a student who I met who had some initial struggles with her studies. She said that some of the messaging she received from Kia Ora Hauora at the induction has sat with her the whole time. It inspired her. It made her realize that she's accountable, not just to herself and to her whānau but to her community. So, it's inspired her along the way and given her that confidence in herself and that commitment to making change." (Tertiary/university lecturer)

"Being part of Kia Ora Hauora has empowered me as a Māori woman and to persevere in my studies." (Student)

The tuakana teina relationships mentioned earlier provided important social connection and role modelling. Students spoke about how they could imagine themselves as part of the wider workforce. Including students in roadshows and recruitment appears to have positive impacts for some students as they were able to act as role models for others.

"Being asked to participate in the two Secondary Career Expos in Rotorua really made me feel validated and encouraged within my career path. Thank you, Kia Ora Hauora! I always recommend registering with you as Māori." (Student)

"Just appreciated being involved in the Expos. The regular contact with me to check if there were any further supports needed or just to check in with how I was doing made a difference." (Student)

Evaluation evidence highlighted the protective element of Kia Ora Hauora, that enabled students to believe they can succeed as Māori in health-science related careers and challenge negative stereotypes of

Māori as underachievers.

"There is quite a bit of discrimination like, 'Māori, they get extra help,' and all that sort of thing. It's almost like it affects the confidence that Māori have to give things a go and to stick at it when it gets tough because as soon as someone's on your back like, 'Oh, you're not as smart as me. You need extra help to be at the same level,' ... and it starts bringing you down a little bit. But if you are getting affected by it, she (the Kia Ora Hauora regional coordinator) picks you up like, 'Don't listen to them. Just carry on the way you're going. You're doing well,' sort of thing. It gives you the drive to just keep going. In the end, you build up that protection against it and it doesn't really affect you as much and you learn to challenge those negative stereotypes." (Student)

Opportunities

It was clear from interview and survey analysis that most student and alumni viewed the personal support they received from their Kia Ora Hauora regional coordinator as extremely important to their engagement and success.

The survey data indicated there was some variability in the pastoral support experiences of students nationally. While most students reported very high support, further investigation is needed into pastoral care support and the consistency of approach across the regions.

The document review and interview data indicated the workload for Kia Ora Hauora may be an issue for some regions. They report being understaffed and stretched, which can compromise pastoral activity. Further investigation into an agreed approach to pastoral care and expectations around implementation is warranted.

4. INCORPORATING A COMPREHENSIVE PIPELINE MODEL

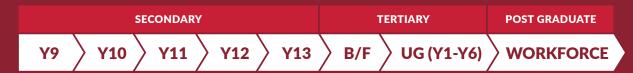
The fourth principle recommends conceptualising and incorporating recruitment activity within a comprehensive and integrated pipeline model that operates across secondary and tertiary education sectors. The provision of early exposure, transitioning, retention/completion and post-graduation activities.

A pipeline framework is commonly utilised to discuss health recruitment activity (Ratima et al., 2008; Anderson, 2007). The pipeline analogy relies on identifying potential candidates as soon as possible and connecting them into the pipeline through to study and eventually work as demonstrated in the figure below.

Exactly what specific components are most effective and efficient, where they should be provided and how recruitment should be occurring within this pipeline remains unclear in the literature (AIDA, 2005). However, overall recruitment should reflect a comprehensive, integrated pipeline approach that includes secondary, tertiary, community, and workforce stakeholders.

The Kia Ora Hauora programme logic was revised in 2016 and provides the framework for activity and outcomes. The five workstreams represent aspects of the pipeline from secondary school to becoming part of the health workforce. The logic model demonstrates that the recruitment programme is focussed on activity from school to work that will support students to succeed. The Kia Ora Hauora programme logic model is presented on page 25.

EDUCATION PATHWAY



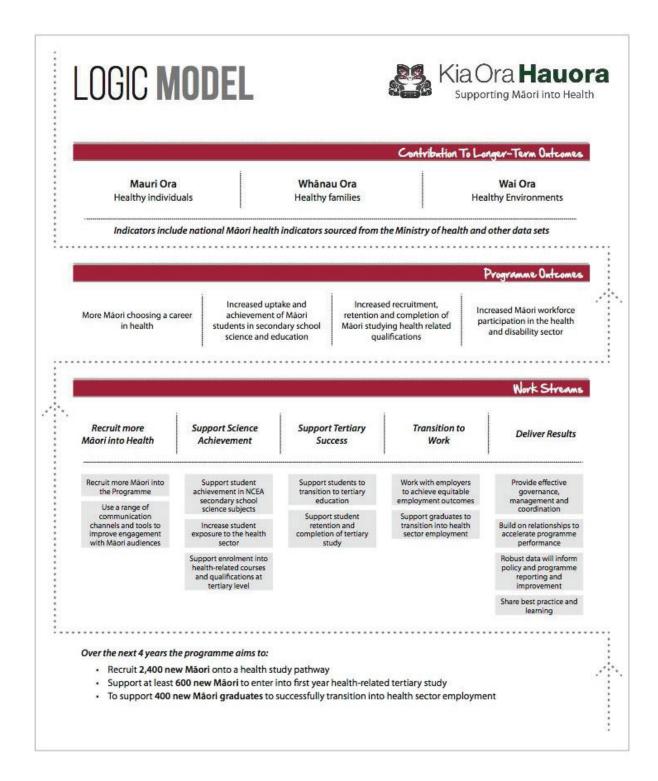
RECRUITMENT INTERVENTIONS

EARLY EXPOSURE	TRANSITIONING			
	RETENTION, COMP		MPLETION	PROF DEV
ACROSS THE TOTAL PIPELINE				

Figure 1. A pipeline framework for health recruitment activity

Programme Logic

The programme logic for Kia Ora Hauora was revised in 2016 and continues to provide the framework for the outcomes the programme hopes to achieve and how these contribute to longer-term Māori health outcomes. The 5 workstreams are sligned to these goals and include the deliverables (means) that will be delivered within the programme. Curtis et al. (2012) identifies four key stages of recruitment and support, early exposure, transitioning, tertiary retention and completion and professional workforce development.



Early exposure

Retention, achievement and subject choice at school improve students' chances of participating in university study. Without this, the pathway to attend university becomes more difficult or closes altogether (UNZ, 2018). It is apparent from the data that this relationship needs to start early in high schools with successful alumni endorsing the importance of shared information around health careers at a young age to support subject choices and enable access to professional courses.

Early exposure activities encourage students to achieve success in appropriate school subjects, address deficiencies in career advice and offer tertiary enrichment opportunities. Secondary science retention and achievement in NCEA is a focus in the logic model. Inequities in academic achievement rates between Māori and non-Māori secondary school students, particularly within science subjects, are a major barrier underlying the need for early exposure.

A discussion paper prepared by New Zealand Universities demonstrates the gap in achievement between Māori and Pāhekā/European students throughout the education pipeline. The data indicates that several of the barriers occur before the students even enter university or tertiary training, but that there are ongoing supports required for Māori to successfully graduate.

The paper identified seven gaps:

Gap 1

Retained to Year 13 – the proportion of Māori or Pasifika retained to Year 13 (and/or attained UE) relative to the chosen baseline.

Gap 2

University Entrance – the proportion of Māori or Pasifika gaining University Entrance (UE) relative to the chosen baseline.

Gap 3

STEM – the proportion of Māori or Pasifika achieving a significant number of NCEA Level 3 credits in science, technology, and/or mathematics. (We've chosen at least 30 credits in Level 3 STEM subjects). The STEM gap has been chosen because Māori and Pasifika are traditionally under-represented in STEM subjects (and a range of non-STEM disciplines such as business studies) and this potentially closes off career options. This focus on STEM is not at the expense of studies across the humanities – which also provide valuable skills and outcomes for New Zealand and New Zealanders.

Gap 4

Participation – the proportion of Māori or Pasifika with UE enrolling in a degree level programme within some period after leaving school (we've chosen five-years).

Gap 5

Retention – the proportion of Māori or Pasifika who enrol in a degree level programme at university and proceed to second year.

Gap 6

Completion – the proportion of Māori or Pasifika who successfully complete a degree level qualification.

Gap 7

Outcomes – the proportion of Māori or Pasifika in graduate level employment (e.g., not unemployed, or under-employed) within three years of completing their studies⁴⁵.

The following table illustrates the considerable drop in retention as Māori move through the education system.

⁴ Note that "Parity Gaps" are calculated per the row named 'Gap Calculation'. The "Parity Gaps" are the difference between the percentage in column (a) and the percentage in column (b).

⁵ Further gaps could be added to this analysis in areas such as; participation in postgraduate studies. However, the seven gaps above are

	European Pākehā		Māori					
Gap Calculation	% of stage (a)	% of school leaver cohort	Loss of cohort (cumulative)	% of stage (b)	% of school leaver cohort	Loss of cohort (cumulative)	"Parity Gap" =(b)-(a)	Gaps
Leave School 2009	100%	100%	-	100%	100%	-	-	
Retained to Yr13 (or attained UE if <yr13)< td=""><td>73%</td><td>73%</td><td>27%</td><td>54%</td><td>54%</td><td>46%</td><td>-19%</td><td>Gap 1 Retention to Yr13</td></yr13)<>	73%	73%	27%	54%	54%	46%	-19%	Gap 1 Retention to Yr13
Left school with University Entrance ⁵	55%	40%	60%	24%	13%	87%	-31%	Gap 2 UE Achievement
Attained 30 or more credits in Level 3 STEM (with UE) ⁶	43%	17%	Included in UE loss (Gap 2)	26%	3%	Included in UE loss (Gap 2)	-17%	Gap 3 STEM
Entered university degree study or above (by 2011) ⁷	86%	35%	65%	85%	11%	89%	-2%	Gap 4 Participation
Passed at least 85% of first year courses	73%	25%	75%	55%	6%	94%	-18%	Gap 5 Retention
Completed a degree qualification or higher within 6 years	78%	27%	73%	60%	7%	93%	-17%	Gap 6 Completion
In degree level employment 3 years after graduating ⁶	>85% est.	23%	77%	>85% est.	6%	94%	0.8%	Gap 7 Outcomes

Table 3. Retention rates for Maori through the New Zealand Education System

Evaluation evidence indicated the absence of prerequisite subjects in secondary science negatively impacted on students' success and increased stress and workload. This is due to students having to undertake additional study to catch up.

"I just think there needs to be more school engagement and Kia Ora Hauora needs to start earlier and be promoted in high schools. I didn't hear anything about this programme when I was at high school and it would have been easier if I had known about it earlier. Then I could have taken the right subjects and that has been a huge challenge for me... just placing extra pressure because I needed to catch up." (Student)

"That's the big push for science. (Māori students) They just don't always take those subjects. I mean, I'm not even a teacher, but I really see that sometimes they take soft subjects. Whereas if they want to carry on in health, science is just so important, and it really does make them focus on that. I have seen them try harder at the end of year 12 and then change their mind about the subjects they want to take the following year." (Careers adviser)

"I think our kids too, they're cruising in Year 10. They're just chilling, not doing anything. Year 11 is the first year of NCEA. Really, they're not that focussed. I think Year 12 and 13 is the average age group because otherwise they're too far away from actually thinking about having to study." (Whānau)

Secondary science selection and achievement continues to be a significant barrier to students entering health pathways. Naming this in the programme logic and committing a standalone workstream dedicated to addressing secondary science achievement indicates the Kia Ora Hauora team are actively working to address this. This is challenging however, as achievement and retention of secondary students in science is highly dependent on the support provided by teachers and secondary schools. Students selecting the necessary healthscience related subjects is also dependent on teacher/ career adviser knowledge of university pre-requisites, schools offering the necessary subject pre-requisites and on students achieving the right credits and endorsements. However, Māori student success in STEM subjects is a critical issue in education and a barrier to Māori entering subsequent high value careers and warrants intervention from cross sector initiatives like Kia Ora Hauora.

There are a range of activities that make up the secondary science workstream. Hands on, practical programmes like the hospital-based encounters, that enable students to shadow Māori health professionals and experience first-hand what their work entails, were consistently reported by students and stakeholders as having impact. These are discussed in the next section.

Transition support across the pipeline

This evaluation indicates that the continuity of support provided by Kia Ora Hauora throughout the pipleine is particularly important to students' success. This is the advantage of having a programme that is not affiliated to any particular school or insitution. As this alumni describes:

"I think the continuity is important. I think having Kia Ora Hauora people there to support your career, right from high school, to university and through to employment. They are continually being supportive, continually being like what are you up to? What do you need? What can we help with? It is really powerful... because the school career advisors see you through to the end of high school and then you change to whoever's looking after you in your first year of uni, and then

depending on the programme it is someone else and then it's someone else and so on. And once you finish uni, it can float away, and you have no one to help provide you with those supports. But Kia Ora Hauora does fill that space as being continually supportive through health, over a wide range of things, and able to support through and provide guidance and advice, that's really valuable." (Alumni)

Transition through the health workforce pipeline can be challenging for Māori students. Kia Ora Hauora staff discuss the importance of engagement and support particularly through study.

"Across the education sector we still find it difficult to get Māori into tertiary study, whether that's health or anything else. I think that is quite a consistent challenge and uniquely in healthscience the challenge is retention. So we have Māori peers getting into uni and starting on a path and then getting a bit distracted and their grades suffer, maybe they didn't have the necessary prerequisites which impacts their ability to get into the right courses, so they have to do extra and then there are various family things, child-care or looking after elderly relatives... home pressure that can distract them, taking them back home and stuff. And so, making sure that we keep them involved and engaged and on that health career pathway is a big challenge." (Kia Ora Hauora staff)

This data in Table 3 highlights the importance of continued activity and contact throughout the pipeline. There are significant points at which support is required to engage and retain Māori students. The following section looks at the activity within the pipeline to support engagement and retention.

Interventions to support transition through the pipeline.

Document review and interviews indicate there are a wide variety of recruitment, engagement and retention related activities undertaken by Kia Ora Hauora.

The following table indicates how these activities are spread across the pipeline.

Activities appear to differ across the regions and are dependent on the local relationships/resources and local context. Analysis across regions indicate

they are all working to achieve the outcomes of the programme logic in a way that is responsive to their regional needs.

Pipeline	Activities
Early Exposure	Whānau hui Visits and presentations at schools Marketing and advertising Working with career advisors in schools Exposure to health careers Secondary enrichment programmes Organised communications and engagement with educators/support staff Online reources including career profiles, case studies
Transitioning	Career expos and roadshows Hospital work experience days Bridging and foundation support – like FYHS Support for mature students entering health study Online career profiles
Tertiary	Tertiary institution orientation activities Kia Ora Hauora run events and presentations Organised communications and engagement with educators/support staff Scholarship support Support to access external scholarships Māori student support within tertiary institutions Pastoral support
Internships	Summer internships DHB sponsored internship programme
Entering health workforce	Study to Mahi CV support Job vacancies advertised Kia Ora Hauora Connect
Across the Pipeline	Facebook communication, emails and text communication from staff Kia Ora Hauora website Evaluation and tracking Role models, social networking, tuakana teina relationships Tautoko whānau - support for whānau of students

Table 4. Kia Ora Hauora pipeline activities.

Impact of pipeline activities

The impact of 'hands on' activities was noted alongside the importance of exposing students to the opportunities with the health sector. They were reported as motivating and inspiring for students and opened their eyes to different career possibilities in health.

"For me, the positive impact of Kia Ora Hauora is seeing students who haven't got any aspirations go into the health week at the hospital. They get taken all over the place, they get inspired and it really does make them feel like they can do it when they see other people doing it. And also, quite a bit of it is hands on as well. They get to do bits and pieces, and I think that's a really big thing, because they don't know stuff until they've seen it, if you know what I mean. Quite often they're from backgrounds that aren't in the health industry, so they really don't have any idea of what it's really like. So, I think that is the biggest plus to be honest." (School guidance counsellor)

As this alumni explained, engaging with Kia Ora Hauora at an early age, and being exposed to the opportunities through these experiences is particularly important.

"I think one of the main barriers is poverty of opportunity. And that's particularly for young Māori at high school, they don't know what's possible for them in terms of health careers, and if you don't know what's there or possible for you, then you don't take the right subjects, and so it's not going to happen. I still think that is one of the main barriers." (Alumni)

The importance and impact of hands on, real-life simulation activities were noted in several previous evaluations and programme documents (King et al., 2012; Andrews, Crawford, and Arcus, 2019; Evaluations from Kia Ora Hauora workshop participants). Research undertaken by Andrews, Crawford, and Arcus (2019) investigated interventions in the Central Region Kia Ora Hauora programme to ascertain their effectiveness for increasing the recruitment of Māori into a range of health careers.

The three main interventions were:

- Tū Kaha Central Region Māori Health Development conference (TK),
- Work choice Day (WC), a mainstream health careers promotional day led by Workchoice
 Trust for senior secondary school students, and
- Work Experience Day (WED), an intervention designed in collaboration with Capital and Coast DHB Māori Health Development Group to target a younger Māori audience (Years 9–11).

These interventions were offered annually from 2012-2017. Overall, it was found the three interventions were effective in increasing engagement and maintaining students' interest in health-related careers. Analysis of other documents has highlighted the importance and impact of interactive and handson activities. For example, participant evaluation forms from Kia Ora Hauora workshops conducted between 2018 and 2019 indicated that although participants were highly satisfied with these workshops, increasing interactivity and 'hands-on' activities (and ensuring more time) was the most suggested programme improvement. Data from this evaluation confirmed that 'hands-on' engagement provided participants with expanded opportunities to learn about different health career pathways.

"One of the best parts was 'hands-on' practical experience. Shadowing other Māori health professionals up north showed me that I could do it too." (Student)

Students and other stakeholders talked about the hands-on, practical nature of the hospital experiences that provided an opportunity for students to try out health careers. These opportunities increased their exposure to the wide variety of careers available in the sector.

"I think Kia Ora Hauora provides them with more opportunities to learn about being a Māori health professional... it's hands-on too. They get to really experience what it is like... with the hospital at the beginning of the week, the students come in with firm ideas of what they want to do. They want to be a nurse. They want to be a doctor, or whatever. But by the end of the week, their heads are a wee

bit of mush, because they've been given all this information, and then they do tend to change their ideas, 'Oh, I wouldn't mind trying mental health. I wouldn't mind becoming a radiologist, or a dentist, or even physiotherapist.' They didn't realise there were so many professions and opportunities within the health system." (District Health Board staff member)

"Oh, I loved it (Kia Ora Hauora). It was awesome because it gave you a back scene around the hospital, and what it is like to be there and to be involved with patients and Māori communities generally." (Student)

There is evidence in the data that some students raised their career expectations during the experiences. As an example this student described how attending a health experience day resulted in the student selecting a professional career pathway.

"Initially I wanted to be a physio but after getting involved in Kia Ora Hauora I changed my mind and decided I wanted to be a doctor. And that was a process facilitated by Kia Ora Hauora, so it changed my career trajectory completely. And then being involved with them through Uni and then after Uni it has definitely impacted the way I look at my work and helped me to continue to be engaged in our communities." (Alumni)

Raising student study and subsequent career aspirations has an impact on the return on investment of the programme. But entering into medical degree level studies, students enter the top quartile of earners, this is discussed in more detail in the next chapter.

Communication strategies

A range of highly effective communication strategies are used to promote Kia Ora Hauora. Clear communication has supported a clear vision and value proposition to stakeholders, and a shared understanding of the intentions of the programme. The development of a strong Kia Ora Hauora brand, identity and logo, has contributed to the success of the programme.

Kia Ora Hauora has effective communication and marketing strategies that raise student awareness and interest in the programme, and these have resulted in increased programme registrations (King et al., 2012). Feedback indicates that the strategies to connect and communciate with students, whānau and stakeholders are highly effective and include;

- Student case studies providing real life storying of Māori acheivement
- Facebook communication
- Kia Ora Hauora website
- Emails and text communication from staff
- Health career workshops, visits and presentations at schools, tertiary institutions and other venues
- Tertiary institution orientation activities
- Hospital work experience days
- Career expos and roadshows
- Kia Ora Hauora run events and presentations
- Organised communications and engagement with educators/support staff

The combination of media and strategies to engage and promote Kia Ora Hauora is what makes communciation effective. Interest is generated in the programme through media, social media, face to face opportunities and work based hands-on experiences. Utilising a combination of strategies rather than relying on a one size fits all approach has enabled the programme to reach Māori in many different settings and circumstances.

Transition to workforce

The recent addition of employment focussed activities to the Kia Ora Hauora programme, including collecting alumni data and supporting students into the workforce through the Kia Ora Hauora Connect programme, is necessary to ensure the increase in

teritary students leads to an increase in workforce capability.

Interviews with alumni indicated that continued relationships with Kia Ora Hauora whānau is enabling. The social network constructed through the programme within the health workforce appears to have a positive impact on those who have completed and are working in their career, as this alumni explains;

"So whenever I go to do stuff with Kia Ora Hauora, whether that's popping in at the monthly meetings, or going and doing various talks they have asked me to do, it's nice to see other Māori pharmacists, the Māori paramedics, the Māori nutritionists, our Māori dentists, and keeping those connections up as well as having contact with these young people who otherwise I probably wouldn't see. And that has given me confidence as a Māori health professional." (Alumni)

Strategic pipeline relationships

Several documents emphasised the strategic relationships and partnerships Kia Ora Hauora hold with key stakeholders within the pipeline, working to advance Māori achievement and advancement in health-science careers. Stakeholders included local DHBs and their Human Resources departments, Massey University's Pūhoro (STEM) Academy, Te Rau Ora (originally Te Rau Matatini), and Te Whare Wānanga o Awanuiārangi to name a few. These partners have similar goals to Kia Ora Hauora.

For example, Te Rau Ora aims to improve Māori Health through leadership, education, research and evaluation, health workforce development and innovation, systemic transformation. Te Whare Wānanga o Awanuiārangi offers Te Ōhanga Mataroa Bachelor of Health Science Māori (Nursing). The Pūhoro STEM Academy aims to transform the status quo by partnering with a selection of secondary schools to operate a STEM Academy to increase Māori student engagement and achievement in STEM subjects. The partnership with Pūhoro was noted in the Kia Ora Hauora Central Region Coordination Centre (CRCC) Progress Report (April, 2018). This partnership with Pūhoro has created an enhanced opportunity to deliver against the Kia Ora Hauora

strategic and operational imperatives. It was noted that MidCentral DHB will support the implementation of the Pūhoro programme, in association with Massey University (Palmerston North). This will include, yet not be limited to:

- Developing a link with Central Region Kia Ora Hauora registered secondary school students
- A minimum of two on-campus workshops
- A mentoring programme delivered by current Massey students
- Development of a Pühoro Health Science Academy

As identified earlier, partnerships with employers of health-science graduates is a key strategic area and evidenced through the Kia Ora Hauora Connect programme. A recent National Coordination Centre Quarterly Report (Q3, Jan 2019 - 31 Mar 2019) emphasised that 'there are a number of relationships that are critical to the successful operation of the Kia Ora Hauora programme both regionally and nationally'. Strategic relationships were noted with:

- Ministry of Health
- Project Steering Group
- GM HR Forum
- Te Tumu Whakarae.
- University's Māori Health Workforce Development Unit (MHWU)

Strategic national and regional partnerships with key stakeholders provides a practical mechanism to actively support Māori secondary school and tertiary students, and Māori community members to advance in health and disability related careers. Engaging with stakeholders nationally, at all levels of the health career pathway from secondary schools, to tertiary institutions, and employers, is a considerable amount of work, but a key imperative to supporting student success.

The National Coordination Centre saw a need to balance recruitment and retention activities, and to ensure these activities were focussed on interventions that would maximise value within the available resources. In consultation with the Expert Advisory Group and Regional Hubs, the National Coordination Centre refined the Kia Ora Hauora service model in 2011 to clarify entry and exit points, and opportunities to step individuals down to lower levels of support where appropriate. This may be an area for ongoing monitoring and refinement as the programme evolves.

'Study to Mahi' is a recent addition to the Kia Ora Hauora Connect Programme. These workshops are designed to accelerate graduate employment opportunities and transition students from tertiary study into health sector employment through job preparation workshops. The 'Study to Mahi' workshops increase skills which are essential in transitioning into health sector employment e.g. mastering interview skills, CV writing, job skills. The workshops are held at the tertiary institutions, originally delivered in two regions, Te Waipounamu and Midlands, the workshops are now delivered nationally. This important work was acknowledged and appreciated by students.

"Through Kia Ora Hauora Connect and the Kia Ora Hauora staff involvement I feel I am well placed to secure the position I want to start my health sector career." (Student)

Opportunity

As a cross-sector initiative Kia Ora Hauora delivers a comprehensive and integrated pipeline model across secondary and tertiary education providers. A workstream is dedicated to addressing the barrier posed by the shortage of Māori students selecting and succeeding in secondary science. The programme demonstrates activities across pipeline from early exposure, to post-graduation alumni activities. The recent addition of Kia Ora Hauora Connect completes the pipeline with transition support into the health workforce. Strategic relationships are key to supporting pipeline activities. There is an opportunity to investigate how work with strategic partners can influence their activity and responsibility within the pipeline.

5. INCREASING FAMILY AND COMMUNITY ENGAGEMENT

The fifth principle recommends increasing engagement with parents, families, and indigenous communities (including tribal groups) within all recruitment activities, but particularly early exposure.

Whānau engagement

While there are no direct whānau activities, Kia Ora Hauora roadshows held at secondary schools usually include a whānau hui to showcase the kaupapa directly to whānau. During career expos staff talk with whānau who attend and promote whānau involvement at events. If students are attending health experiences during school hours, the Kia Ora Hauora staff engage directly with whānau. Students engaged in Kia Ora Hauora believed that support from Kia Ora Hauora had benefitted themselves but also other whānau members.

"Kia Ora Hauora has encouraged me to be vigilant with my studies and to make positive changes for myself and my whānau and for the betterment of Māori in the health sector." (Student)

Whānau were very appreciative of the support Kia Ora Hauora had provided.

"My son and I are just so grateful for all that Kia Ora Hauora has done in helping him in his studies. He has done so well, and we are very proud. I always mention to others about the important work of Kia Ora Hauora and how it is contributing to the health and wellbeing of our communities." (Whānau)

The continued support of Kia Ora Hauora was important for alumni. The programme provided a protective element as there could be extra demands placed on alumni by whānau once they had graduated,

particularly in relation to changing a health system that had under performed for Māori communities.

"Once you graduate... you can face a lot of demands and expectations placed on you by whanau, hapū and iwi... And particularly as you're working in a health system that hasn't delivered for Māori ... you face the brunt of it and the pressure mounts up and you face that burn out." (Alumni)

Kaupapa whānau

Evaluation evidence highlights that Kia Ora Hauora operates through a kaupapa whānau approach. Kaupapa whānau are not based on whakapapa and are characterised by members of a group who typically share a common goal or bond (Cunningham, Stevenson & Tassell, 2005). These authors cite Mason Durie's arguments that "kaupapa whānau is used to describe those individuals who may not be descended from the same ancestor but who share a common mission and behave towards each other as if they were whānau" (2005, p. 14). Relationships within whānau are important whether they are whakapapa whānau or kaupapa whānau (Cunningham, Stevenson & Tassell, 2005). Evaluation evidence highlights the importance of this approach.

There is clear evidence that Kia Ora Hauora's kaupapa whānau approach has an impact at all levels of the health workforce pathway, from recruitment through to career development. For example, students discussed how they aspired to be role models for younger rangatahi. The tuakana teina relationships apparent in the service delivery of the model are particularly enabling for students as they see their engagement as future leaders.

"Having access to Māori role models through Kia Ora Hauora is hugely important... because there are so few Māori in the health sector in general. So having those idols, those role models to look up to is definitely a confidence booster and something that lets you know that you can do this, you know it's important to get this mahi done, and your leadership will contribute to turning around those negative statistics and one day you will be up

there being a role model for the next lot to come through." (Student).

Access to positive role models was viewed as an important enabler as was the tikanga that infused the programmes.

"I think a key enabler of Kia Ora Hauora is giving Māori students increased opportunities to meet their role models, it's actually seeing Māori professionals who are working in the workforce, and also the tikanga, the protocols involved in the programme and all those sort of things that are having an impact." (University/tertiary lecturer)

The role of Kia Ora Hauora in providing ongoing support through a social network to support Māori health professionals is just as vital as the role the programme plays in recruiting Māori to study for health careers. Alumni noted that the opportunity to support Kia Ora Hauora and attend networking events had strengthened their confidence and pride.

"Knowing that I have the support of other Māori health professionals has been immensely valuable and has increased my pride of being Māori." (Alumni)

Students described how the connection with Kia Ora Hauora and participation in their social network had enabled them to feel less isolated in their studies. Increased social connection with other students and Māori health professionals was an important outcome of Kia Ora Hauora activities.

"I felt quite isolated in my study programme so Kia Ora Hauora's ability to support me attending a national hui in my profession has been so important to me, and as a result I've been included in a local network of Māori practitioners." (Student)

"Kia Ora Hauora has had a huge positive impact on my studies. Going through the internship I met a lot of other like-minded Māori students who have already graduated or are still studying but are also working in current Māori health roles, physio roles, occupational roles, within the hospital. That's quite cool to gain some

knowledge and some first-hand experience from other students, other Māori health professionals who are currently in the workforce too, so that has definitely had a huge positive impact on my studies and given me a bit of a boost too you know, finish this degree and then hopefully get a job signed on afterwards." (Student)

Iwi engagement in Kia Ora Hauora

Kia Ora Hauora has an iwi engagement strategy. The strategy "is a project that will directly address and seek the plans, ambitions and desires of iwi to build their Māori workforcecapacity within the Health Sector" (p. 4). The strategy states that iwi engagement is an important next step in the evolution of the programme.

The following vision is noted in Kia Ora Hauora documents.

"The Kia Ora Hauora Iwi Engagement Vision is to integrate iwi into the Kia Ora Hauora project, concepts and current developments. We want to share our successes with iwi nationwide and show them our Kia Ora Hauora enrolled population. This will identify their 'tamariki, mokopuna' who are studying, working or want to engage with the health sector as a career pathway. The Kia Ora Hauora Iwi Engagement Vision is to 'whakatō te kakano hauora'."

They have called this Kia Ora Hauora-a-iwi. The Kia Ora Hauora lwi Engagement Strategy has been designed to explore what iwi have in place for their own people in regards to professional careers in health. The initiative aims to work with iwi to support current registered tamariki, mokopuna and help them complete their study in the health sector.

The strategy has six key objectives:

- Create a look and feel for the Kia Ora Hauora lwi Engagement Strategy.
- 2 Create, develop and communicate the concept of the Kia Ora Hauora Iwi Engagement Strategy.
- 3 "Whakaarohia' one or two iwi to pilot the Kia Ora Hauora lwi Engagement Strategy concept.
- Have a National Kia Ora Hauora lwi Engagement Strategy.
- Develop new relationships within the wider Rohe.
- Continue to support and encourage

 Māori to seek a professional career in
 the health sector.

The iwi engagement strategy will be enacted through various phases and engagement.

Opportunity

The staff work hard to create a kaupapa whānau within the Kia Ora Hauora programme that provides essential connection and support amongst students within the programme. The iwi engagement strategy has the potential to engage iwi in the pipeline and support current and future iwi based health initiatives. There is an opportunity to increase whakapapa whānau involvement, particularly during early exposure activities. Parents' attitudes to their children's likely educational success have consistently been found to

be very powerful. A New Zealand synthesis found that "regardless of ethnic or socio-economic background, families with high levels of educational expectations have the most positive effects on their children's achievement at senior school levels (Biddulph et al.,

2003)." Whānau are an important part of student achievement and success, engaging them on the journey alongside their child provides a powerful support network.

6. INCORPORATING QUALITY DATA TRACKING AND EVALUATION

The sixth principle recommends incorporating high quality data collection, analysis, and evaluation of recruitment activities within programmes with the publication of results where possible.

The ability of Kia Ora Hauora to track and monitor student and alumni engagement is a key strength of the programme. Kia Ora Hauora sets national targets and tracks the progress of these via the 'Performance Dashboard'. Progress against national Kia Ora Hauora targets are reported on in quarterly and annual reports. Document review highlighted that Kia Ora Hauora is making steady progress towards achieving key national and regional performance targets.

A purpose-built national database enables the tracking of individual students through their study and into employment. The database enables their progress to be monitored against key performance targets. There are a range of monitoring and evaluation activities undertaken with the aim of improving the responsiveness of the Kia Ora Hauora programme and its ability to reach set performance targets. The Kia Ora Hauora programme logic notes that "robust data will inform policy and programme reporting and improvement". Quarterly and annual reports describe progression against these targets and describe key activities undertaken.

Kia Ora Hauora primarily uses the Results Based Accountability (RBA) framework for reporting to stakeholders and provide ongoing monitoring. According to the Kia Ora Hauora National Coordination Quarterly Report (Oct-Dec 2018), Kia Ora Hauora is meeting most national performance targets, particularly in relation to 'New Māori on health study pathway'.

Participant feedback forms are distributed through regional programme workshops and activities. These are analysed for reporting purposes, often reported in the form of infographics. A key focus of workshop evaluations is capturing participant satisfaction levels and interest levels. Demographic information (age, gender, and sometimes ethnicity) is recorded. Ensuring Māori participant voices are heard through data analysis is essential for monitoring and evaluation purposes. For example, internal evaluation results indicated rangatahi prefer Kia Ora Hauora to contact them using text and email, or via phone calls during the hours of 3.30-8.00pm. Most rangatahi answer emails within 1-3 days and will respond to texts straight away if they have credit. These type of feedback loops, that engage Māori participants in evaluating current Kia Ora Hauora practices provide valuable data for improvement.

A review of regional reports indicate there are consistently high levels of participant satisfaction with Kia Ora Hauora programmes and activities across the four regions. Gaining a national picture of the Kia Ora Hauora across the four regions is challenging. The regional coordinators are well aware of the programme logic which provides a shared understanding of the activities and the goals of these activities. However there are several factors which can influence the way in which the programme is delivered regionally including:

- Variability with local stakeholder relationships
- Variability with the relationship with the local DHB (some are employers, some are not)
- Variability in how the programme is managed within the regions

- Variability in data and access to data
- Variability in how the programme is implemented regionally
- Variability in how institutions promote, engage and value the programme
- Regional geographic differences, rural versus urban
- Funding and resource variability
- Individual staff skill and relationships within their own regions
- The extent and influence of the relationship with tertairy stakeholders and secondary schools in each region

This variability can provide significant challenges in terms of how consistently the programme is implemented across the regions. However, these variations also reflect how Kia Ora Hauora has adapted to regional differences and aims to provide localised solutions appropriate to varying contexts. The variation across the regions should be viewed as improving the implementation of the programme at a local level as well as a means of achieving national success. Therefore consistentency across regions is not a goal of programme improvement, but rather the development of bespoke localised solutions that enables programme goals to be achieved. For example, outcome data highlights the high recruitment numbers that the Northern region is achieving. There maybe specific processes or practices that enable the Northern region to achieve these outcomes. More specific inquiry into this is needed so that successful strategies and processes can be shared across other regions.

Currently regions commission their own evaluation, which has been reviewed for this evaluation. As an example, Simmons (2019) compiled a report on the Māori health workforce within District Health Boards in the Central Region, for the Kia Ora Hauora Central Region. It was commissioned by Capital and Coast District Health Board for Kia Ora Hauora on behalf of the Central Region Māori Health Managers (CRM). The report provides data to support Kia Ora Hauora

Central Region in meeting its objectives and to aide planning at DHB level for the period 2018-2021-2023. The overall objectives of the report were to identify:

- Māori health workforce need;
- the potential supply of Māori health workforce;
- current and projected demand for prioritised professions; and
- training pathways that correspond with these professions.

Simmon's notes to achieve parity over the next 13 years (2020 to 2033), the Māori DHB workforce must more than double to achieve population parity (from 1,100 to 2,463). This equates to approximately 91 new permanent Māori health professionals placed in health positions across the region each year over the next five-years to 2023. The greatest areas of regional need are for doctors, nurses, midwives, dentists, dental therapists and hygienists, hospital pharmacists, health service managers, social workers, physiotherapists, nursing support workers, support workers (aged care) and community workers.

Simmons' (2019) report also provided useful background information on Māori secondary school students studying science in each District Health Board area within the Central region. In general, both participation and attainment in science are low compared to non-Māori and decrease further in the higher NCEA levels. She recommended further focus on increasing science participation (in health-related sciences) for Māori students and notes this needs to start a lot earlier, at Years 7 and 8. Raising Māori school students' engagement and achievement in health-science related studies is essential if Kia Ora Hauora is to achieve its overall vision. This type of detailed regional analysis is very useful to Kia Ora Hauora and other key stakeholders in evaluating existing recruitment approaches as well as identifying key enablers and barriers to workforce development.

Opportunity

The sixth principle of effective practice is the need for high quality data collection, analysis, and evaluation of recruitment activities within programmes. Kia Ora Hauora has a tracking and monitoring programme and publishes outcome data regularly in quarterly and annual reports. This data is clearly important for reporting purposes and accountability for funding. However, there are opportunities for more in-depth focus and regional inquiry that would enable Kia Ora Hauora to identify successful strategies and processes and share these with other regions.

Undertaking more in-depth inquiry into regional pastoral care is recommended. As noted earlier, data gathered for this evaluation indicated some variability in the pastoral support experiences of tertiary students nationally. While the majority of students reported very high support, further investigation is needed into the consistency of approach across the regions. It was clear from interview and survey analysis that most students and alumni viewed the personal support they received

from their Kia Ora Hauora regional coordinator as extremely important to their engagement and success. There are opportunities to undertake more regional analysis to identify successful pastoral care strategies and DHB supporting processes that work to enable more effective pastoral care.

Kia Ora Hauora outcome data highlights variability related to gender and engagement in the programme. Results consistently indicate that females are more engaged than males. There are opportunities to undertake further investigation into the enablers and challenges that male Māori students face as they engage in health-science related studies, and to identify recruitment activities that work to address these gender differences.

Retention and achievement data in the tertiary sector are difficult to capture and record for Kia Ora Hauora. There is an opportunity to work with tertiary partners to source this data for Kia Ora Hauora participants. It is difficult to determine the true value of the programme without destination data.



CHAPTER 3

Impact, value, and importance

Persistent inequity in health outcomes for Māori whānau is a critical issue for the Aotearoa New Zealand Health system.

Addressing the underrepresentation of indigenous health professionals is recognised internationally as being an integral component of the overall response to overcoming indigenous health inequities (Ratima et al., 2008). The current health system is constrained by the under-representation of Māori, particularly in regulated professional roles. Māori are crucial in enabling and creating a sustainable health workforce for the future (Allport et al, 2017; Abel, Marshall, Riki & Luscombe, 2012; Baker & Pipi, 2014; Baker, Pipi & Cassidy, 2015; Ball, 2010; Cram, 2014; Crengle, 1999; Curtis et al., 2015; Harfield et al., 2018; Gibson et al., 2015; Kidd, 2013; Margeson & Gray, 2017; McCalman et al., 2017; Shahid et al., 2018; Smith & Emery, 2015; Te Puni Kōkiri, 2015).

The indigenous health workforce shortage in New Zealand is critical, with New Zealand having the largest proportion of overseas trained doctors internationally (Gorman et al., 2009). For health and disability services to better reflect the communities they serve, the Māori health workforce would need to triple in size, requiring a targeted effort over the next decade. An aspirational target of 1,500 more Māori doctors by 2026 was identified to adequately support the Māori population (Sewell, 2017). Therefore, the contribution of Kia Ora Hauora as a health workforce development programme cannot be understated.

VALUE TO MĀORI HEALTH SECTOR

Under Te Tiriti o Waitangi the Ministry of Health, as steward and kaitiaki of the health and disability system (under Article I), has a responsibility to enable Māori to exercise their authority (under Article II) and enable the health system to achieve equity in health and wellness for Māori (Article III) in ways that enable Māori to live and thrive as Māori (the Ritenga Māori Declaration⁶). These obligations are reflected in the principles of Te Tiriti as they apply to the health and disability sector, specified in the Waitangi Tribunal's recent Wai 2575 Health Services and Outcomes Kaupapa Inquiry report (Waitangi Tribunal 2019; Whaanga, 2020).

He Korowai Oranga: Māori Health Strategy (Ministry of Health, 2014) sets the overarching framework that guides the Government and the health and disability sector to achieve the best health outcomes

for Māori. Originally published in 2002, the refreshed framework was strengthened in 2014 by the addition of core components. Under consultation in 2020, The Draft Māori Health Action Plan proposes eight priority areas. One of these priority areas is workforce development, with the aim of enabling a hauoracompetent workforce along with more Māori in the health and disability workforce (Whaanga, 2020).

A core element of the strategy to address Māori health inequity in New Zealand is Māori workforce development, including increasing cultural capability and capacity. Kia Ora Hauora offers a valuable contribution in achieving these goals.

The following section explores the potential tangible and intangible value added.

TANGIBLE BENEFITS

The significant increase of Māori working in health include both tangible and intangible measures. Tangible measures are those benefits that can be converted into monetary values. Intangible measures are the benefits directly linked to the project that cannot be converted to monetary values credibly.

Māori are highly underrepresented in the health and disability workforce, especially in the professional occupational groups (Ministry of Health, 2007). While Māori make up to a third of the health workforce they are employed in lower paid positions with limited decision-making (Ministry of Health, 2007). Evidence from this evaluation and previous evaluations indicate that Kia Ora Hauora has resulted in increased numbers of Māori studying and entering health and disability career pathways. Kia Ora Hauora adds significant value to the health and disability sector as well as contributing positively to achieving the goals of the Māori Health Strategy He Korowai Oranga.

It is evident that there are several tangible benefits

accrued that can in part be attributed to Kia Ora Hauora. This evaluation demonstrates that:

- More Māori secondary school students are entering health study
- Māori students raised their expectations regarding their health career because of exposure to different careers through Kia Ora Hauora programmes
- Māori students enrolled in higher level qualifications as a result of exposure to different career pathways
- Māori students are more likely to complete their qualifications (due to financial and pastoral support from Kia Ora Hauora)
- Māori alumni were more likely to stay engaged in their career due to social support networks created through Kia Ora Hauora.

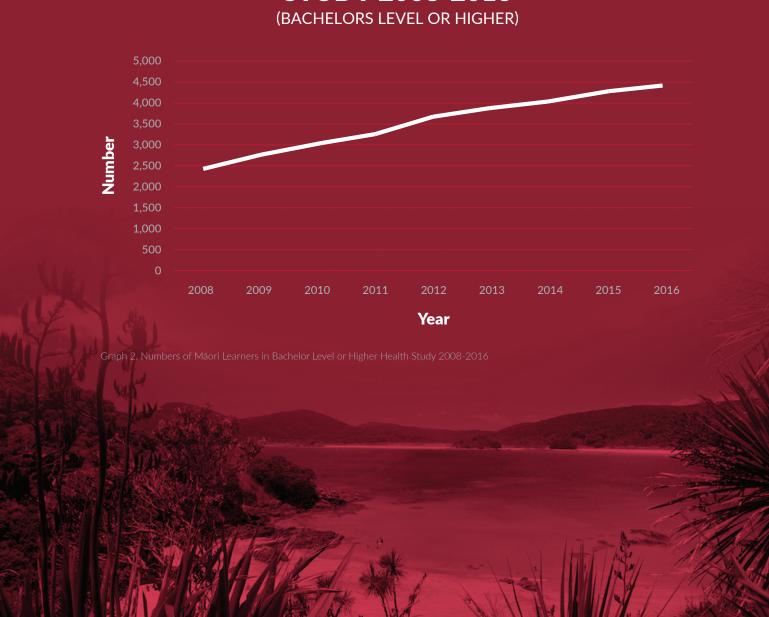
⁶ The Ritenga Māori declaration (often commonly referred to as the 'fourth article') was drafted in te reo Māori and read out during discussions with rangatira concerning Te Tiriti o Waitangi. It provided for the protection of religious freedom and the protection of traditional spirituality and knowledge.

INCREASE IN MĀORI STUDYING HEALTH

The increase in Māori enrolments in health-related study (Bachelors or higher) is illustrated in the following graph. In 2008, the year prior to the commencement of Kia Ora Hauora, there were 2,440 enrolments. Eight years later in 2012, that number had increased to 4,455, an 82.5 percent increase.

This significant increase in enrolments must be attributed at least in part to Kia Ora Hauora. While there are programmes to support health study within universities/tertiary institutions, Kia Ora Hauora is the only national Māori student health recruitment programme.

NUMBER OF MĀORI LEARNERS IN HEALTH STUDY 2008-2016



ECONOMIC BENEFITS OF KIA ORA HAUORA

Such significant increase in Māori students studying health at Level 7 (degree level) will have an impact on the life of these students and their whānau when they graduate successfully. In a report looking at the employment outcomes of tertiary education, for the Ministry of Education, Park et al., (2013) investigated the impact of achieving higher qualifications on employment outcomes. Their findings included:

Earnings increase with the level of qualification completed. There is also a significant jump in earnings between degree and non-degree qualifications.

- Employment rates increase with level of qualification gained. For example, in the first year after study, 53 percent of young bachelor graduates who stayed in New Zealand were in employment and 40 percent were in further study. Of young people who had completed a Level 1-3 certificate and stayed in New Zealand, 34 percent were in employment and 49 percent were taking more study.
- Very few young people who complete a
 qualification at diploma level or above are on
 a benefit in the first five-years after study. For
 those who stay in New Zealand, the benefit
 rate is around six percent for diploma graduates
 and around two percent at bachelor level. But it
 is around 13 percent for those who graduated
 with certificates at Levels 1-3.
- Earnings vary considerably by field of study. Young graduates with bachelor's degrees in medicine earn the most of all bachelor graduates. The median income for medical graduates is over \$109,300 five-years after leaving study, compared to \$50,700 for all young bachelor graduates. Bachelor's degree graduates in creative arts have the lowest earnings among young bachelor graduates after five-years and they have relatively high rates of benefit receipt.
- Some qualification types and some fields are associated with high rates of further study.
 Around half of all young people who complete

a certificate or Level 5-7 diploma move into further study the next year. Around 61 percent of young bachelor graduates in natural and physical sciences who stay in New Zealand were in further study one-year after completion of a bachelor's degree, and 33 percent after five-years. (p.1)

Park et al. (2013) note, 'While we often focus on the median earnings, there is a lot of variation at each level. For instance, the upper quartile of those who complete tertiary qualifications at bachelor's level or below is around 25 percent more than the median. Five years after completion of their degree, a quarter of young bachelor's graduates earn less than \$37,070, which is 27 percent below the corresponding median' (p. 4). Bachelor's degree graduates in medicine earn in the upper quartile. The table below shows the financial advantages enjoyed by Kia Ora Hauora health graduates in comparison to those who choose other degree pathways.

A measurable increase in Māori students completing Level 7 and above qualifications will contribute to a significant increase in earnings. Based on this assumption King and Associates, (2015) proposed that Kia Ora Hauora could make a critical difference that could result in Māori selecting and staying on a health career pathway. They stated that if 29 students over a three-year period (1 July 2013 to 30 June 2016) achieved a tertiary qualification who would not otherwise have done so, Kia Ora Hauora would show a positive return on investment (p.33).

They note that:

"Given the numbers of Māori registered in Kia Ora Hauora, their ongoing engagement with the programme, the multiple strategies being use to provide information and support, and the relatively small impact required to break even, a positive return on investment seems highly plausible." (p. 35)

To determine the exact return on investment of the programme data tracking is needed. Retention rates, completion and employment rate data would enable a true cost benefit analysis. Recent programme improvements in data tracking and employment tracking may enable this to be carried out in the future.

Kia Ora Hauora supports young Māori onto a health career trajectory. The economic benefits of this activity continue over a lifetime, potentially over 40-years of employment. Hence the total economic benefit to a student and their whānau over a lifetime of earning are substantial. This illustrates the power of a successful support intervention in a young person's life. Kia Ora Hauora is contributing to the increase in lifetime earnings of a considerable number of Māori students, many of whom will move on to a significantly higher income path when they complete their qualification.

Level of Study	Measure	Years After Study		
		ONE	TWO	FIVE
	Upper quartile	\$69,983	\$75,343	\$81,953
Doctorate	Median	\$60,604	\$66,672	\$71,412
	Lower quartile	\$34,290	\$51,178	\$52,667
	Upper quartile	\$54,700	\$60,816	\$72,923
Master's degree	Median	\$43,479	\$50,880	\$59,341
	Lower quartile	\$27,708	\$38,321	\$44,730
Level 8	Upper quartile	\$52,047	\$57,971	\$74,061
bachelors honours/pg	Median	\$44,600	\$50,192	\$60,327
dip or cert	Lower quartile	\$33,911	\$38,970	\$44,812
	Upper quartile	\$49,853	\$54,511	\$69,336
Graduate certificate or diploma	Median	\$45,946	\$48,300	\$58,749
or anpromis	Lower quartile	\$36,976	\$41,485	\$43,077
	Upper quartile	\$46,169	\$50,591	\$62,992
Bachelor's degree	Median	\$38,082	\$43,720	\$50,749
	Lower quartile	\$26,592	\$33,141	\$37.070
	Upper quartile	\$36,352	\$40,322	\$49,202
Diploma	Median	\$28,553	\$32,025	\$39,046
	Lower quartile	\$19,352	\$22,915	\$27,603
	Upper quartile	\$31,854	\$35,259	\$43,425
Certificate at level 4	Median	\$25,622	\$29,329	\$35,514
	Lower quartile	\$17,556	\$20,724	\$25,440
	Upper quartile	\$31,891	\$34,776	\$44,361
Certificate at levels 1-3	Median	\$24,892	\$28,141	\$34,918
	Lower quartile	\$15,954	\$19,310	\$24,278

Table 5. Median and quartile annual earnings of young domestic graduates, one, two and five years after study by qualification level.

BENEFIT FOR WÄHINE

The Kia Ora Hauora outcome data highlights variability related to gender and engagement in the programme. Data indicates that females are more engaged than males. In 2020, 84 percent of the recruitment has been female, and 16 percent male. While more needs to be done to lift the engagement of males in the programme, Kia Ora Hauora is achieving considerable benefits for wāhine.

The following figures demonstrate the inequity that exists between men and women regarding rates of employment/unemployment and labour force participation. While across the board inequity exists, the gap between men and women closes as women access higher qualifications. For women there is a steady increase in employment rates from Level 4 certificates to bachelor's degrees.

Eighty-four-point five percent of single parent families are women caring for their dependents. In the 2013 Census, 42 percent of Māori children lived in sole parent households. The 2012–13 New Zealand Household Economic Survey found that 56 percent of sole parent households with children were in poverty (South Island Health Alliance, p. 88).

Young Māori women under 25-years have an unemployment rate of 23.6 percent, an increase of one percent since 2015. Young Māori and Pacific women under 25-years have a high NEET⁷ rate of

22.5 percent. This is much higher than the NEET rate for all people under 25 which is 10.8 percent (Human Rights Commission, 2018, p. 10).

Pay differences exist in both the broader labour market and the public service. Men are paid more than women; European New Zealanders are paid more than other ethnic groups. In the labour market, Pacific and Māori women are paid a lower rate than European women. (Human Rights Commission, 2018, p. 12). The data on Māori women's participation in leadership roles is unreliable and inconsistent. Statistics on leadership are rarely broken down by ethnicity or factors other than gender (Reynolds, 2013). Despite the high participation by women in the New Zealand labour force and tertiary education, it shows that the more senior the position, the lower the percentage of women in positions of leadership across all sectors of the economy.

Engaging increasing numbers of young Māori women in courses that are likely to result in degree level qualifications will have a significant impact on these statistics. International research has found that an increase in mothers' educational attainment is linked to an increase in their children's expectations to earn a bachelor's degree (Augustine, 2017). This indicates there is a likely intergenerational impact and economic benefit when Māori women are engaged and successful in health study.

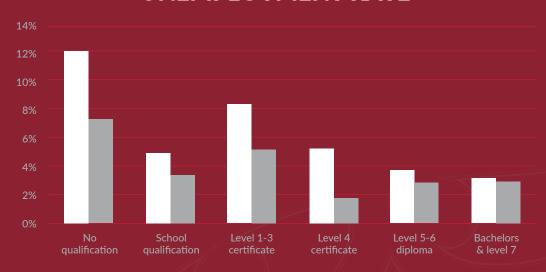
INTANGIBLE BENEFITS

The outcomes achieved by the Kia Ora Hauora national prorgramme are currently measured by the impact on students themselves. It is important to note that intangible benefits may not be measurable but are no less valuable. These include:

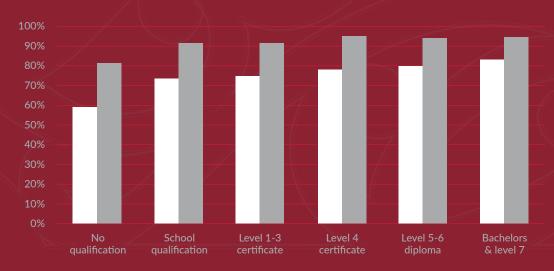
- The impact of additional Māori health professionals within the health workforce, potentially enabling a cultural shift to occur supporting efforts to achieve health equity
- The impact of additional Māori health professionals on their colleagues and their health practices
- The impact of additional Māori health professionals on the whānau they encounter within the system
- The impact of additional Māori health professionals on the aspirations of rangatahi they come into contact with

⁷ NEET - Not in Education, Employment or Training

UNEMPLOYMENT RATE

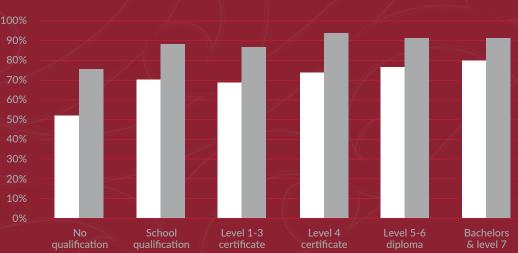


LABOUR-FORCE PARTICIPATION RATE



Graph 3. Employment indicators for 25 to 39-year olds by highest qualification and gender

EMPLOYMENT RATE



Graph 4. Employment rate | Source: Statistics New Zealand, Census 2006.

- The influence of an increased Māori health workforce on the responsiveness of the whole system
- The influence of increased Māori health workforce on Māori NGO community providers
- The impact of an increased Māori health workforce on shifting the focus of the health system from an individual to a whānau-centred approach
- The influence of an increased Māori health workforce on Māori health innovation within the sector

For the whānau and student there are potential intangible benefits that are likley to be accurred in the future such as:

- Increased intergenerational educational achievement
- Increased wellbeing for Māori alumni and their whānau due to increased economic benefits
- A sustainable Māori health workforce
- Improved services for Māori in the health system (as health services are more likley to be culturally congruent)

It is likely that the benefits of a programme like this will ripple out through whānau, both in the present and in the future (Dalziel, Saunders & Guenther, 2017). Ihi Research has not attempted to quantify these ripple effects, which reinforce the conclusion that considerable value is being created through this initiative.

Evaluation results have highlighted the tangible social and economic benefits of Kia Ora Hauora. In particular, this evaluation demonstrates that the rates of Māori secondary school students entering health study has increased significantly in the past 10-years. Māori students raised their expectations regarding their health career because of exposure to different careers through Kia Ora Hauora programmes, and they were more likely to enrol in higher level qualifications because of exposure to different career pathways. Māori students are more likely to complete their qualifications due to financial and pastoral support from Kia Ora Hauora. Māori alumni were more likely to stay engaged in their career due to social support networks created through Kia Ora Hauora.

This evidence suggests there is likely significant financial return on the investment.



CHAPTER 4

Opportunities for improvement

A key objective of this evaluation is to provide key recommendations for the national coordination team to continually improve Kia Ora Hauora.

EXPAND AND SUPPORT KIA ORA HAUORA

Overall evaluation results highlight the many positive impacts of the Kia Ora Hauora programme, particularly on increasing the Māori health workforce. Kia Ora Hauora provides an essential kaupapa Māori approach that strengthens student and alumni engagement and success in health-science related careers. A key objective of the Draft Māori Health Action Plan (Whaanga, 2020) is to build the capacity and capability of the Māori health workforce as part of He Korowai Oranga, the Māori Health Strategy to address Māori Health Inequity. This evaluation demonstrates that Kia Ora Hauora has had considerable success increasing

the rates of Māori studying health-science and moving into health careers. Continuation and extension of Kia Ora Hauora is highly recommended.

Data from this evaluation indicates the future success of Kia Ora Hauroa is primarily hindered by funding. Therefore, there is a need to increase resourcing so more can be done to promote the programme across Aotearoa, while continuing to support and retain students in Kia Ora Hauora. Increased funding will also be required to implement the second recommendation.

STRENGTHEN KIA ORA HAUORA STRATEGIC RELATIONSHIPS TO ADDRESS INSTITUTIONAL BARRIERS

The success of Kia Ora Hauora is reliant on strategic relationships. Such relationships present opportunities but also challenges. Kia Ora Hauora has no direct influence over the practice of high schools, universities/tertiary insitutions or employers. Kia

Ora Hauora staff are aware of the delicate line they walk; supporting student and alumni and advocating for them without disrupting or endangering existing relationships.

Kia Ora Hauora staff expressed their hope, that as the numbers of Māori students within health courses and in health careers increased, institutions would evolve and adapt to meet their needs. However, these institutional barriers need to be systematically addressed to ensure the Ministry of Health's goal of increasing Māori workforce capability and capacity is met.

Kia Ora Hauora staff have the capability to work with schools, tertiary institutions and employers but ultimately these organisations need to take responsibility as well. Other evaluations (King et al, 2015) have emphasised that Kia Ora Hauora requires 'a whole of sector' response to Māori workforce development. Ensuring Kia Ora Hauora is funded to support key staff within institutions to identify and address barriers is recommended as a necessary first step in shifting the sector.

PROMOTE KIA ORA HAUORA EARLIER AT HIGH SCHOOLS AND SUPPORT KEY TRANSITIONS

It is recommended that Kia Ora Hauora continue to promote health careers and subject selection in high schools. Data indicated students needed early support, particularly with subject selection, to ensure they take the correct pre-requisite subjects to enter health related pathways. Māori student science achievement in secondary schools is a significant barrier to Māori health workforce development.

It is also important to continually improve transitions within the pipleline (high school to tertiary – tertiary

into employment). Currently only Kia Ora Hauora and whānau provide consistency in terms of support through this pipeline. Increasing connection with whānau early on in the pipeline will enable whānau to offer continued support alongside Kia Ora Hauora. Further, professional and informed advice and support is essential in these key transition phases. Recent developments in the Kia Ora Hauora Connect, the transition to work programme, are well placed to ensure this occurs.

ENSURE CONSISTENCY OF PASTORAL CARE

It is important to clarify expectations around pastoral care. Further research into pastoral care is recommended based on the findings from this evaluation. Clearly describing what effective pastoral practice looks like and clarifying expectations for the support of students and alumni is warranted. Effective and innovative approaches could then be shared and trialled across regions.

The tuakana teina approach is reported by both student and alumni as an effective way of providing important, supportive relationships between those engaged in the programme. Investigating how social networking platforms can enhance and broaden these relationships to enable networked support for student and alumni is recommended.

ALIGN MONITORING AND EVALUATION

There are three monitoring and evaluation recommendations:

Track retention and destination data

The database and results based accountability enables Kia Ora Hauora to report progress towards key performance targets (for example numbers of students recruited or engaged in tertiary study). Data on retention once engaged in tertiary study and destination to employment is more difficult to collect and track. However, this data would enhance planning, continuous programme improvement and enable the true cost benefit of the programme to be realised.

Further, this data would enable longitudinal research into the experiences of Kia Ora Hauora alumni as they transition into employment, and the enablers and challenges affecting continued Māori workforce development. This is particularly important as Kia Ora Hauora Connect has been established to support the transition into the health workforce.

Align internal evaluation with programme logic

A key recommendation from this evaluation is to focus on internal evaluation for continuous programme improvement at both the regional and national level. This requires data collection and analysis (including workshop evaluations) to be aligned to the programme logic at both levels.

It is noted that localised solutions are making a difference in terms of regional implementation. Successful approaches should be recognised and shared across regions. Regional variations that may be inhibiting the success of the programme should also be identified and addressed.







Te Titiri o Waitangi, addressing wai 2575



KIA ORA HAUORA

Whakamau, Whakau, Whakaora i te ao Māori Recruit, retain and revitalise the Māori health workforce



3557

82.5%

registered students

Increase in Māori enrolling in (Bachelors or higher) health study (2008, 2440 to 2016, 4,455)

registered alumni

ACHIEVED THIS THROUGH...

- Framed recruitment within indigenous world views
- A comprehensive pipeline model across sectors
- Commitment to Māori health equity
- Engagement with whānau and communities
- Designing interventions to address barriers to success
- Data tracking, analysis and evaluation

ADDS VALUE BY...



Increasing numbers of Māori students in health study



Increased likelihood of completion due to financial and pastoral support



Raising Māori career expectations



Creating networked support for students and alumni



Māori enrolling in higher level qualifications



Providing a culturally congruent health workforce

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APPENDIX 1

Methodology

The methodology utilised a kaupapa Māori approach applying an exploratory sequential mixed-method design that employed both qualitative and quantitative data and analyses. The researchers followed the guiding principles for working respectfully with indigenous peoples nationally and internationally. These are articulated by Kennedy & Wehipeihana (2006, p. 1-2):

- **Self-determination** including the right to make decisions about all aspects of their lives. Clear benefits to those being researched.
- Acknowledgement and awareness refers to respect and due recognition and appreciation for indigenous culture, values, customs, beliefs and rights, including an acceptance of a worldview that may not be consistent with Western ideologies. The researchers have Māori whakapapa and bring their experience working with whānau in community-based research.
- Cultural integrity relates to the validity of indigenous knowledge and ways of being, and that cultural knowledge must be protected from misuse, misappropriation and must be preserved for future generations. The researchers have demonstrated cultural integrity working for Māori organisations, iwi, hapū and whānau.
- Capacity building enabling indigenous
 peoples to participate actively in the research,
 with the aim to ultimately drive their own
 research. Ihi Research is committed to building
 capability in all aspects of their research,
 working collaboratively and sharing knowledge.

Trust is a very important part of stakeholder engagement and ensuring sustainable relationships. We take our ethical responsibilities very seriously and ensure our relationships in the community and with iwi, hapū and whānau are a priority. Ihi Research work to an engagement framework that ensures we have

agreed values and principles. These are:

- Manaakitanga acting in a caring and supporting way to each other
- Whanaungatanga respecting the bonds of Māoritanga and 'kinship'
- Rangatiratanga supporting and respecting each other's authority, intelligence and mana
- Paeheretanga creating and nurturing the linkages between each other for a common purpose

The approach was built around whanaungatanga and ensuring that it underpinned all our interactions with students, alumni and whānau. This meant that as researchers we remain connected to the Māori communities we work with. Whanaungatanga ensures we capture, create, nurture, grow and protect the mātauranga shared with us during this project, not for our own benefit or gain, but for the benefit of whānau. Whanaungatanga demands that we engaged with students, alumni and whānau in a respectful way that is mana-enhancing, respectful of each individual and the collective mauri and whakapapa.

Privacy and ethics

The evaluation followed clear ethical procedures, including informed consent and avoidance of harm. An information sheet and consent form were provided for all participants and designed in collaboration with Mokowhiti Consultancy. The participation form was discussed prior to all interviews and participants were able to ask questions and have their questions answered. Written consent was also obtained by the researcher at the interview. The interview transcriber signed a confidentially agreement to ensure they will not share the information they receive. All identifying information was removed from the transcript and pseudonyms were provided.

Phase 1

Document review

Phase 2

Interviews & surveys

Phase 3

Data analysis & synthesis

Survey participants were also provided with information about the evaluation at the start of each survey. They could only proceed with each survey once they had given their consent.

All contact and research data are considered sensitive information; therefore, Ihi Research ensures it is physically and electronically secure with industry standard protection, including password protection on all computers from which it can be accessed. Access was limited to only the necessary personnel. At the conclusion of a research project, raw data is stored electronically for one year and then destroyed unless otherwise agreed with the participants or the clients.

Phase 1: Document review

The first phase involved conducting a document review from previous evaluations, research and reports related to Kia Ora Hauora and its impact. The purpose was to gain a picture of the programme across the regions it operates in, and to ascertain its impact. A total of 10 evaluation reports were reviewed. These included national evaluations of Kia Ora Hauora, National Coordination Centre (NCC) Quarterly Reports, Kia Ora Hauora Regional Quarterly Reports, as well as a research article on Kia Ora Hauora programme impact. In addition to this information, individual participant workshop evaluations were analysed for Kia Ora Hauora workshops delivered in the Northern and Midlands regions. Other Kia Ora Hauora documents that were reviewed included the Kia Ora Hauora programme logic model, Kia Ora Hauora Iwi Engagement Strategy and Plan, Pūhoro Kia Ora Hauora Strategy, and Kia Ora Hauora Connect Information Paper.

Document review results demonstrated that Kia Ora Hauora is a highly successful and worthwhile programme, that has significant positive impacts for Māori students (secondary and tertiary students). The holistic pastoral care approach coupled with practical, real-life activites enabled students to engage in health and disability related career pathways. Documents highlighted the success that Kia Ora Hauora was achieving in its recruitment targets for secondary and tertiary students, and in generating interest in health and disability related careers. Key enablers of success were identified as:

- Kia Ora Hauora kaupapa Māori approaches
- Committed Kia Ora Hauora staff
- Strategic Partnerships
- Hands-on, real-life simulations in Kia Ora Hauora activities
- Communication and marketing
- Kia Ora Hauora programme logic, objectives and performance targets
- Tracking, monitoring and evaluation activites

A number of barriers were identified in the document review. The main barriers were identified as outside of the Kia Ora Hauora programme's direct responsibility. Although the programme was successful in encouraging students engagement in health related career pathways, a key challenge was achieving partity of participation in the workforce. It was more challenging for Kia Ora Hauora to achieve its employment targets once students graduated from tertiary/unviersity studies. Barriers included variability in key stakeholder engagement and support of the programme (for example from secondary schools, tertiary/universities, DHBs and employers). Ensuring student engagement and success in health-science related study and career pathways requires

a systems approach whereby secondary schools, universities/tertiary providers and employers, take more responsibility for achieving equitable education outcomes and greater Māori representation in the health and disability workforce.

The document review findings were then used to inform the development of interview questions that was the second stage of this evaluation. A number of key stakeholders engaged in semi-structured interviews. More information on the characteristics of participants is provided in the following section.

Phase 2: Stakeholder interviews and analysis

We conducted semi-structured interviews with 21 key stakeholders. Participants included students currently studying at a a university/tertiary institution and who were engaged in the Kia Ora Hauora programme, Kia Ora Hauora alumni who had been through the programme and had finished their studies, whānau of students/alumni, Kia Ora Hauora regional co-ordinators, and other key stakeholders (such as university/tertiary lecturers and District Health Board representatives). The aim was to get varying perspectives on the impact of the programme; the enablers and barriers to success, and; how the programme could be improved, expanded or developed further. The table outlines the characteristics and number of participants who engaged in semi-structured interviews.

All interviews were transcribed and then analysed using an inductive method. A six-step framework (Braun & Clarke, 2006) was employed to generate themes. This meant; becoming familiar with the data; generating initial codes; searching for themes; reviewing themes; defining themes and finally, writing these up.

- Tauira currently studying at a university/ tertiary institution
- Kia Ora Hauora
 alumni tauira who
 had graduated from
 a university/tertiary
 institution and were
 now employed
- Whānau of tauira/ alumni
- Kia Ora Hauora regional coordinators and staff members
- Other key stakeholders (university/tertiary lecturers, secondary school teachers, District Health Board representatives)

10TAL **21**

Table 1: Characteristics of interview participants

Phase 3: Kia Ora Hauora national surveys and quantiative analysis

Using key themes from the interviews, two online surveys were constructed to understand strength in shared themes of high interest. One version of the online survey was tailored to Māori tertiary students and the other to alumni. Survey invitations were distributed by Kia Ora Hauora and email reminders were sent weekly. To increase participation a draw to win a \$50 petrol voucher was offered to participants. The survey was initially open from 2nd to 13th of March 2020. However, surveys were extended by one week to increase the participation rate. The surveys concided with the COVID-19 outbreak which may have affected the survey participation.

Responding to the survey questions was voluntary and respondents could skip answering any questions. Therefore, the total number of respondents per question is variable.

In total, 68 participants completed Māori tertiary students survey until the end, including the demographic sections. Another 18 respondents completed only some sections of the survey – they were included in the analysis of the respective questions with the total number of participants reaching 86.

In total, 10 participants completed alumni survey until the end, including the demographic sections. Another four respondents completed only some sections of the survey – they were included in the analysis of the respective questions with total number of participants reaching 14.

The survey themes covered personal and cultural impacts, and academic and career impacts as a result of the involvement in Kia Ora Hauora. The questions were rated on 4-point Likert scale (e.g. 1-Strongly disagree, 4-Strongly agree). 'I don't know' answer option was additionally provided. The averages were calculated for each question, with higher scores reflecting a stronger agreement with the question. "I don't know" answers were not included in the calculation of the averages.

Respondents were also asked to indicate which features of the programme have been most important in encouraging them to stay engaged and what were the main challenges/barriers.

Demographic questions included: age, gender, iwi affiliation, Kia Ora Hauora region, qualification of study, current study (student survey only) or employment (alumni survey only). Regional analyses were not conducted due to small numbers of participants representing each region.

Demographic information from tauira (Māori tertiary student) survey

The following table identifies the Kia Ora Hauora region that participants identified with. The Northern region had the highest number of completed surveys (25) and Te Waipounamu, the lowest number (7).

Region	N
Central	21
Midlands	12
Northern	25
Te Waipounamu	7
Unknown (uncompleted surveys)	21
Total	86

Age

The average age of the 68 participants was 31 (median 27) years, ranging from 17 to 54 years. Age was unknown for 18 participants, as they did not complete the survey to the end.

Gender	N
Female	63
Male	5
Unknown	18
Total	86

Currently Studying	N
University	30
Other tertiary institution	31
None of the above: - 2 working - 1 unemployed and at home mother - 1 waiting to do two papers in the second semester - 1 Uni and a whare wānanga	6
Unknown	19
Total	86

Number of Iwi affiliations	N	
1	46	
2	9	
3	9	
4	4	
Unknown	18	
Total	86	

lwi	N
Ngāpuhi	16
Tainui	11
Ngāti Kahungunu	10
Ngāti Porou	6
Ngāti Tūwharetoa	6
Ngāi Tūhoe	4
Ngāti Maniapoto	4
Te tihaunui-a-Papārangi	4
Te Aitanga-a-Hauiti	3
Te Arawa	3
Te Rarawa	3
Kāi Tahu	2
Ngā Rauru	2
Ngāi Te Rangi	2
Ngāti Ranginui	2
Ngāti Raukawa	2
Ngāti Wai	3 2 2 2 2 2 2 2 2 2
Taranaki	2
Te ti Awa	2
Te Aupōuri	2
Kāti Māmoe	1
Ngā Ruahine	1
Ngāi Tahu	1
Ngāi Tūāhuriri	1
Ngāti Awa	1
Ngāti Hauā	1
Ngāti Koata	1
Ngāti Kurī	1
Ngāti Pāhauwera	1
Ngāti Pāoa	1
Ngāti Ruanui	1
Ngāti Tama	1
Ngāti Tamaterā	1
Ngāti Whakaue	1
Ngāti Whātua	1
Te Aitanga-a-Mahaki	1
Te Whānau-ā-Apanui	1
Waikato	1
Waitaha	1
Total	39

Qualification for study	N
Bachelor of Health Science (Midwifery, Nursing)	33
Bachelor of Social Work	4
Bachelor of Medicine (and Surgery)	3
Bachelor of Applied Counselling	1
Bachelor of Psychology	1
Bachelor of Science	1
Bachelor of Physiotherapy	1
Biomed/medicine	1
Postgraduate Diploma in Health Sciences	2
Postgraduate Diploma in Psychology	1
Postgraduate Diploma in Business Māori Development	1
MA/MSc of Psychology	3
Master of Social Science	1
Diploma in Applied Science	2
Certificate of Health Science	1
Dentistry	1
Midwifery	1
Physiotherapy	1
Poupou Huia Te Reo	1
Social Work	1
BN	1
Whitireia Polytechnic Porirua	1
Unknown	23
Total	86

Alumni survey - Demographic information

Age

The average age of the 10 participants was 34 (median 33) years, ranging from 19 to 49 years. Age was unknown for four participants, who did not complete the survey until the end.

Gender	N
Female	9
Male	1
Unknown	4
Total	14

Employment	N
Full-time employment (30 hours or more per week)	4
Part-time employment (less than 30 hours per week)	2
None of the above: - 2 students	4
Unknown	4
Total	14

Number of affiliations	N
1	6
2	2
3	1
4	1
Unknown	4
Total	14

Region	N
Central	5
Midlands	2
Northern	1
Te Waipounamu	2
Unknown (uncompleted surveys)	4
Total	14

Number of Iwi affiliations	N
Ngāpuhi	3
Ngāi Tahu	2
Ngāti Kahungunu	2
Ngāti Raukawa	2
Tainui	2
Ngāti Maniapoto	1
Ngāti Mutunga	1
Ngāti Porou	1
Ngāti Ruanui	1
Te Whānau-ā-Apanui	1
Waikato	1
Whakatōhea	1
Total	12

Current role/position	N
Administration team support for older adult, rehabilitation and allied health and clinical typist	1
Guest lecturer/Psychometrician	1
Health care assistant - Cancer unit	1
Health support worker	1
Mental Health and Addictions social worker/Addictions trainee counsellor	1
Registered nurse NESP	1
None	3
Unknown	5
Total	14

Qualification for study	N
Bachelor of Nursing	2
Bachelor of Midwifery	1
Bachelor of Physiotherapy	1
Postgraduate Mental Health Sciences	1
Aged Care Level 3 Dementia	1
Doctorate	1
HCA Level 3 Certificate	1
Te Taketake Diploma in Applied Addictions Counselling	1
Nil - still thinking about what to do here	1
Unknown	4
Total	14



