

SURGICAL EDUCATION OPEN ACCESS

Te Huarahi Roa—The Long Road

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ABSTRACT

Māori are significantly underrepresented within the surgical health workforce in Aotearoa, perpetuating longstanding inequities in access, experiences and outcomes. Little is known about the experiences of Māori across the continuum from medical school to consultancy. This study aimed to explore the experiences of Māori doctors to identify barriers, enablers and opportunities for improving pathways into surgery. A qualitative study was undertaken using a Kaupapa Māori methodological approach, combining an online survey of Māori medical students, junior doctors, and registrars with semi-structured interviews with Māori surgical consultants. Key motivators for pursuing surgery were early surgical exposure, strong mentorship and commitment to improving Māori health. Culturally grounded initiatives such as the interview preparation wānanga and mentorship, particularly from Māori senior clinicians, were recognized as strong supportive factors. Key barriers included systemic and interpersonal racism, limited access to Māori mentors, and the cultural tensions experienced when navigating predominantly Pākehā surgical environments. This study provides one of the first continuum-wide insights into Māori doctors' experiences within surgical training. Addressing systemic barriers and strengthening culturally grounded support structures is essential to improving Māori representation and equity within the surgical workforce.

1 | Introduction

In Aotearoa Te Waiponamu (New Zealand) Māori make up 19.6% of the population, they represent the second largest ethnic group after Pākehā/Europeans [1]. Despite significant representation, Māori experience disproportionately higher rates of chronic conditions including diabetes, cardiovascular disease and cancer, and have a markedly reduced life expectancy compared with non-Māori [2–5]. These inequities reflect the historical, social, structural, and economic determinants that continue to shape differential access to prevention, early detection, and timely treatment.

Māori are also significantly underrepresented in the health workforce [6]. A lack of cultural concordance between health professionals and the patients and whānau they serve can compromise the quality of care delivered, reducing patient

satisfaction, engagement, adherence, and timely access to treatment [7–9]. This underrepresentation arises from inequities that present in early childhood education, including differential access to academic resources, learning environments that are culturally safe, and more tailored structural support that guides Māori to not only pursue but also succeed in health professional programs [10].

Within surgery, underrepresented groups face substantial barriers. A recent study of minority trainees entering the Royal Australasian College of Surgeons' Surgical Education and Training (SET) program identified discouragement, structural racism, unconscious bias, discrimination, lack of role models, and exclusionary policies as key challenges [11]. However, there is limited evidence examining these issues specifically for Indigenous peoples, and no studies have explored the experiences of Māori across the surgical pipeline. Without this

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research, we lack an understanding of what meaningful interventions could be implemented to create meaningful changes that tautoko (support) Māori doctors.

Te Rau Poka, the Māori Surgical Academy of the Royal Australasian College of Surgeons, represents a major step in strengthening Māori participation in surgery as part of the Te Rautaki Māori Strategic Plan (2024–2026). In this context, the present study aims to evaluate existing support mechanisms, delve into the systemic barriers faced by Māori students and doctors, and explore opportunities for enhancing support to ensure equitable pathways into surgery for Māori in Aotearoa New Zealand.

2 | Methods

2.1 | Participant Recruitment

Eligible participants included Māori medical students, junior doctors, nontraining registrars, SET registrars, fellows, and consultants. Recruitment occurred nationwide through direct email outreach. Potential participants were contacted either via publicly available institutional email addresses or through the Te Rau Poka contact list, which individuals had previously opted into through direct contact made at medical student and junior doctor meetings, conferences, and teaching events. Emails outlined the purpose of the study and invited interested individuals to volunteer.

2.2 | Data Collection

Medical students and doctors (excluding qualified specialists) were invited to complete an online survey designed to capture the experiences of Māori tauira (students) and tākuta (doctors) within surgical departments. Survey questions for students and house officers focused on early aspirations, awareness of support systems, and initial barriers encountered (Data S1). For registrars, the survey explored the effectiveness of existing supports, challenges encountered during training, and suggestions for improving the training environment.

Consultants were contacted via email and invited to participate in a separate interview, either in person or via Zoom. These interviews focused on individual experiences, observations of support systems, barriers to training, and recommendations for improvement. A Kaupapa Māori methodological approach underpinned the interview process. Each interview began with whakawhanaungatanga (establishing relationships) and karakia (prayer), ensuring clarity of purpose and grounding the kōrero within tikanga Māori. Interviews were semi-structured (questions provided in Data S1), allowing participants to lead the conversation while ensuring key topics were addressed.

Before commencing each interview, participants were reminded of the purpose of the study, the confidential nature of their responses, and their right to withdraw at any time without consequence. Interviews were audio-recorded with informed consent and transcribed verbatim to support thematic analysis.

Interviews typically lasted between 30 and 60 min and were conducted between March 2024 and December 2024.

2.3 | Ethics

Ethics was obtained from the local district health board ethics approval committee (RO24068) and local Māori consultation was sought through Te Komiti Whakarite. This study was out of the scope for review by the national New Zealand Health and Disability Ethics Committee (HDEC).

2.4 | Data Analysis

Interviews were audio-recorded and transcribed verbatim by one researcher. Transcripts were analyzed using a thematic analysis approach, which involved familiarization with the data, systematic coding, and the organization of codes into initial themes. These themes were reviewed, refined, and clearly defined before being finalized and named.

3 | Results

3.1 | Theme 1: Motivations and Inspiration Experiences in Surgery

Early exposure to surgery, meaningful clinical experiences, and the influence of positive role models were consistently highlighted as key drivers that influenced participants' decisions to pursue surgery. Students frequently reported having “really good experiences on general surgery runs,” citing “interesting cases, the practical aspect of it, [and] role models” as confirming their interest in the specialty. One participant reflected that “there is something powerful about seeing a patient improve because of your work... it makes all the challenges worthwhile,” illustrating the significance of patient impact as a source of motivation.

For many, the decision to pursue surgery was also shaped by a strong commitment to improving Māori health outcomes. Participants acknowledged the longstanding inequities in access, treatment, and postoperative outcomes for Māori across multiple surgical specialties. Entering a career in surgery was therefore viewed as an opportunity in which they could make a meaningful contribution to their communities by directly improving the quality and equity of surgical care for Māori.

3.2 | Theme 2: Mentorship and Support Systems

Mentorship emerged as a critical factor at every stage of training. Participants highlighted the unique value of having mentors who not only understood the technical aspects of being a surgeon, but also understood what it meant to be a Māori surgeon. One participant noted “the majority of support I required was specific to being a Māori surgical registrar and the unique demands and isolation we face in a Pākehā based healthcare system.” Junior doctors described difficulty in having to establish local connections when their training required them to continuously relocate. It was noted that “focus needs to be

placed on attracting medical students and house surgeons. Providing them with additional opportunities to upskill such that there is equity come interview time without the requirement for quotas. Quota systems carry negative stigma both perceived by others and held by the individual. Equity should be achieved prior to interviews so that the best candidate on the day is chosen with no weight being held for race or sex.” In recent years we have seen the introduction of the interview preparation course which has shown success in supporting registrars secure a place on the training scheme. It was noted “a close friend of mine (also Māori) and I noted how much nepotism and racism is present in the surgical selection process. This led to the development of an interview preparation program that is run by Māori trainees for Māori candidates that has had great success” [12].

While consultants did describe how mentorship was even more minimal when they had trained, they did highlight that “now we have positions on council, education boards, and various structures within RACS to improve Māori representation and support.”

3.3 | Theme 3: Systemic Barriers and Experiences of Racism

Systemic racism and bias were often identified as barriers. Participants described encountering both overt and subtle forms of discrimination. One participant shared that “negative attitudes to affirmative action have been disheartening at times,” another noted, “more so overt comments from peers or senior colleagues that question my place here.” Registrars mentioned facing assumptions that undermined them, “I’ve been repeatedly asked if I came through MAPAS by non-Māori peers, as if my achievements couldn’t have been on merit.” Experiences of racism not only affected participants’ day-to-day sense of safety but also shaped their long-term career decision-making. Several participants described actively avoiding certain surgical specialties because of the reputations of senior surgeons within them. As one participant noted, “racist surgeons in particular specialties have put me off ever considering those pathways.”

Senior consultants shared that systemic racism has been a long-standing issue. It was mentioned on numerous occasions that Māori were not often being offered jobs on the back end of their training, “it was very clear that Māori weren’t a priority.” Another shared frustration with the status quo, saying “people are unwilling to change the current system, even when change would benefit Māori health outcomes.”

3.4 | Theme 4: Balancing Cultural Identity With Surgical Training

Balancing and maintaining cultural identity with the demands and expectations of surgical training emerged as a major theme. Some of the students shared their concerns around navigating a culturally foreign environment in medical training. One student stated “it’s hard to balance cultural values when the environment is so Westernized.” Registrars echoed these sentiments, describing the ongoing experience of “imposter syndrome,”

which was noted to be “a big one, and I’m not sure if it’ll ever go away entirely.”

Many consultants shared that this challenge was one they had also experienced throughout their training and ongoing into their careers. One reflected, “you lose a lot of your sense of personal identity becoming a surgeon because you’re so focused on fitting into a specific mold.” Another added, “it’s difficult to bring tikanga into the surgical world, it feels like two different worlds, and bridging them is a challenge.”

3.5 | Theme 5: Suggestions for Improved Pathways and Support

Participants across all stages of training provided recommendations to support Māori in surgery, including better funding for training, stronger mentorship networks, and a “pipeline” approach that would support Māori from medical school through to consultancy. Students emphasized a need for more practical support such as funding and networking opportunities. One student noted, “funding to attend conferences or courses would be a game-changer for someone like me.” “Creating more spaces where tauira can meet tākuta within the spaces they are interested in and start these connections early.”

Medical students and junior doctors also highlighted that it would be helpful to have “a workshop on the application process. Not necessarily the interview practice, but a sit-down to go through the requirements to apply and mapping out when they should get things done over their career.”

Registrars discussed their desire for more structured mentorship programs with regular check-ins to prevent feelings of isolation and help them progress through training. One registrar suggested that “Te Rau Poka should make clear pathways for Māori surgical trainees, with Māori mentors available.” “We need more Māori surgical trainees and Māori surgeons not only to provide better care for our patients but to provide a better network for each other.” It was suggested that having a Māori psychologist who could understand both worlds and how they intertwine would be of benefit.

Through the interviews with consultants it was suggested that a more comprehensive approach to supporting Māori in surgery is established, starting this from early exposure in schools through medical school, training and eventual consultancy. “We need to keep people plugged in so we don’t lose them along the way.” Another consultant emphasized the need for job security after training, especially in locations that are significant to Māori doctors, saying, “if we could generate a roster of who wants to go where... it would be a beautiful way to ensure Māori doctors can work close to their tūrangawaewae (place of belonging).”

4 | Discussion

The underrepresentation of Māori within the medical and surgical workforce is one of the many direct contributors to health inequities. A more representative healthcare workforce is likely to improve the responsiveness of care and better address the needs

of indigenous communities. There are numerous factors contributing to this underrepresentation, including access to education resources, mentoring, and the presence of strong support networks. This study sought to explore the perspectives of Māori medical students, junior doctors, trainees, and consultants to understand their experiences with surgical training.

The current study reflects both structural and cultural tensions between Māori worldviews and the Western surgical working environment. To understand the impacts this dichotomy has on doctors it is essential to view this through a kaupapa Māori lens. Kaupapa Māori research is guided by principles such as Tino rangatiratanga (self-determination), whanaungatanga (relational connection), and manaakitanga (care and collective uplift). These guiding principles help us to understand that the call for mentorship, connection, and culturally safe spaces within surgical spaces are not just a matter of personal preference but are reflections of Māori epistemologies. The difficulties identified by participants within this study, such as racism, isolation, and imposter syndrome, highlight a lack of cultural safety within hospitals. Prior research by Curtis et al. highlights the importance of adopting the “transformative concept of cultural safety, which involves a critique of power imbalances and critical self-reflection” to contribute to the creation of safer working environments and subsequently improvements in Indigenous health inequities [13]. It is through creating these culturally safe environments and embedding Kaupapa Māori values that is critical to increasing representation and maintaining retention of Māori in surgical specialties. “You lose a lot of your sense of identity becoming a surgeon.” The overt and subtle experiences of racism reported by participants reveal the persistent systemic biases that exist from medical school through to consultancy. Even where initiatives are implemented to support Māori, participants described structural barriers that continue to disadvantage and deter Māori from entering surgical specialties. “I’ve been repeatedly asked if I came through MAPAS...,” “negative attitudes to affirmative action...” These experiences clearly demonstrate how institutional, interpersonal, and internalized racism has embedded itself into institutional and commercial assessment, feedback, and selection systems.

In order to address these inequities, a systems level approach that addresses the structure of medical and surgical training is required. Māori are under represented at every stage: secondary school, medical school, SET training and fellowship. Previous research has emphasized the effectiveness of pipeline programs, bridging courses and structured mentoring programs in increasing Indigenous representation [14]. However, the current study reveals that the current pipeline is fragmented, as reflected by one participant who explained that “we need to keep people plugged in so we don’t lose them along the way.” While achieving this continuum will require long term, sustained interventions, several existing initiatives have demonstrated success. The Māori and Pacific Admission Scheme (MAPAS) has improved early access to medical education through targeted entry pathways and academic support, while Te Rau Puāwai has provided a proven model of wraparound mentorship and funding for Māori in mental health training [15]. Within surgery, Te Rau Poka (the Māori Surgical Academy of the Royal Australasian College

of Surgeons) represents a more recent effort to extend this pipeline into postgraduate surgical training. Collectively, this highlights how long term, culturally grounded programs can produce measurable gains for representation of Māori in the health workforce. Participants’ reflections within surgery suggest this is an area that has not been prioritized and requires further attention.

The relationship between clinical representation and the outcomes of patients served by these clinicians is well recognized [16, 17]. Research has shown that Indigenous clinicians are more likely to support underserved communities, practice culturally responsive care, and form therapeutic relationships that are grounded in shared cultural understanding and decision making [13]. Clinically, this improves engagement of Indigenous communities in the healthcare system and supports outcomes including earlier access to earlier diagnoses, treatment outcomes and overall survival [18]. Consequently, increasing the representation of Māori in surgical specialties represents a pivotal point in which we can aim to address inequities experienced by Indigenous communities [14].

Mentorship not only emerged as a means of supporting students and doctors to pursue surgery but was also identified as a critical buffer against isolation and cultural disconnection. Mentorship programs foster reciprocal learning, cultural connection and are grounded in the values of whakawhanaungatanga and ako. Participants describe mentors as being more than just academic support, but also cultural anchors within environments in which they felt isolated. One registrar noted that “the majority of support I required was specific to being a Māori surgical registrar and the unique demands and isolation we face in a Pākehā-based healthcare system.” The findings in this study reflect previous research which has demonstrated how mentorship guided by whakawhanaungatanga strongly supports the success of Māori in both tertiary and professional settings [19, 20]. Further illustrating the power of culturally grounded peer support is the success of the Māori-led interview preparation wānanga (course), which has been described as transformative in helping candidates prepare for the intensive interviews required to secure a spot in surgical training [12]. Without accessible and culturally aligned mentorship, trainees described a sense of disconnection that only exacerbated their feelings of marginalization and imposter syndrome. Participants also highlighted the value of having access to a Māori psychologist, recognizing the importance of speaking with someone who understands Te Ao Māori and the interconnected roles of wairua and hinengaro in shaping how Māori engage with their whānau, their communities, and their mahi (work). For medical students and early career doctors knowing seniors in their field of interest was important in making those specialties feel achievable. Additionally, providing spaces and times where Māori can discuss their experiences working within the healthcare system.

This study has several limitations. The sample size was small and participants were included in a voluntary manner. This may have introduced selection bias, with those participants who had experienced stronger experiences more likely to come forward for interviews. With the nature of qualitative research, the findings from this study reflect the subjective experiences recalled

by participants, and we note these experiences are likely to differ across the motu.

5 | Conclusion

This study provides one of the first continuum-level examinations of the experiences of Māori doctors pursuing a career in surgery in Aotearoa. The findings highlight the complex interplay between Te Ao Māori and the surgical training environment, including the cultural compromises often required to progress. At the same time, participants identified the powerful role of culturally grounded support systems, mentorship, and safe spaces, offering clear opportunities for strengthening pathways and improving Māori representation in surgery.

Author Contributions

Jonathan Koea: conceptualization, funding acquisition, writing – review and editing, methodology, supervision, resources. **Ruth Herd:** conceptualization, writing – review and editing, supervision, resources, funding acquisition, methodology. **Nasya Thompson:** methodology, investigation, writing – original draft, conceptualization, formal analysis.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

References

1. “2023 Census National and Subnational Usually Resident Population Counts (by Ethnic Group, Age, and Māori Descent) and Dwelling Counts,” 2023.
2. B. Robson and R. Harris, *Hauora: Māori Standards of Health IV. A Study of the Years 2000–2005* (Te Rōpu Rangahau Hauora a Eru Pōmare, 2007).
3. H. Came, D. O’Sullivan, J. Kidd, and T. McCreanor, “The Waitangi Tribunal’s WAI 2575 Report: Implications for Decolonizing Health Systems,” *Health and Human Rights* 22, no. 1 (2020): 209–220.
4. J. K. Gurney, B. Robson, J. Koea, N. Scott, J. Stanley, and D. Sarfati, “The Most Commonly Diagnosed and Most Common Causes of Cancer Death for Māori New Zealanders,” *New Zealand Medical Journal* 133, no. 1521 (2020): 77–96.
5. J. Gurney, J. Stanley, M. McLeod, J. Koea, C. Jackson, and D. Sarfati, “Disparities in Cancer-Specific Survival Between Māori and Non-Māori New Zealanders, 2007–2016,” *JCO Global Oncology* 6 (2020): 766–774.

6. J. Sewell, *Profiling the Māori Health Workforce 2017* (Te Rau Matatini, 2017).
7. P. Jansen, K. Bacal, and S. Crengle, “He Ritenga Whakaaro: Māori Experiences of Health Services,” *Hospital (Rio de Janeiro, Brazil)* 200 (2008): 30–37.
8. L. A. Cooper and N. R. Powe, “Disparities in Patient Experiences, Health Care Processes, and Outcomes: The Role of Patient–Provider Racial, Ethnic, and Language Concordance,” 2004.
9. T. A. LaVeist, A. Nuru-Jeter, and K. E. Jones, “The Association of Doctor–Patient Race Concordance With Health Services Utilization,” *Journal of Public Health Policy* 24, no. 3 (2003): 312–323.
10. C. Rubie-Davies and H. O’Regan, “Looking Back and Looking Forward: Understanding and Addressing the Inequities for Māori in Aotearoa New Zealand’s Education System,” *Policy Futures in Education* (2024): 14782103251390264.
11. C. Villanueva, J. Cain, J. Greenhill, and D. Nestel, ““The Odds Were Stacked Against Me”: A Qualitative Study of Underrepresented Minorities in Surgical Training,” *ANZ Journal of Surgery* 91, no. 10 (2021): 2026–2031.
12. L. Nicholls, N. Parore, and L. Buckthought, “He Wānanga Whakarite: Preparing Māori for Surgical Selection Interviews,” *ANZ Journal of Surgery* 91, no. 6 (2021): 1143–1147.
13. E. Curtis, R. Jones, D. Tipene-Leach, et al., “Why Cultural Safety Rather Than Cultural Competency Is Required to Achieve Health Equity: A Literature Review and Recommended Definition,” *International Journal for Equity in Health* 18, no. 1 (2019): 1–17.
14. J. Aramoana, P. Alley, and J. B. Koea, “Developing an Indigenous Surgical Workforce for A Ustralia,” *ANZ Journal of Surgery* 83, no. 12 (2013): 912–917.
15. L. W. Nikora, M. Rua, A. Duirs, K. Thompson, and T. Amuketi, “Te Rau Puawai 2002–2004: An Evaluation,” 2005.
16. B. N. Greenwood, R. R. Hardeman, L. Huang, and A. Sojourner, “Physician–Patient Racial Concordance and Disparities in Birthing Mortality for Newborns,” *National Academy of Sciences of the United States of America* 117, no. 35 (2020): 21194–21200.
17. L. M. Marrast, L. Zallman, S. Woolhandler, D. H. Bor, and D. McCormick, “Minority Physicians’ Role in the Care of Underserved Patients: Diversifying the Physician Workforce May Be Key in Addressing Health Disparities,” *JAMA Internal Medicine* 174, no. 2 (2014): 289–291.
18. R. Crosswell, H. Nikora, R. Paul, et al., “Ascending the Poutama: Culturally Responsive Diabetes Care for Māori Communities,” *Journal of Primary Health Care* 17 (2025): 338–346.
19. G. R. Hook, T. Waaka, and L. P. Raumatī, “Mentoring Māori Within a Pākehā Framework,” *MAI Review LW* 1, no. 3 (2007): 13.
20. A. Reweti, “Understanding How whānau-Centred Initiatives Can Improve Māori Health in Aotearoa New Zealand,” *Health Promotion International* 38, no. 4 (2023): daad070.

Supporting Information

Additional supporting information can be found online in the Supporting Information section. **Data S1:** ans70647-sup-0001-Supinfo.docx.