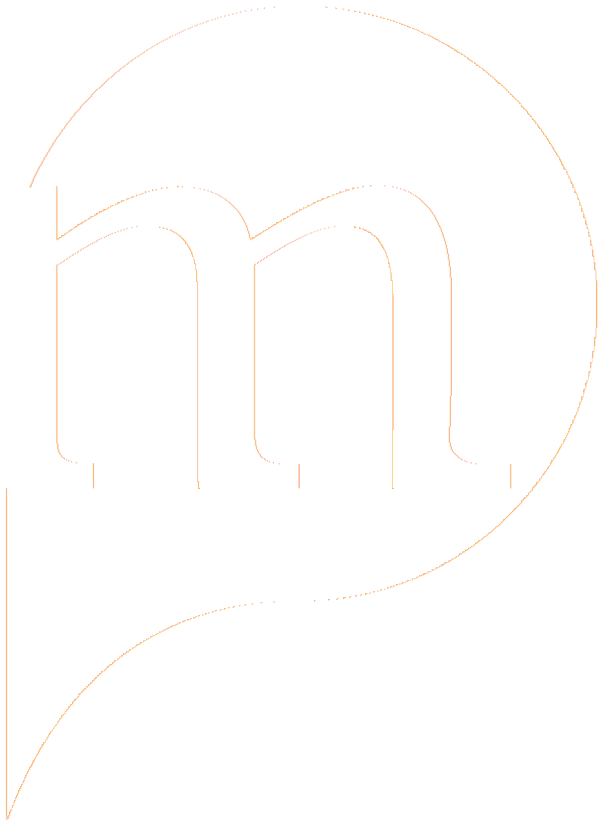

Quality Improvement: Indigenous Influence in Oral Health Policy, Process, and Practice

Charrissa Makowharemahihi, MPH
Justin Wall
Greg Keay
Cheryl Britton
Minnie McGibbon
Patrick LeGeyt
Joyce Maipi
Virginia Signal, BN, MPH

Abstract: A Quality Improvement Group for Māori oral health providers [Indigenous New Zealand oral health services] has been an effective and necessary mechanism for engaging Indigenous oral health expertise in decision-making for Indigenous oral health policy and sector developments to reduce oral health inequalities and improve Indigenous oral health outcomes.

Key words: Oral health inequalities, Indigenous oral health, quality improvement, integration, primary care.

Despite New Zealand's government-funded oral health service for children and adolescents, significant inequalities still disfavor Māori children and adolescents in comparison with.[1,2] These health inequalities in New Zealand must be understood in context of the Treaty of Waitangi (hereafter, *the Treaty*), the founding document between the British Crown and the Indigenous Māori people of New Zealand. Under the Treaty, the Crown applies the principles of partnership, participation, and protection to ensure that Māori enjoy the same level of health as non-Māori.[3] Despite the Treaty, however, the Māori do not have the same level of health as non-Māori.[1–7]

In response to these health inequalities, Indigenous health providers in New Zealand established their own health services, which are now known as *Māori health providers*. Māori health providers are a distinctive feature of New Zealand's health sector and play an important role in the development and delivery of health and disability services that work for Māori[4] within a model that empowers and supports whānau (families) to exercise control over their health and well-being.[5] As autonomous, charitable, non-government organisations, Māori health providers operate in a competitive funding

Please address correspondence to ***CHARRISSA MAKOWHAREMAHIHI****, Māori Oral Health Advisor & Research Fellow, National Māori Oral Health Coordination Service & Department of Primary Healthcare and General Practice, University of Otago, Wellington, Charrissa.makowharemahihi@otago.ac.nz.*

environment. Māori health providers have now grown into major providers of health and disability services in New Zealand, modelling integrated service provision by offering a comprehensive range of health services[5] including general practice, diabetes care, screening, smoking cessation, asthma, nutrition, immunisations, and antenatal care.

Indigenous Oral Health in New Zealand

Indigenous Māori people of New Zealand experience differential access to oral health care and disproportionately poorer oral health outcomes in comparison with non-Indigenous people.[1–7] These disparities occur for Māori across all age groups, socioeconomic statuses, and geographical locations compared with non-Māori groups. Māori children and adolescents have higher prevalence and severity of dental caries,[1–8] and poorer access to and utilisation of oral health care.[4] Māori adults are more likely to avoid dental care because of costs than non-Māori, and are less likely to have visited a dentist in the past year, or to have attended a dentist for a check-up.[9] These differential outcomes are evidence that oral health services for Māori are inadequate, and that the Crown has failed in its obligations to protect the oral health of Māori under the Treaty. There is an urgent need for the Crown to ensure an equitable oral health system, but also to support Māori aspirations for improving Māori oral health.

New Zealand's Oral Health System

New Zealand delivers a government-funded oral health service for children and adolescents from infancy through 18 years. Adult dental care is not subsidised, and is provided through private dental care on a user-pays basis. People receiving government-funded welfare assistance may be eligible for a special dental grant, but this is only available for emergency dental treatment, once per annum, and is capped at $300NZD. Adults on low incomes can apply for a government community service card, with which they may be eligible for low-cost dental care provided via public hospital outpatient dental departments. However, not all hospitals provide these services, and where they are available entry is oversubscribed on a 'first in-first served' basis. Treatments are limited to basic restorations and extractions; preventive or more complex dental treatments are not available.

Development of Indigenous Models of Oral Health Services

Concerns about Māori not receiving needed dental care[10] and the unacceptable level of untreated dental disease among Māori led to a number of Māori health providers establishing oral health services co-located alongside their existing primary care services. These Māori oral health providers (MOHP) operate under Māori principles of health,[11] and provide services that are culturally authentic and responsive to Māori.[5] They deliver a full range of oral health care services from both fixed and mobile clinics to population groups with high health needs, and in high deprivation areas. MOHPs are unique because they operate a mixed government-funded and private business model, providing a range of oral health services via contracts and subsidised dental care for

people on low incomes at little or no cost, while also providing dental services to the public. The MOHP workforce comprises dentists, dental therapists, dental assistants, oral health promoters and educators, and utilises final year Bachelor of Dentistry students through a community-based outplacement programme. Importantly, MOHPs take a life-course approach offering oral health care services to their enrolled population from infancy through 100 years, with a view of supporting good oral health for the whole whānau (family) rather than just the individual.[12]

Supporting the Development of the Māori Oral Health Provider Sector

New Zealand's dental service for children was established in the 1920s and—before the establishment of MOHPs—was clearly not meeting the needs of all children. A significant policy shift to address the appalling oral health inequalities was required. In 2006, the New Zealand government released its strategic vision for oral health, developed by the Ministry of Health, and focused initially on reconfiguring child and adolescent oral health services.[2] Primary responsibility for realizing this vision sits with New Zealand's 20 district health boards who are required to deliver a model of care that is responsive to the oral health needs of their communities. Māori health providers, some already delivering oral health services for children and adolescents, naturally expected to be part of this new model of service delivery within their communities. However, most Indigenous providers were not engaged, consulted, and/or included in any meaningful way in the respective redevelopment plans. Concurrent to the reconfiguration of child and adolescent oral health services, the Ministry of Health's Māori Health Business Unit undertook a project to invest in the capacity and capability of selected Māori Health Providers to establish new or develop existing oral health services.[13] This investment was intended to support them to deliver a model of care that was consistent with the nationwide direction for child and adolescent oral health services, and to participate in the delivery of those services.[13] It was during this phase that the MOHPs, despite their commonalities as Indigenous oral health services, found they had little opportunity for communicating and collaborating across their sector. To address this, the Ministry of Health's Māori Health Business Unit pulled together key clinical and non-clinical people from the MOHP sector and established a Quality Improvement Group for the Māori oral health provider sector. This Quality Improvement Group also provided a means to build on progress to better achieve equity of oral health outcomes for Māori by being an advisory source for the Ministry of Health to draw on clinical and technical expertise and engage Indigenous sector practitioners in the development of government policy for Indigenous oral health.

A Quality Improvement Group for Māori Oral Health Providers

The Quality Improvement Group for Māori oral health providers ('QIG') is tasked with identifying priorities for the MOHP sector in a coordinated and strategic way to improve the quality of service provision and ultimately oral health outcomes for Māori. The QIG receives administrative and project support from the National Māori

Oral Health Coordination Service, and is accountable to the Ministry of Health's Māori Health Business Unit.

To date, the QIG has played a major role in contributing to the advancement of Indigenous oral health and oral health improvements generally. For example, the QIG has been pivotal in the development and delivery of the final year Bachelor of Dentistry outplacement programme. Māori oral health providers are recognised University training sites providing clinical and community experience in the primary care setting. Other activities include improving sector collaboration for MOHPs, oral health workforce development, and service and clinical planning for the Māori oral health provider sector.

The establishment of an Indigenous sector group to influence policy development for Indigenous oral health represents positive progress towards improving Indigenous oral health outcomes. This influence, however, now extends beyond just providing advice with Ministry of Health support. The QIG also develops and pilot's projects that may change how all health services are delivered in the future—to both Indigenous and non-Indigenous populations.

Ngā Ara Tika: An Example of an Indigenous Professional Oral Health Group Leading Efforts to Improve Indigenous Oral Health

With support from the Ministry of Health, the QIG produced Ngā Ara Tika: Integrated Practice Guidelines for Māori oral health providers in the primary care setting (hereafter, *the Guidelines*).[14] The development of the Guidelines involved a review of national and international literature about integrated health practices in the primary care setting, key informant interviews with oral and primary care practitioners within Māori health providers,[15] and a series of workshops with all MOHP.[16]

The national and international literature reviewed calls for an increased focus on integrated practices to reduce disparities in health and improve patient outcomes.[17–19] There is necessary connection between good oral health and good general health.[9] This connection is more significant for medically compromised people where acute or chronic dental problems are a precipitating factor in medical management (such as those with poorly controlled diabetes, people who smoke, and people requiring dental exam or dental certification prior to surgery).[20] Recognising the potential for MOHP to play an increased role in the primary care workforce and vice versa, to contribute to equity through integrated care programmes particularly for those at risk of poor oral and/or general health outcomes, the QIG developed the Guidelines. The Guidelines have been piloted in two MOHP, and included a formative evaluation.[16]

Improvements in Indigenous Oral Health Must be Led by, for, and with Indigenous People

The process involved in developing and implementing the Guidelines extended beyond standard engagement methods. Through the establishment of the QIG by the Ministry of Health, this formal mechanism enhanced the process used by ensuring appropriate and meaningful input from Indigenous sector experts to guide and shape the project.

The literature review identified only limited examples of Indigenous models of integrated oral health practices, which made the input from Indigenous sector experts all the more necessary for developing and implementing the Guidelines.

The QIG identified that integrating oral health into primary care requires more than a co-location of services; it involves a shift in organisational thinking, a new way of operating, changes to the management and sharing of patient information to inform clinical decision-making, and amended or new processes that facilitate change in service delivery.[15] The formative evaluation showed good staff uptake and support for integrated practices, and a general willingness to work together to improve patient care. Two main barriers were identified that have real potential to undermine the implementation of integrated practices: 1) the cost of dental treatment relative to the resources of whānau (families), and 2) information technology limitations and the impact on practitioner ability to share patient information and support clinical decision-making.[16]

Neither of these barriers are explicitly part of the Guidelines project, but they will affect its outcome. Equitable funding arrangements are needed to minimise and eliminate the cost barrier to achieve equitable access and better patient management. Making information systems compatible will require significant investment and will not only have implications for MOHPs but learnings for the wider oral and primary care sectors. The advantage of the QIG in addressing both these issues is the strategic relationship and ability to engage in dialogue at policy levels about how barriers to access to care can be overcome and/or avoided.

Summary

Efforts to improve Indigenous oral health must be led by, with, and for Indigenous people. The QIG is an example of the importance of Indigenous sector experts working closely with central government when developing oral health sector policy, and of good consultation and engagement processes. The unique perspective that Indigenous sector experts bring is invaluable for identifying priority oral health areas, maximising opportunities to reduce oral health disparities, and improving Indigenous oral health outcomes.

References

1. Public Health Advisory Committee. Improving child oral health and reducing child oral health inequalities. Wellington, NZ: National Health Committee, 2003. Available at http://www.aapd.org/assets/1/7/NZImprovingChildOralHealth.pdf.
2. Ministry of Health. Good oral health for all, for life: the strategic vision for oral health in New Zealand. Wellington, NZ: Ministry of Health, 2006. Available at http://www.health.govt.nz/system/files/documents/publications/good-oral-health-strategic-vision-2006.pdf.
3. Ministry of Health. He Korowai Oranga: Māori health strategy. Wellington: Ministry of Health, 2002. Available at https://www.health.govt.nz/system/files/documents/publications/mhs-english.pdf.
4. Ministry of Health. Tatau Kahukura: Māori health chart book 2010, 2nd Edition.

Wellington, NZ: Ministry of Health, 2010. Available at: https://www.health.govt.nz/system/files/documents/publications/maori-hth-cbk-2010.pdf.

5. Mauri Ora Ki Te Ao, Living Universe Limited. Te Toi Hauora Nui—achieving excellence through innovative Māori health service delivery. A report prepared for the Ministry of Health. Wellington, NZ: Ministry of Health, 2009. Available at: http://www.moh.govt.nz/notebook/nbbooks.nsf/0/E4A8992664267404CC2576A80006846D/$file/te-toi-hauora-nui.pdf.
6. Ministry of Health. Tatau Kahukura: Māori health chart book, Public Health Intelligence Monitoring Report No.5. Wellington, NZ: Ministry of Health, 2006. Available at: http://www.health.govt.nz/system/files/documents/publications/maori-health-chart.pdf.
7. Robson B, Harris, R (eds). Hauora: Māori Standards of Health IV. A study of the years 2000–2005. Wellington, NZ: Te Rōpū Rangahau Hauora a Eru Pōmare, 2007. Available at: http://www.otago.ac.nz/wellington/otago067740.pdf.
8. Koopu P, Keefe-Ormsby V. Oral health—Oranga Niho. In: Hauora: Māori standards of Health IV. Robson B, Harris R (eds). A study of the years 2000–2005. Wellington, NZ: Te Rōpū Rangahau Hauora A Eru Pōmare, 2007. Available at: http://www.otago.ac.nz/wellington/otago067750.pdf.
9. Ministry of Health. Our oral health: key findings of the 2009 New Zealand Oral Health Survey. Wellington, NZ: Ministry of Health, 2010. Available at: https://www.health.govt.nz/system/files/documents/publications/our-oral-health-2010.pdf.
10. Broughton JR. Te niho waiora me te iwi Māori: dental health and Māori people. N Z Dent J. 1993 Jan;89(395):15–8.
PMid:8441509
11. Broughton JR. The development of Oranga Niho services. Pac Health Dialog. 2000 Mar;7(1):703.
12. Mauri Ora Associates. Review of Māori child oral health services. A report prepared for the Ministry of Health. Wellington, NZ: Ministry of Health, 2004. Available at: http://www.health.govt.nz/system/files/documents/publications/review-of-maori-child-oral-health.pdf.
13. Ministry of Health. Evaluation of the Māori Oral Health Providers Project. Wellington, NZ: Ministry of Health, 2011. Available at: http://www.health.govt.nz/system/files/documents/publications/evaluation-maori-oral-health-providers_0.pdf.
14. National Māori Oral Health Coordination Service. Ngā Ara Tika: Integrated practice guidelines for Māori oral health providers in the primary care setting. Wellington, NZ: Ministry of Health, 2013.
15. National Māori Oral Health Coordination Service. Oral and general health: integrated practices in the primary care setting. A report prepared for the Quality Improvement Group for Māori oral health providers and the Ministry of Health Māori Health Business Unit. Wellington, NZ: Ministry of Health, 2012.
16. National Māori Oral Health Coordination Service. Formative evaluation of Ngā Ara Tika: integrated practice guidelines for Māori oral health providers in the primary care setting. A report prepared for the Quality Improvement Group for Māori oral health providers and the Ministry of Health. Wellington, NZ: Ministry of Health, 2014.
17. Mouradian WE, Berg JH, Somerman MJ. Addressing disparities through dental-medical collaborations, part 1. The role of cultural competency in health disparities:

training of primary care medical practitioners in children's oral health. J Dent Educ. 2003 Aug;67(8):860–8.
PMid:12959159

18. Petersen PE, Estupinan-Day S, Ndiaye C. WHO's action for continuous improvement in oral health. Bull World Health Organ. 2005 Sep;83(9):642. Epub 2005 Sep 30.
PMid:16211149 PMCid:PMC2626343
19. Petersen PE. World Health Organization global policy for improvement of oral health—World Health Assembly 2007. Int Dent J. 2008 Jun;58(3):115–21.
http://dx.doi.org/10.1111/j.1875-595X.2008.tb00185.x
PMid:18630105
20. Robson B, Koopu P, Gilmour J, et al. Oranga Waha—Oral health research priorities for Māori: low income adults, kaumatua, and Māori with disabilities, special needs, and chronic health conditions. Wellington, NZ: Te Rōpū Rangahau Hauora a Eru Pōmare, 2011. Available at: http://www.otago.ac.nz/wellington/otago019612.