The value of te reo in primary care

Suzanne Pitama MA Hons, Dip Ed Psych; Annabel Ahuriri-Driscoll MPH Distinction; Tania Huria BA, BN RcpN, MPH Credit; Cameron Lacey MBChB, FRANZCP; Paul Robertson PhD, MAHons, DipClinPsych

1 Maori Indigenous Health Institute, University of Otago, Christchurch, New Zealand
2 The Institute of Environmental Science and Research (ESR) Ltd, Christchurch

ABSTRACT

INTRODUCTION: The influence of indigeneity is widely recognised as a health determinant; however the impact of the utilisation of the indigenous language on health care has not been closely examined.

AIM: To explore the Maori language (te reo) as a determinant of health from a Maori patient’s perspective.

METHODS: Maori patients were recruited through Maori health networks and the snowballing technique. Thirty participants participated in one of three focus group interviews. A semistructured interview explored the utilisation of health services, comfortability with service delivery and perceptions of general practice surgeries’ cultural competency. Thematic analysis was utilised to interpret the data.

RESULTS: Te reo was recognised as an important cultural competency, noted by participants as contributing to the development of appropriate doctor–patient relationships and their feelings of being valued within a practice. Patient-led use of te reo was identified as most appropriate, an indicator of quality of care.

DISCUSSION: The training of primary care staff in te reo should be encouraged. Developed as a competency, this will see primary care settings better able to respond to Maori patients and in turn support Maori health gains.

KEYWORDS: Maori health; Maori language; family practice; quality health indicators

Introduction

The influence of one’s ethnic culture, and more specifically indigenous culture, as a health determinant is well recognised.1–5 However, the impact of utilisation of the indigenous language on health care has not been closely examined.6 The current article examines patients’ perceptions of the value of use of the Maori language (te reo*) in primary health care settings.

Health disparities between indigenous and non-indigenous peoples have been well documented in New Zealand (NZ) and a number of other countries.7–10 A range of factors have been identified as contributing to these disparities, with increasing evidence that variables relating to clinician and institutional practice have a significant impact.11–14 Such findings have prompted the development of strategies specifically for clinicians and health care providers to strengthen their capacity to support indigenous health outcomes. In the NZ health environment this has involved the promotion of cultural competency and safety, particularly in the health education sector.15

This provides a context in which to consider Maori health issues and explore/develop appropriate competencies and skills.16 To date, inclusion of the Treaty of Waitangi, cultural protocols, communication strategies, epidemiological data and Maori health models, as well as facility in te reo have been identified as pivotal in increasing

* Te reo refers to ‘Maori language’ for the purposes of this paper.
the clinician’s ability to work effectively with Maori patients and whanau. The application of elements of te reo is the focus of the current article; specifically, data drawn from Maori patients’ perspectives on determinants of quality in primary health care.

**Methods**

The wider study from which the current data was drawn was conducted in 2001 and involved the evaluation of a Ministry of Health funding model used in contracting an Independent Practitioners Association (IPA). This study involved a multi-methods evaluation approach to determine the efficacy of this funding model and its potential to be transferred to other IPAs. For the purpose of this paper, an aspect of the project, which involved Maori community perceptions of this IPA’s health service delivery, is reported on.

Maori patients were identified and invited to participate through the local Maori provider network. To be included participants needed to self-identify as Maori, be registered with a general practitioner (GP) from the IPA, and to have visited their GP at least four times in the previous 12 months. The latter criteria allowed participants to comment on the basis of multiple visits, as opposed to a single experience. Exclusion criteria included those who were under 16 years of age, and those deemed as cognitively unable to give personal informed consent.

Ten participants agreed to participate through the initial provider network recruitment strategy. Twenty more participants were subsequently recruited through a snowballing technique. This involved the initial 10 participants identifying other friends/family/colleagues they knew who might be interested in participating. These initial referrals were followed up by the research team and, utilising the general information form, were invited to participate in one of two further focus group interviews. All those invited to take part in the research agreed.

All participants were asked their ethnicity upon recruitment, using the Census 2001 question. Participants ranged in age from 25 to 70 years of age, with 19 of the participants being female. Participants ranged in work experience. At the time of the interview, 10 worked within the health environment, five were involved within the education sector, five were retired, eight worked in other fields of employment and two were not employed at the time of the interviews. Participants attended the same GP surgery each time (except in emergencies where they would access either the 24-hour after-hours clinic or the emergency department). The exact number of surgeries represented by the participant group was not specifically captured. However, the experiences shared within the transcripts highlight that these practices ranged across deprivation areas within Christchurch and were all urban-based. Participants received a petrol voucher as koha for their time and sharing of knowledge.

For the purpose of this study, 30 participants were seen as adequate to provide the breadth and depth of experiences necessary to saturate any themes arising from the data. A semi-structured interview schedule was used to explore utilisation of health services, comfortability with service delivery and perceived cultural competency of their general practice surgery. Interview times were 1.5 and two hours respectively. All focus groups were audio taped and transcribed verbatim.

Data analysis took an inductive thematic approach in order to represent the patient voice.
without imposing coding schemes. The interview transcripts were analysed by two researchers and broad themes identified. These themes were collated and condensed according to similarity. The final categorisation of themes resulted after four sorting procedures; consensus was reached throughout the process by the researchers agreeing on the category generation.

The Canterbury Ethics Committee reviewed and approved the complete research evaluation (CTY/01/03/031).

Findings

Although the interview schedule did not ask specifically about te reo, this emerged as a significant theme in all focus groups. The results are presented below in relation to the three primary themes derived from the data.

1. Name pronunciation

“I would really like to have my name pronounced correctly.”

During discussion of barriers to care, participants were asked what constitutes ‘good health care’. The focus groups’ initial responses related to the medical receptionist pronouncing their name correctly. Participants recounted many experiences of having their name mispronounced, and noted how this had led them to feel belittled or unwelcome in the clinic, discouraging them from attending again.

“I hate that every clinic I’ve ever been into it’s always Ms X [mispronounced Maori name by medical receptionist] and now I don’t bother saying my name or any of my children’s names [correctly]. Things won’t change.”

“You are in the waiting room and you hear the receptionist/nurse go TTTTTTTITT...and you sigh, get up and go in, you know it’s you.”

“You look at people that go to my doctors... a hell of a lot of Pakeha, every single thing is Pakeha. Right down to the abuse, verbal abuse of your name.”

Participants agreed that everyone in the practice (the medical receptionist, nurse and GP) pronouncing their name correctly was a measure of ‘gold standard’ health care. They saw this, as not only a sign of respect, but also indicative of the GP’s intention to engage with them, as Maori.

“I get on a first name basis now in our medical clinic, it’s not very often you get called by your name correctly.” [Participant had a Maori first name.]

2. Relationship development skill

A second theme to emerge was that the use of te reo had assisted in the development of positive relationships between participants and their general practice surgeries. Although all patients spoke fluent English, there were times when they preferred to use te reo. The main reason for this was that they felt they were better able to articulate how they felt about their health condition and/or presenting complaint characteristics. Often this was conveyed by the use of one word (e.g. hoha) or a phrase (he mate au). It was also seen as an opportunity to share more with the general practice about themselves and their connection to the Maori world and Maori beliefs and values—including te reo.

There was an expectation by participants that their general practice surgeries would either know/understand these words or seek clarification. When general practice staff ignored or reacted to te reo negatively (e.g. body language or verbal commentary), participants took this as a sign that Maori perspectives were not valued, or seen as valid. Furthermore, participants also perceived this as a strong message that general practice did not want to develop a relationship with them. Such negative experiences had led some participants to disengage with the health system for a period of time.
“They ask you how you feel and you say hoha, and they say what? ...waste of time... they just don’t get you... so you say nothing.”

Participants reported feeling high levels of dissatisfaction and having enhanced connection with primary health care providers who did engage in te reo, either by repeating Maori words used, or seeking further clarification of the word/phrase meaning. Participants perceived a general practice prepared to attempt te reo as more ‘trustworthy’.

“My GP was a good doctor... I would go in there and I could say xyz [words in te reo] and there was a relationship.”

It is interesting to note that for participants the relationship was seen as pivotal to the quality of health care; several noted that if their GP moved surgeries they would follow, in order to maintain the relationship. Some participant accounts saw whanau travelling for more than 40 minutes to maintain continuity with that GP.

3. Quality of care indicator

Participants identified that Maori visual media (such as posters, signs and brochures) alone were not sufficient as a sole mechanism for engaging with Maori patients. Such efforts were seen as tokenistic, as indicated by the following brief conversation:

Interviewer: “How would you define tokenism?”

P1: “Seeing a Maori bear sitting in the corner...”

P2: “...or Manu doll”

P3: “...or just a ‘haere mai’ sticker or something on the door like that...”

The use of te reo was seen as an important non-tokenistic indicator of cultural competency. Overall, participants felt strongly that future health care for Maori should encompass the use of te reo as a quality indicator.

“I mean the ideal that being like a culturally-sensitive experience is right out there, it’s sort of like the year 2020. I’m hearing kia ora when I walk through the door... I’d like it to be but it’s sort of dreaming. That’s where I’d like to take my children... somewhere like that.”

All participants agreed that use of te reo should be patient-led. However, they clearly identified that if patients do use te reo within the general practice setting, it needed to be valued and responded to in a positive way.

Discussion

This study highlights the value of te reo usage within primary care, as perceived by participants. This can be as simple as making an effort to correctly pronounce patients’ names and to utilise te reo spoken by the patient. Te reo was clearly identified as assisting in relationship-building between clinician and patient and as an indicator of quality health care.

Over the past decade there has been a trend towards the use of te reo in health promotion, reflecting both increasing numbers of te reo speakers within NZ and recognised benefit of providing targeted health care messages/interventions.23,24 The use of te reo is seen as a core cultural competency central to enhancing communication and engagement. More specifically, te reo can be a vehicle to better understand cultural protocols (tikanga) and Maori health perspectives. However, in order to be sensitive and responsive to individual Maori patients, clinicians should mirror patients’ use of te reo, rather than assume fluency or acceptability.

International attempts to develop a range of cultural competencies have tended to focus on clinician knowledge of health disparities and eliciting patients’ health beliefs.25–27 The value of clinicians’ adoption of indigenous language as a key cultural competency and clinical skill has not previously been explored.

There are a number of limitations within this study. Firstly, the participant group was drawn from a single community and it is unknown whether similar beliefs are held throughout Aotearoa. Secondly, the inclusion of health care workers within the focus groups may also limit the generalisability of conclusions drawn in this
study to Maori patients in general. Additionally, the absence of adolescent participants within this study means that we were not able to explore the value of te reo to younger Maori in this context, a group amongst whom there is increasing usage and fluency. Finally, whilst the use of te reo was valued by these participants, it remains to be shown whether use of te reo in primary care will ultimately affect Maori health outcomes.

However, despite these limitations it is clear from the study findings that use of te reo can significantly enhance the experience of Maori patients in general practice and primary care. From the perspective of strengthening service responsiveness and therefore quality, staff within primary health care providers ought to be encouraged to improve their pronunciation and use of te reo. This is a powerful symbol of provider interest and willingness to engage meaningfully, can assist in understanding a patient’s health beliefs and, ultimately, foster a stronger therapeutic alliance.

References
The Hui Process: a framework to enhance the doctor–patient relationship with Māori

Cameron Lacey, Tania Huria, Lutz Beckert, Matea Gilles, Suzanne Pitama

Abstract

Aim To describe a method of integrating cultural competency practice, specific to Māori, in the doctor–patient relationship.

Method The Hauora Māori curriculum at University of Otago, Christchurch has developed the ‘Hui Process’, a framework to guide clinical interaction with Māori derived from engagement and relationship building principles of Te Ao Māori.

Results The current consensus from Māori health leaders, student feedback and anecdotal Māori patient feedback indicates the ‘Hui Process’ is easily learnt, well received by patients and can enhance the doctor–patient relationship.

Conclusion The introduction of the ‘Hui Process’ as a framework for building effective relationships between doctors and Māori patients has been well received in medical education. Clinicians should consider utilising the ‘Hui Process’.

Cultural competency in doctor-patient communication has developed as part of broader strategies to address disparities in health care for minority ethnic groups.1 While most doctors engage with patients with positive intent, there is evidence that misperception and lack of connection between patients from non-dominant ethnic groups and medical professional is not uncommon.2,3 Poor engagement between doctors and patients is associated with negative outcomes for both the patients4 and doctors.5

How cultural competence is best taught and implemented in clinical settings remains uncertain. Initially medical education focused more on providing cultural information, with limited attention being paid to the application of this information to a specific clinical context.6,7 How to integrate ethnic cultural beliefs, values and practices into clinical practice has rarely been made explicit. This is particularly problematic where elements of an ethnic culture and medical culture are incompatible or even in direct conflict.8

There have been some attempts internationally to guide clinicians in engagement strategies with some ethnic groups.9 An alternative approach has been to produce generic non ethnic-specific guidelines although these have not been considered within New Zealand medical context.10

There has been extensive work within the area of Māori health regarding the importance of Māori culture in the New Zealand health system11, and some training options exist for enhancing clinician’s ability to work effectively with Māori 12,13. However the routine adoption of Māori cultural competency as a core clinical skill and the best method for teaching and learning these skills is still to be agreed.
In this paper we present the ‘Hui Process’ as a framework for working effectively with Māori that is currently taught in the University of Otago, Christchurch.

**Hauora Māori Curriculum at University of Otago**

The University of Otago hosts a six-year undergraduate medical training course. Hauora Māori is included within the medical curriculum as a vertical module throughout each year of the course. The Hauora Māori curriculum encompasses the breadth of learning environments with immersed, integrated and independent learning.

The ‘Hui Process’ was initially piloted in the advance learning in medicine years (Years 4–6) at the University of Otago, Christchurch campus, and has also been applied at other clinical sites.

Medical students are introduced to the ‘Hui Process’ in an immersed marae (traditional meeting place) setting at the beginning of 4th year and skills are further developed during subsequent clinical rotations.

**Development of the ‘Hui Process’**

A hui is a meeting or coming together and is a central ritual of encounter in Te Ao Māori (The Māori world). The authors acknowledge drawing on traditional knowledge and practice and aligning it to a contemporary situation in seeking to develop more culturally congruent practice with Māori patients and whānau (family and support network).

The ‘Hui Process’ applies traditional principles of greeting, introducing, starting a relationship and closure of an encounter to the setting of a medical consultation. These principles may be observed overtly in powhiri (formal structured meetings), and can also be seen to occur with more subtlety in informal meetings.

The ‘Hui Process’ has been explicitly aligned with the University of Otago’s standard teaching model for clinical interviewing (the Calgary-Cambridge framework).

**The Hui Process**

The ‘Hui Process’ has been identified as containing four key elements: Mihi, Whakawhānaungatanga, Kaupapa and Poroporoaki, as described below:

- **Mihi**: initial greeting and engagement.
- **Application to clinical consultation**: The main focus of the first stage is to ensure clinicians clearly introduce themselves and describe their role (as the doctor) and the specific purpose of the consultation to the Māori patient and whānau. At this stage, the clinician should also confirm that the patient identifies as Māori.
- **Whakawhānaungatanga**: making a connection.
- **Application to clinical consultation**: The primary focus of this stage is connecting at a personal level with the patient and any whānau present. This process is based on a traditional format of engagement within Māori cultural protocol, and is often mistaken as ‘building rapport’.
Building rapport is important and is a usual step with all patients, however engagement with Māori patients and whānau requires a further step. Whakawhānaungatanga requires clinicians to draw on their understanding of Te Ao Māori and relevant patient and whānau Māori beliefs, values and experiences. This may be in terms of the patient’s whenua (land) connections, whānau involvements, use of te reo (Māori language). This should not only include identification of these aspects of the Māori patient, but critically should include some self-disclosure of the student / doctor about their own experience of these aspects.

At times it may not be fruitful to pursue the medical agenda until this point of shared experience is reached. This is a key point of difference from existing clinical skills teaching and something established clinicians may consider challenging where no self-disclosure has been taught, often as part of establishing boundaries. Similar boundaries exist within Te Ao Māori and the ‘Hui Process’ and obviously limits of self-disclosure must be considered. The challenge for the teaching staff has been to help students identify appropriate information that will assist them in moving from rapport to whakawhānaungatanga with Māori patients, while remaining within safe boundaries.

We observed that medical students coming to New Zealand from other countries had fewer problems adopting this new approach compared to students who grew up in New Zealand. It is often noticeable when a connection has been made, for example, as indicated by the patient asking personal questions, change in body posture, or use of humour.

It is emphasised that whakawhānaungatanga is not a one off event and there is a need to attend to connecting with the patient and whānau throughout the consultation.

- **Kaupapa:** attending to the main purpose of the encounter.

- **Application to clinical consultation:** this is identified as the point at which the focus moves to history taking or whatever the clinical task at hand is (e.g. taking blood pressure). Students are provided with a complementary framework, the Meihana Model, to extend the standard history taking process presented elsewhere.

The Meihana Model has undergone development to incorporate aspects of further contemporary and historical factors that may influence the health experience of patients and whānau such as migration, colonisation, racism, marginalisation and Māori beliefs, values and experiences. This allows for a broader focus in understanding patients’ presenting complaints, as well as facilitating ongoing whakawhānaungatanga as patients are encouraged to talk more broadly about their situation.

- **Poroporoaki:** concluding the encounter.

- **Application to clinical consultation:** this reminds the students of the need to clearly identify both the finishing point of the consultation and to ensure clarity about the next steps for the patient and whānau.
Three tasks are identified:

- Ensure that you have understood what the patient has said,
- Ensure the patient understands what you have said, and
- Ensure the patient is clear about the next steps (for example the date for a follow-up appointment, details of referral for tests, lifestyle change, medication regimes etc).

Research exploring Māori patient and whānau experience within the health system highlights that this process is often seen as sub-optimal and incomplete. The poroporoaki only occurs if a relationship has been effectively developed over the consultation as the traditional role of the poroporoaki was to ensure all ‘business’ of the hui was completed, that both parties understood what would come next, and that the relationship existed for further steps to be negotiated as required. The aim of this stage is to provide students with the tools to articulate a poroporoaki process which is comfortable and appropriate with Māori patients and whānau.

The hui process is usually introduced to students based on initial engagement with a Māori patient and whānau. Subsequent meetings follow a similar but more abbreviated format and may simply reflect upon the shared commonality identified in whakawhānaungatanga stage on the previous occasion as well as the outcome of the last meeting.

**Learning opportunities and assessment of ‘Hui Process’**

Students are firstly introduced to the ‘Hui Process’ through the use of simulated patients, using role-play techniques in a group format. Students also view videos where a clinician is modelling the ‘Hui Process’. Students are then encouraged to utilise the ‘Hui Process’ with Māori patients they encounter across all clinical rotations.

The students then undertake summative assessments which require the ability to utilise the ‘Hui Process’ with a Māori patient for their Hauora Māori written long case and their Hauora Māori oral case presentation. There is an additional opportunity to assess students’ use of the ‘Hui Process’ during the Hauora Māori OSCE. A review of students’ performances in these summative assessments identifies that the students are able to apply the ‘Hui Process’ and its core principles to clinical settings.

**Student feedback**

Evaluation of the ‘Hui Process’, including formal student feedback and observation of student performance on summative assessments, suggests students value having a specific framework (which involves specific lines of questioning and guided questions) to work with, as they develop their history taking skills. Student feedback suggests that the teaching process and the framework itself are seen as acceptable and relevant. Further systematic evaluation of the ‘Hui Process’ is underway.

Self-reflective comments from students has also revealed that a number of students become aware of the impact of not using the ‘Hui Process’, and recognised better engagement with patients and better quality information when using the process.
One student identified being able to more clearly identify the nature of a presenting problem and making an appropriate referral for input from a Māori Health Worker, once she had engaged in the “Hui Process”. There has also been some informal feedback from community members reporting increased engagement and satisfaction by patients involved in ‘Hui Process’ consultations.

While evaluations are still in the early stages and limited conclusions can be drawn, it seems that the “Hui Process” meets requirements as an effective cultural competence framework. It is firmly grounded in the culture of the target group, it aligns well with standard medical practice and is seen as relevant and useful by students. Most importantly it appears that it can be applied by students and has a positive impact on patient experience.

Conclusions

It is a challenge to develop and teach cultural competence which extends beyond tokenistic or oversimplified stereotypes and truly integrates clinical and cultural elements of practice. Teaching cultural competency in a way which facilitates application of knowledge in clinical practice in ways which reflect patient reality remains a challenge.

Identifying the relevance of such competencies to ‘real’ medicine remains critical, as does ensuring that the skills applied are relevant to patients. While the initial development and evaluation of the ‘Hui Process’ suggests that this cultural competence fulfils many of the criteria for effectiveness, the full impact of this teaching on both student practice and patient experience has yet to be assessed.

We present a simple framework for enhancing the therapeutic relationship between clinicians and Māori currently taught at the University of Otago. Initial feedback indicates it is found to be effective by students and well received by Māori. Students have also identified that their use of the ‘Hui Process’ has sometimes assisted in improving the therapeutic relationship between more senior clinicians and Māori patients.

We encourage all clinicians, irrespective of their discipline or level of training, to consider adopting the ‘Hui Process’ with Māori patients. While cultural competence is important for all, we caution against the use of this approach for other cultural groups. The essential element of this framework is its alignment with Te Ao Māori principles and exclusion of these may result in similar non-ethnic specific guidelines already available. However the process of integrating culturally specific principles of greeting and relationship building to the medical consultation could be applied by other cultural groups.

It is hoped that adoption of this framework is one strategy that individual clinicians can adopt which may result in improved health outcomes for Māori and the closure of the gap in life expectancies with non-Māori. The potential impact of this framework was suggested by a community member who presented with a range of health challenges and had been a high user of health services for over thirty years.

This person provided unsolicited feedback to one of the authors after being interviewed by a 4th-year student who used the ‘Hui Process’:

“He was the first doctor who got me.”
Ultimately the effectiveness of the learning cultural competency is reflected in the quality of the relationships established and the fruits of those relationships, in terms of connections, understandings, and the willingness to engage and to trust.

**Competing interests:** None declared.

**Author information:** Cameron Lacey, Senior Lecturer, Māori Indigenous Health Institute (MIHI), University of Otago, Christchurch; Tania Huria, Lecturer, Māori Indigenous Health Institute (MIHI), University of Otago, Christchurch; Lutz Beckert, Associate Professor, Department of Medicine, University of Otago, Christchurch; Matea Gillies, General Practitioner, Christchurch; Suzanne Pitama, Associate Dean Māori, Māori Indigenous Health Institute (MIHI), University of Otago, Christchurch.

**Acknowledgements:** The authors thank Wendy Katoa-Dallas and Dr Paul Robertson for their considerable assistance in the development of the ‘Hui Process’ and Jessica Cuddy for her review of this paper.

**Correspondence:** Cameron Lacey, MIHI, University of Otago, Christchurch, PO Box 4345, Christchurch, New Zealand. Fax: +64 (0)3 372 0407; email: cameron.lacey@otago.ac.nz

**References:**


Improving Māori health through clinical assessment: Waikare o te Waka o Meihana

Suzanne Pitama, Tania Huria, Cameron Lacey

Abstract

Health professionals play an important role in addressing indigenous health inequalities. This paper describes the further development and a new conceptualisation of the Meihana model (2007) and the Hui process (2011), which together have formed the indigenous health framework in the University of Otago, Christchurch undergraduate medical education programme for 4th–6th year medical students over the past 5 years. The components of the framework are defined followed by description of their application to clinical assessment.

The indigenous health framework has been evaluated by medical students, health practitioners, Māori patients and whānau over this time and has been rated favourably as a clinically relevant framework that supports health practitioners to work effectively with Māori patients and whānau.

In New Zealand health disparities between Māori and non-Māori are well documented,1,2 as is the role of the Treaty of Waitangi in health.3 The Health Practitioners Competency Act (2003) identifies that all professional health regulatory bodies require health practitioners to demonstrate appropriate levels of cultural safety and competency in order to be fit for practice.4,5 However, the evidence is less clear on how individual health practitioners can positively incorporate cultural competency into clinical practice.6–8

The Indigenous Health Framework developed at the University of Otago, Christchurch aims to translate the principles of cultural competency and safety into an approach that health practitioners can use in everyday practice and, by doing so, improve health service delivery for Māori patients/whānau. The Indigenous Health Framework is comprised of the Hui Process9 and the Meihana model10 and is used primarily in the medical interview, building on the widely used Calgary-Cambridge model.11

The Hui Process describes recommendations for enhancing the doctor-patient relationship with Māori. It includes mihimihi (initial greeting engagement), whakawhānaungatanga (making a connection), kaupapa (attending to the main purpose of the encounter), and poroporaki/whakamutunga (closing the session).

The Meihana model describes how the kaupapa (purpose of the encounter) can extend standard history taking to give a broader understanding of Māori patients’ presentations. It has also been specifically developed for use by both non-Māori and Māori health practitioners.

The Meihana model was created using the foundations of the well-documented Māori health model, Te Whare Tapa Wha.12 The Meihana model was initially published in
and described six components of the model (whānau, wairua, tinana, hinengaro, taiao and iwi katoa) and introduced a concept referred to as Māori beliefs, values and experiences (MBVEs) which overlaid the six components.

Over the last 6 years the authors and their colleagues based at the University of Otago (inclusive of Christchurch, Wellington and Dunedin campuses) have trained medical students, medical doctors, allied health professionals (nurses, psychologists, physiotherapists, occupational therapists), Māori health workers and administrative staff on the principles and practicalities of implementing the Meihana model. These training initiatives have been evaluated through student/staff/patient feedback forms, a qualitative case study, case presentations and observed structured clinical examinations (OSCE) and have been shown to increase quality interactions between health practitioners, Māori patients and whānau.9,10,13

The use of this model in diverse health settings and advances in the research about factors contributing to health disparities has led to changes in the presentation and some of the concepts of the model compared to its original description. This includes further refinement of how each component of the model is defined and explored within a clinical assessment, and the inclusion of the concept of Nga Hau e Wha, which provides a further context to the health environment for Māori.

The purpose of this paper is to provide an updated descriptive overview of the Meihana model and its application to clinical assessment. The term ‘Waikare o te Waka o Meihana’ refers to the rippled waters from the Meihana waka and reflects the development of the model from its original description. It also encompasses our aspirations that this model may positively influence change in health practitioner’s history taking and management behaviours.

Overview of Meihana model

The analogy of a waka hourua (double-hulled canoe) was developed to describe the elements of the Meihana model, their interactions and to assist with visual presentation of the model, see Figure 1.

Figure 1. Diagram of the Meihana model
A waka analogy has been previously used in other research and health models\textsuperscript{14,15} This development of the Meihana model uses the components of the waka hourua and factors that can affect this voyage to summarise the breadth of information that may be required to fully understand a Māori patient’s health status. The waka hourua was the traditional mode of transport used in the migration of Māori from Hawaiki to Aotearoa (New Zealand). Therefore this analogy draws on a voyage of a waka hourua across the moana (ocean) from one destination to another.

Figure 1 illustrates the two hiwi (hull – representing the patient and whānau) are attached through aku (crossbeams). Each voyage is charted towards a destination, for the waka hourua this involves the passage of attaining hauora (health/wellbeing), however the course can be influenced by nga hau e wha (the four winds of Tawhiri-matea), nga roma moana (ocean currents) and whakatere (navigation).

**Components of Meihana model**

Each of the components of the waka hourua, nga hau e wha (four winds) and nga roma moana (ocean currents) and whakatere (navigation) is described, beginning with a brief discussion of the term’s use in Te Ao Māori (Māori world view), followed by the definition used in the Meihana model and its application to clinical assessment.

**Waka hourua (double-hulled waka)**—The waka hourua demonstrates the importance of considering both the patient and their whānau in assessment of health. Additionally, it is a role of the health practitioner to get onto this waka hourua and become a part of the patient’s support network (kaupapa whānau) for a period of time. Assessing the health of a Māori patient should include developing an understanding of the strength and weakness of each of the aku (cross beams) and its role in the patient’s health. The components of the waka hourua will not be new to health practitioners and are not unique aspects to Māori - they are components of any thorough clinical assessment. However this model describes their relevance for Māori in clinical assessment.

**Component: Patient**

*Definition:* Patient identifying as Māori with ethnicity correctly confirmed within the clinical context.

*Application to clinical assessment:* Despite the importance of ethnicity as a determinant of health, ethnicity data if often inaccurately recorded (16). Self-identification through the Ministry of Health ethnicity data protocols (17) is the most effective way to allow Māori patients the right to identify themselves as Māori.

Within clinical practice it should become common place for all patients to be asked their ethnicity, and to have this reviewed over time, because the more comfortable a patient becomes in the service, or the more a health practitioner demonstrates cultural competency and safety, the more likely a patient may feel willing to identify as Māori within the service.
The identification of Māori patients should ensure Māori health services and supports are offered to the patient (regardless of whether their physical salience is recognised by others as being 'typically' Māori).

**Component: Whānau**

**Definition:** Support network(s) for the patient

**Application to clinical practice:** Whānau may refer to biological family (whakapapa whānau) and/or other key support people (kaupapa whānau) who are stakeholders in the patient’s health and well-being.\(^{18}\)

Whānau often have a key role in establishing collateral history and family medical history. Assessment should also include whānau understanding of the patient’s condition and their expectations around management and prognosis. For example, if a patient presents with chest pain and another member of the whānau previously died following a heart attack, is mortality the patient’s expected outcome? Gathering an understanding of this can inform appropriate health education and management of the patient and their whānau.

Unfortunately whānau often feel excluded from participating in clinical assessment.\(^{19}\) This may limit a health practitioner’s ability to gain a comprehensive understanding of the patient’s symptoms and family medical history (especially if it is unknown to the patient). Permission to include whānau in the clinical setting should be sought from the patient, as failure to include the whānau, may result in overlooking the impact of the patient’s health on the whānau and if wider support networks are required. This also allows for the exploration of the perceived confidence of the patient/whānau to navigate through the health system. If a patient opts not to include whānau in the consultation, health practitioners can enquire about the patient’s understanding and/or perceptions of their whānau support networks.

**Component: Tinana**

**Definition:** Physical health and functioning of the patient

**Application to clinical assessment:** This component incorporates the assessment of a standard medical history to draw an accurate profile of the patient’s physical status (both past and current functioning). For example this includes physical symptoms, medications, substance use, diet, exercise and physical examination. It should be noted that tinana, while a vital part of the clinical assessment does not stand alone and cannot be considered without the other relevant components of this model.

**Component: Hinengaro**

**Definition:** Psychological and emotional wellbeing of the patient

**Application to clinical assessment:** This component encourages health practitioners to explore psychological wellbeing but should also include assessment of the patient’s concept and perception of their condition and the impact of this on their wellbeing. For example this may reveal the comorbidity of depression with chronic illnesses, or
stigma in relation to specific mental health illnesses. These beliefs and emotions may influence the manner in which a symptom or illness is discussed.

**Component: Wairua**

**Definition:** Beliefs regarding connectedness and spirituality

**Application to clinical assessment:** This component identifies the beliefs, values and priorities for the patient/whānau that may impact their engagement with the health system and/or their paradigm of health. Health practitioners can begin to explore this by enquiring about spiritual-religious belief and attachments to people, places and taonga (treasured items). Incorporating this component allows a conversation about religion, death and dying within an appropriate cultural context. This is especially important in palliative care and in situations where a lack of connectedness may be a key risk factor e.g. assessing depression and/or suicide risk.

**Component: Taiao**

**Definition:** The physical environment of the patient/whānau.

**Application to clinical assessment:** This component identifies the importance of gaining a clear understanding of the physical environment of the patient/whānau. This includes direct questions of the patient/whānau about their home environment, neighbourhood and workplace health and safety. It also involves critiquing the service or clinical environment that the patient/whānau are interacting with. This may include identifying whether the basic details of the physical and interpersonal spaces promote privacy and dignity (e.g. adequate seating for support networks to attend, appropriate clinical gowns/sheets in order to complete investigations) and whether the service has identified potential barriers to access in the service (e.g. car parking, close to amenities, Māori ‘friendly’ environment).

**Component: Iwi Katoa**

**Definition:** Services and systems that provide support for patients/whānau within the health environment.

**Application to clinical assessment:** An integral part of the assessment process is to identify whether patients/whānau have had appropriate access to services and systems that can improve their broader health context and/or their engagement with the health environment. This includes access to mainstream services such as NGOs, Work and Income (community service cards, high user health cards), screening programmes, Plunket, other primary care services (e.g. brief intervention services), ‘green prescriptions’ and/or specific Māori health services such as Kaupapa Māori provider services (e.g. Tamariki ora, addiction services, Rongoa Māori) and Māori Health workers (in both primary and secondary care services). Exploring current barriers and enablers to accessing services allows the health practitioner to further tailor future care plans for the patient/whānau.
Nga Hau e Wha – The four winds

Nga Hau e wha in Te Ao Māori refers to “four winds”\textsuperscript{21}; in this analogy these winds impact the journey of the waka hourua to Hauora (wellbeing). The four winds signify historical and societal influences on Māori as the indigenous peoples of Aotearoa/New Zealand. Knowledge and understanding of these winds assists in providing the appropriate context for Māori health (in a colonised society) and encourages the health practitioner to reflect on how these winds have influenced their perception of Māori patients/whānau/community.

In practice, each of the four winds are inter-related e.g. urban migration of Māori was highly influenced in the 1960s by government policies (colonisation) to meet workforce shortages in the cities.\textsuperscript{22,23} This section outlines the broad framework of each component to provide a guide for health practitioners to consider in assessment – components may or may not be relevant to Māori patients and/or whanau.

**Component: Colonisation**

*Definition:* Colonisation, both historical and on-going, occurs through the loss of land, political re-organisation and dehumanisation of Māori patients and/or community.\textsuperscript{3}

*Application to clinical assessment:* This component of the model challenges health practitioners to explore poverty, socioeconomic status, employment conditions, access to quality education opportunities, appropriate housing and financial ability to engage in the health system. Health practitioners should also consider the context of contemporary political events, which foster the inclusion or alienation of Māori communities in the development and implementation of services that may contribute to Māori health gains. This component may also include awareness of specific deficit stereotypes of Māori which may contribute to bias in clinical decisions.\textsuperscript{24,25}

**Component: Racism**

*Definition:* Understanding of the impact of institutional, interpersonal and internalised racism on a patient’s presenting complaint/wellbeing.

*Application to clinical assessment:* Racism has consistently been identified as a key determinant of health.\textsuperscript{26} This component encourages the health practitioner to explore the patient’s experiences of living in a racialised society, including questions around experiences in which they (or their whānau) have been discriminated against because they are Māori. This may have occurred in education, health or community settings. Exploring racism with patients requires sensitivity. It also requires the health practitioner to identify when the patient/whānau may not attribute their experience to racism but something that ‘just happens’ and to be critical of the systemic processes that maintain the silence of racism within our community. This line of enquiry can identify reasons for the way the patient/whānau engage with health services and assist health practitioners to tailor their practice to reduce further likelihood of racist experiences in the health system.
More recent research has described three types of racism that influence health outcomes: interpersonal, institutional and internalised racism. Inter-personalised racism is the type most commonly thought of and includes “prejudice and discrimination, where prejudice means differential assumptions about the abilities, motives and intentions of others according to their race and discrimination means differential actions towards other according to their race”.  

Exposure to this type of racism has been associated with lower health status. It is included in the Meihana model to encourage health practitioners to explore if Māori patients have felt discriminated or treated differently within the health environment as well as wider society because of their ethnicity.

Institutional racism is differential access to goods, services and opportunities by race. In order to understand the influence of institutional racism, health practitioners need to be aware of and encourage the evaluation of equity of services (including their own) as part of routine on-going quality improvement. The Health Equity Assessment Tool (HEAT) is a newly developed tool designed for this purpose.

Internalised racism is the acceptance of negative messages about self-worth based on racial identity. ‘Clues’ to recognising these beliefs in the clinical setting may include statements such as “I’m not into that Māori stuff” or “Just treat me like everyone else.” Understanding the significance of this type of racism for Māori patients and whānau can be difficult to assess, however it is important that practitioners have an awareness of this type of racism and the impact it can have on Māori patient’s self-worth and identity.

Component: Migration

**Definition:** Understanding internal migration of Māori from traditional iwi land to other regions within Aotearoa/New Zealand, tracking of possible external migration and establishing where their support networks are located.

**Application to clinical assessment:** This assists the health practitioner to explore connections to whenua (land), where current support networks are located, reasons behind migration and how such events have engaged or disabled access to quality health care. This encourages a discussion around where the patient/whānau identify their whenua connection (if known), which can lead to further understanding of iwi/hapu identity. It also identifies who migrated (e.g. the patient or their parent, grandparent) and hence how long the patient/whānau has been in the current location and their connections to the current and ‘historical’ regions.

For some patients/whānau who are 2nd or 3rd generation descendants of Māori who migrated from traditional tribal areas, they may choose not to connect back with traditional iwi structures and associate with other Māori collectives that are urban based (e.g. urban authorities, urban marae). If there has been no migration and the patient/whānau live within their own iwi boundaries, this may lead to discussing the support networks available to the patient/whānau.
Component: Marginalisation

Definition: Knowledge of health information which identifies current Māori health status, including health disparities and health gains.

Relationship to clinical assessment: Knowledge of current Māori incidence, prevalence, morbidity and mortality rates (in relation to a specific illness/condition) can influence clinical assessment and practice. For example, knowledge of higher surgical readmission rates for Māori should prompt the health practitioner to carefully assess the adequacy of the discharge plan after a surgical procedure.²

Health practitioners are also encouraged to consider changes in Māori disease profile over time. For example understanding that current mental health disparities have only emerged since approximately the 1970s may help maintain therapeutic optimism and reinforce the potential for a better outcome for Māori. This component of the Meihana Model acknowledges the commitment required by health practitioners to be up to date with current Māori health information to reduce marginalisation of Māori within the health system.

Nga Roma Moana – Ocean Currents

Māori navigators understood how the currents influenced seafaring voyages. Familiarity with the currents influenced the timing of voyages and assisted to plot the course required to reach the destination. Harnessing the currents aided in time efficiency and energy required to undertake the voyage.

There are four specific ocean currents around the two larger islands of New Zealand, and these are used in this model to represent four specific components from Te Ao Māori (the Māori world view) that may influence Māori patients/whānau in clinical settings. It is important to note that the influence of these currents varies greatly due to individual patient experiences in Te Ao Māori and the effects of colonisation. The influence of these currents and the flexibility of the model allow for Māori patients’ diverse experiences to be equally valued.

Component: Ahua

Definition: Personal indicators of Te Ao Māori that are important to the patient/whānau.

Relationship to clinical assessment: The identification of personalised indicators of Te Ao Māori that are important to the patient and whānau are opportunities to develop meaningful whakawhanaungatanga with the patient and whānau.³ Enquiry of this component helps health practitioners to facilitate patients and whānau sharing more about themselves and validates the patient and whānau as Māori in the clinical setting. Specific indicators may include a patient and/or whānau using te reo within interactions, the wearing of specific taonga, ta moko, clothing with te reo or Māori motifs and/or having a Māori name (ingoa).⁴
Component: Tikanga

Definition: Māori cultural principles.

Relationship to clinical assessment: This requires the health practitioner to become familiar with specific cultural principles and how these are enacted (kawa) by the patient and/or whānau, and how these might be integrated with clinical investigations and practices. For example health practitioners should assess whether a Māori patient preparing for surgery has any expectations around disposal of body tissues or the right to have space or time for karakia (prayer).

Health practitioners should be familiar with their organisation’s tikanga guidelines (such as those produced in every DHB) to ensure that they are able to inform Māori patients and whānau of the organisational processes available if specific tikanga practices are requested within the clinical setting.

Component: Whānau

Definition: The relationships, roles and responsibilities of the patient within Te Ao Māori, including whānau, hapu, iwi and other organisations.

Application to clinical assessment: Identifying the patient and/or whānau role and responsibility in the wider whānau may assist the health practitioner to understand the patient’s (and often that of their whānau) priorities, values and beliefs. For example understanding a Māori patient’s role on the marae, or within the family group, may help identify targets for motivational interviewing or barriers to attendance at a clinic.

It may also assist, in the clinical setting, to understand why some whānau members may be more actively involved than others in a consultation. For example at the time of a critical incident some whānau may take on roles such as providing emotional or practical support and others may take on more of a representative role such as speaking on behalf of the whānau. Understanding the nature and importance of these relationships, roles and responsibilities enables the health practitioner to be more confident, when required to approach the whānau as a collective. This can also assist in navigating through patient and whānau privacy expectations.

Component: Whenua

Definition: Specific genealogical or spiritual connection between patient and/or whānau and land.

Application to clinical assessment: When asking Māori patients where they are from, Māori may respond with the region where they have whakapapa (genealogical connections) rather than the place they currently reside. This place may be a key component of the patient and whānau identity and provides an opportunity to explore with the patient and/or whānau where they are from; how often they go back there; for what events; share experiences if the health practitioner has visited the location or to learn about the whenua if they haven’t been there.
The health practitioner may also share where they are from (their whenua connection) to enhance whakawhānaungatanga (relationship building). This information is also particularly relevant when discussing expectations around proximity of whānau support, location where palliative care might occur and processes involved in death and dying.

**Whakatere – Navigation**

Whakatere refers to navigation which was a key component for the successful migration of Māori to Aotearoa. In the Meihana model, navigating the most appropriate course is influenced by the assessment of the aku, the waka hourua, the presence of nga hau e wha and nga roma moana. The process of plotting a course and setting the sails and rudder is analogous to the health practitioner and patient/whānau selection and implementation of proposed treatment interventions and recommendations. This component encourages the health practitioner to investigate and apply the best clinical practice guidelines for Māori.

Whilst there remains a need for further evidence based interventions and management recommendations for Māori, the number of evaluated Māori health interventions and management recommendations is increasing. For example, knowledge of the National Guidelines Group recommending cardiovascular screening at an earlier age for Māori is necessary in order to deliver best practice for Māori. Similarly health practitioners should be aware of areas where Māori are not receiving best practice.

**Discussion**

Māori health models have been utilised within mainstream and Māori health provider services since the early 1980s in an attempt to address health disparities between Māori and non-Māori. Examples include Te Whare Tapa Wha, Te Wheke, Te Pae Mahutonga, Powhiri process and others. These models draw on key cultural beliefs embedded in Te Ao Māori to provide a framework for non-Māori health practitioners to tailor their services to Māori patients and whānau.

The Meihana model builds on the work of other Māori health models and is specifically designed to support health practitioners to gain a fuller understanding of the presenting complaint and the context of the patient and whānau. The purpose of the framework is to encourage health practitioners to broaden their range of assessment to provide quality health care and reduce health disparities between Māori and non-Māori.

This model allows diverse Māori realities within a colonised society to be recognised and responded to. The inclusion of fluid, variable elements that explore societal and cultural influences encourages health practitioners to identify which components are relevant to individual patients and whānau and prioritise such components. This not only provides opportunities to explore the presenting complaint but also extends health practitioners to consider wider influences of hauora that may lead to positive health outcomes.
The Calgary Cambridge model guides the content, structure and ideal communication skills required in clinical assessment which has been adopted by the Faculty of Medicine, University of Otago. The earlier publication of the Hui Process in this journal described how communication skills described in the Calgary Cambridge model could be adapted for use with Māori. The Calgary Cambridge model recommends a revised content guide for the medical interview which includes the patient perspective alongside the biomedical perspective of disease.

The Meihana model describes how the Calgary Cambridge content can also be adapted for Māori. The Meihana model further extends the Calgary Cambridge model with inclusion of whānau and societal perspectives of illness as well as providing specific details to broaden aspects of the personal and social history.

Undergraduate medical students and other learners are taught how to explore the components of the Meihana Model within the Calgary-Cambridge assessment structure. This includes strategies and lines of enquiry to appropriately discuss potentially complex areas and to avoid awkward, direct approaches such as “how is your wairua?” or “how has colonization affected you?” in a way that maintains a safe environment for health practitioner, patient and whānau.

**Conclusion**

There is consistent evidence of biomedical, social, political and cultural factors that contribute to health inequalities of indigenous communities internationally. The Meihana model takes into account this research and provides a clinical assessment framework to assist health practitioners working with Māori patients and whānau to contribute to improved Māori health outcomes. Recently completed research evaluates the Meihana model in medical education and clinical practice and is being prepared for publication (13,35).

**Competing interests:** Nil.

**Author information:** Suzanne Pitama, Associate Dean Māori, Māori /Indigenous Health Institute, University of Otago, Christchurch; Tania Huria, Senior Lecturer, Māori /Indigenous Health Institute, University of Otago, Christchurch; Cameron Lacey, Senior Lecturer, Māori /Indigenous Health Institute, University of Otago, Christchurch

**Acknowledgements:** We acknowledge the Hauora Maori sub-committee of the Faculty Curriculum Committee of the University of Otago and David Paitai for their support, valued input and constructive feedback in the writing of this paper.

**Correspondence:** Suzanne Pitama, Māori Indigenous Health Institute, 45 Cambridge Terrace, PO Box 4345, University of Otago, Christchurch, New Zealand. Email: Suzanne.Pitama@otago.ac.nz

**References:**

2. Rumball-Smith J. Inequality in quality?: the selection and use of quality indicators to investigate ethnic disparities in the quality of hospital care, Aotearoa New Zealand : a thesis submitted for the degree of Doctor of Philosophy of the University of Otago, [Dunedin], New Zealand 2012.


