

Management of chronic kidney disease for Māori in Aotearoa New Zealand: a summary of clinical practice guidelines

Curtis Walker, Susan Reid, Carla White, Merryn Jones, Lee-ora Lusic, Rachael C Walker, John Collins, Helen Rodenburg, David Tunnicliffe, Suetonia C Green

ABSTRACT

AIMS: The kaupapa of the Caring for Australians and New Zealanders with Kidney Impairment (CARI) *Clinical practice guidelines for management of chronic kidney disease for Māori in Aotearoa New Zealand* is to provide whānau-centred and evidence-based recommendations to healthcare systems, healthcare providers and healthcare workers. The guidelines include screening, identification, management and system-level responses to chronic kidney disease (CKD) to deliver best practice care to Māori affected by CKD across community, primary and secondary services.

METHODS: The guidelines are funded by the Ministry of Health – Manatū Hauora and are written by a panel of Māori and non-Māori clinicians and literacy experts across Aotearoa New Zealand from Kaupapa Māori organisations, general practice and nephrology units using standardised methods. The guidelines' methodology included consultation with whānau Māori with lived experience of CKD and primary and secondary care practitioners. Additional guideline development would be required to inform management of CKD for non-Māori in Aotearoa New Zealand.

RESULTS: The guidelines provide recommendations about equity, governance and accountability, cultural safety, case management, information systems, social determinants of equity and wellbeing and screening.

CONCLUSIONS: Recommendations to health services for Māori with CKD are based on giving effect to Te Tiriti o Waitangi and best practice care to prevent CKD, delaying its progression, treating kidney failure through timely transplantation, delivering in community and providing high-quality symptom management.

Guidelines

Honoa te pito ora ki te pito mate

Recommendations for health systems and health services

Equity

We recommend that health systems and providers prioritise actions to achieve equitable outcomes in kidney health for whānau Māori.

Strong recommendation. Evidence: pai (good).

We recommend that health systems and providers advance equity in kidney health through the collection, reporting, monitoring and use of high-quality, Māori-centred data over time to inform quality improvement.

Strong recommendation. Evidence: āhua pai (moderate).

Governance and accountability

We recommend that health systems and providers include Māori leadership and governance and hold providers accountable for healthcare quality.

Strong recommendation. Evidence: pai (good).

Cultural safety

We recommend that health systems and providers ensure that cultural safety is a key aspect of workforce training and professional development to ensure that culturally safe care is delivered to whānau Māori.

Strong recommendation. Evidence: pai (good).

Case management

We recommend that health systems and providers of services for Māori with or at risk of chronic kidney disease (CKD) are led in primary care or Kaupapa Māori services providing case management and support throughout the patient journey.

Strong recommendation. Evidence: pai (good).

Information systems

We suggest that health systems and providers of care for Māori with or at risk of CKD are supported by a unified, integrated information and referral system.

Strong recommendation. Evidence: āhua pai (moderate).

Social determinants of equity and wellbeing

We recommend that health systems and services for Māori with or at risk of CKD partner with organisations to address social determinants of risk factors for kidney health, such as justice, housing, education and poverty.

Strong recommendation. Evidence: āhua pai (moderate).

Screening

We recommend that health systems and providers

calculate 5-year cardiovascular disease risk using the New Zealand Primary Prevention Equation, including urine albumin to creatinine ratio and estimated glomerular filtration rate for all tāne Māori (men) aged 30 years or older, wāhine Māori (women) aged 40 years or older and all Māori with diabetes from diagnosis.

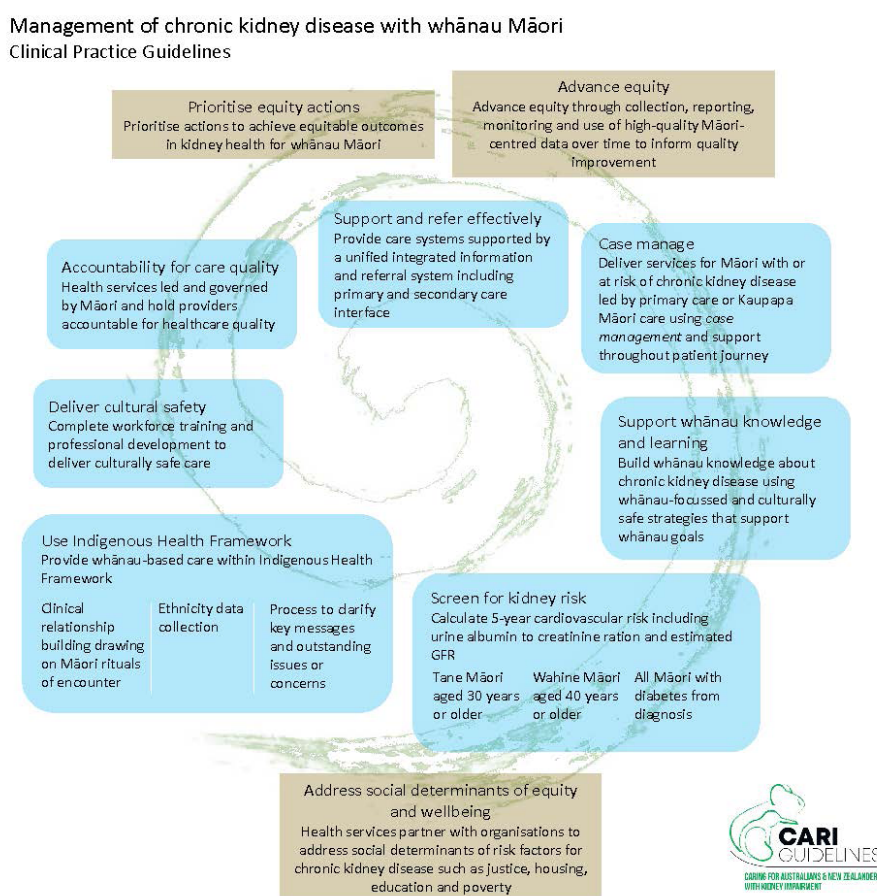
Strong recommendation. Evidence: āhua pai (moderate).

Recommendations for clinicians and health service providers

Clinical assessment framework

We recommend that individual providers of care to Māori with or at risk of CKD provide whānau-based care within an Indigenous Health Framework. This includes the importance of respect and reciprocity within the clinical relationship-building process that draws on Māori rituals of encounter, the importance of ethnicity data collection and a process to clarify key messages

Figure 1: Summary of Clinical practice guidelines for management of chronic kidney disease for Māori in Aotearoa New Zealand.



and identify outstanding issues or concerns.

Strong recommendation. Evidence: pai (good).

Whānau knowledge and learning

We recommend that individual providers of care to Māori with or at risk for CKD build whānau knowledge about CKD and health issues that contribute to using learning strategies that are whānau-focussed and culturally safe to support whānau goals.

Strong recommendation. Evidence: pai (good).

Context

CKD affects one in nine adults, and costs 1% of the annual health budget in Aotearoa New Zealand.^{1,2} There is substantial inequity in delivery of health services and outcomes for CKD that has been documented over decades.³ NZ European patients are three times less likely to commence dialysis for advanced CKD and have one-third of the risk of requiring dialysis care due to diabetes than Māori.⁴ In addition, NZ European patients are four times more likely than Māori to receive a kidney transplant and more likely to have a transplant as their first treatment for advanced CKD.⁵

The purpose of these clinical practice guidelines is to assist health providers in making decisions about the management of CKD affecting Māori.⁶ This guideline is intended to inform policy, service development and design and treatment protocols, specifically to improve healthcare delivery for CKD for Māori. The guideline has a focus on the earlier stages of CKD. These guidelines use a strengths-based approach and focus on interventions at a health services and health provider level.

Guidelines review

There has been no previous clinical practice guideline for CKD management for Māori. The guidelines were identified as a priority topic by the CARI Guidelines Steering Committee in consultation with clinicians in Aotearoa New Zealand. A guideline working group was then formed.

Consultation

The topics in these guidelines were identified as important by Māori patients and whānau who attended one of four hui facilitated by SR and CW in Hawke's Bay, South Auckland and Kerikeri. Both are experienced focus group facilitators with extensive knowledge of Te Ao Māori. The

transcripts were analysed inductively into major topics related to clinical care. Nephrologists and nephrologists in training and primary care clinicians met separately at two meetings with members of the guideline working group (SG and Carmel Gregan-Ford) to determine provider-led expectations for the scope of the guidelines.

Consultation with whānau Māori with lived experience of CKD provided a clear mandate to generate the guidelines to inform delivery of best practice care. Whānau described not being told how they developed kidney disease or that blood pressure and diabetes were risk factors for kidney disease. They described missed opportunities when seeking healthcare to build their knowledge about CKD and ways to prevent or delay its progression. Whānau described care as lacking continuity and untimely. They experienced a lack of relationship building with clinicians and uncertainty about where to access trustworthy information. Whānau described being blamed for having their condition and wanted to experience shared decision-making within a trusted therapeutic relationship. Most whānau did not recall discussions about kidney transplantation until after commencing dialysis. Whānau described many examples where a reasonable standard of care was not provided due to poor delivery of primary care, poorly coordinated care services and insufficient time to have face-to-face discussions with health workers.

Primary and secondary healthcare clinicians indicated that the guidelines should be focussed on primary care, to enable care that supports equitable outcomes, and to address issues of relevance to policy and practice change.

Guideline development group

The guideline development group includes Māori and non-Māori health literacy experts and practicing clinicians from Kaupapa Māori, primary and secondary healthcare organisations, including the authors of this paper (CW, SR, CW, MJ, LL, RW, JC, HR, DT, SG). The guideline development was discussed with the Ministry of Health – Manatū Hauora, which provided funding to support consultation with whānau to conceptualise the core topics of the practice guidelines.

Methodology

Principles

The two key principles on which healthcare services for Māori with CKD are based on were:

- Giving effect to Te Tiriti o Waitangi guarantee of tino rangatiratanga—autonomy, self-determination, sovereignty, self-government—to enact the principle of partnership, the principle of active protection, the principle of equity and the principle of options.
- Best practice care that prevents CKD, prevents or delays progression of CKD, cures or treats kidney failure through timely transplantation, is delivered in the community and provides high-quality symptom-based care.

Pou

The guidelines are grounded by four pou (pillars), as considered collectively by the guideline writing panel (Figure 2). These pou are drawn from mātauranga shared by whānau Māori during guideline development and form the underlying aspirations of safe and effective healthcare expressed within the guideline recommendations.

Development of guidelines

A key aspect of these guidelines was to ensure Māori community engagement over whānau Māori experiences of CKD and the health system’s response. This was undertaken in accordance with partnership, participation and to inform options.

This guideline was developed using the CARI guidelines development manual.⁷

The CARI guidelines development includes:

- Defining scope and priority topics
- Retrieving evidence
- Assessment of evidence with synthesis

- Formulating recommendations
- Planning implementation of the guidelines

Evidence review

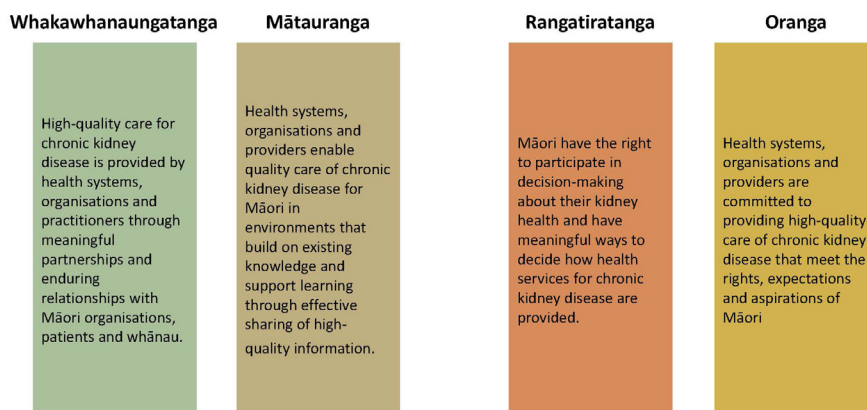
Evidence reviews were carried out following community consultation hui to address:

- Equity
- Governance and accountability
- Cultural safety
- Case management
- Information systems
- Social determinants of health and equity
- Screening and awareness of CKD
- Models of care
- Knowledge and learning

Identification and retrieval of evidence

We first conducted an electronic literature search in MEDLINE, nzresearch.org and Google Scholar without a language or date restriction. We used keyword search terms, including “Māori”, “Indigenous”, “First Nations”, “Aboriginal and Torres Strait Islander”, “Native” and “Oceanian”. We combined these terms with keyword search terms related to health and knowledge, including “mātauranga”, “ōranga”, “health outcomes”, “equity” and “critical”. We did not use search terms for a particular study design or publication type. We searched the reference lists of retrieved publications to identify additional eligible studies. We reviewed the retrieved citations by title and abstract to identify potentially eligible data. The full text of potentially included studies was then examined to adjudicate study eligibility. The flow of information during the literature search is

Figure 2: Guideline pou underpinning the development of the clinical practice guidelines drawn from mātauranga shared by whānau Māori during the guideline process.



shown in the online guideline publication.⁶

We included reports, articles and publications that were peer-reviewed and reported data for the management of CKD and risk factors for CKD, including cardiovascular risk factors, smoking, physical movement, nutrition, lipid abnormalities, cardiovascular disease and diabetes and pre-diabetes (any type). We included systematic reviews, scoping reviews, narrative reviews based on empirical evidence, government and non-governmental reports and policies, randomised controlled trials, cohort and cross-sectional studies, and qualitative and survey data.

We considered studies to be eligible if they reported data for the management of long-term conditions, including CKD, diabetes, hypertension, cardiovascular disease and risk factors for CKD. We included studies involving Indigenous peoples in any region or location. We considered any health-related role as eligible, including health systems, health providers, health services, health professionals, clinicians, patients and whānau. We also considered non-health settings, including education and justice. Studies proved eligible if they reported models of care or health services improvement or reform, equity approaches, or care quality and determinants of inequity, including racism, marginalisation and colonisation.

Evidence synthesis

Information in the available eligible studies was extracted line-by-line and grouped according to the evidence review topics. Data were tabulated and reviewed by the guidelines group to identify core concepts and evidence related to clinical outcomes and clinical practice management. The concepts and related evidence were triangulated among the guidelines group during several online video hui and two kanohi-ki-te-kanohi hui in Auckland and Wellington conducted with the guidelines expert team from the CARI office.

Evidence grading

Each guideline recommendation includes the strength of the recommendation and the certainty of the evidence on which the recommendation is made.⁸ Evaluation of the evidence certainty underpinning these guideline recommendations is based on an appraisal of the quality of the underlying research, using an Indigenous Quality Appraisal Tool, combined with whether contributing studies were consistent in their findings, and provided evidence directly relevant

to clinical management for Māori patients and whānau.⁹

The evidence certainty was adjudicated as:

- **Pai (good)** when the underlying research was conducted aligning to best practices when involving Māori, was consistent across studies and involved evidence from research conducted with Māori.
- **Āhua pai (moderate)** when the research was less well aligned to best practices when involving Māori, or findings were not consistent, or studies were not conducted involving Māori.
- **Whekowheko (poor/weak)** when the research was less well aligned to best practices when involving Māori, *and* findings were not consistent *and* studies were not conducted involving Māori.

The strength of the recommendation (strong or conditional) considered the balance between benefits and harms, evidence certainty and applicability to Māori health and wellbeing. A strong recommendation is based on the quality of the evidence, a lack of evidence of important harms and a judgement about whether translation of the evidence into practice will improve Māori health and wellbeing. A strong recommendation indicates that most stakeholders would make the same choice as the suggested guideline action. A conditional recommendation indicates that most stakeholders would make the same choice as the guideline action, but a substantial minority would not.

Peer review

The draft guidelines were extensively peer reviewed by a Māori Public Health physician and a nephrology Nurse Specialist.

Presentation

The guidelines are presented categorised into the core topics identified during the consultation process and based on analysis of a systematic review of the electronic literature. The CARI guidelines encourage the inclusion of the findings into clinical pathways, health policies and health system design and development.

Dissemination plan

The guidelines are publicly available on the CARI website and are available for inclusion in Health Pathways.⁶ The guidelines will be

published in the *New Zealand Medical Journal* and presented to the New Zealand Nephrology Group of the Australian and New Zealand Society of Nephrology and the Renal Society of Australasia. The guidelines will be disseminated via the Kidney Health New Zealand website and to primary care via other communication channels. The guidelines will be available to whānau Māori through local renal units and patient newsletters through an animated video of the results.

Implementation

Guideline implementation will be monitored through CKD outcomes as measured in the clinical

quality registry for treated advanced CKD in Aotearoa New Zealand.³

Definition

CKD is defined as a structural abnormality or evidence of an estimated glomerular filtration rate below 60mL/min per 1.73m² of body surface area and/or abnormal urinary sediment, including red cells, white cells, or albuminuria or proteinuria occurring on at least two occasions in the previous 3 months.¹⁰ Advanced CKD is an estimated glomerular filtration rate of 15mL/min per 1.73m² or treatment with kidney transplantation or dialysis.

COMPETING INTERESTS

Nil. Funding from Manatū Hauora Ministry of Health.

AUTHOR INFORMATION

Curtis Walker: Nephrologist, Te Whatu Ora Te Pae Hauora o Ruahine o Taranui, New Zealand.

Susan Reid: Health Literacy Expert, Health Literacy New Zealand, New Zealand.

Carla White: Health Literacy Expert, Health Literacy New Zealand, New Zealand.

Merryn Jones: National Clinical Manager, Kidney Health New Zealand Tākihi Hauora Aotearoa, New Zealand.

Lee-ora Lusi: Nurse Practitioner, Whānau Ora/Lifespan, Te Taiwhenua o Heretaunga, Hastings, New Zealand.

Rachael C Walker: Nurse Practitioner, Te Whatu Ora Te Matau a Māui, The University of Auckland, New Zealand.

John Collins: Nephrologist, Mercy Specialist Centre, Auckland, New Zealand.

Helen Rodenburg: Island Bay Medical Centre, Wellington, New Zealand.

David Tunnicliffe: Research Fellow, Sydney School of Public Health, The University of Sydney, Australia.

Suetonia C Green: Professor, University of Otago, Christchurch, New Zealand; Nephrologist, Te Whatu Ora Waitaha, New Zealand.

CORRESPONDING AUTHOR

Prof Suetonia Green: Department of Medicine, University of Otago, Christchurch, 2 Riccarton Avenue, Christchurch 8011, New Zealand. E: suetonia.green@otago.ac.nz

URL

<https://nzmj.org.nz/journal/vol-137-no-1594/management-of-chronic-kidney-disease-for-maori-in-aotearoa-new-zealand-a-summary-of-clinical-practice-guidelines>

REFERENCES

- Ashton T, Marshall MR. The organization and financing of dialysis and kidney transplantation services in New Zealand. *Int J Health Care Finance Econ.* 2007;7(4):233-52. doi: 10.1007/s10754-007-9023-x.
- Lloyd H, Li G, Tomlin A, et al. Prevalence and risk factors for chronic kidney disease in primary health care in the southern region of New Zealand. *Nephrology (Carlton).* 2019;24(3):308-15. doi: 10.1111/nep.13395.
- Australian and New Zealand Dialysis and Transplantation Registry (ANZDATA) [Internet]. Adelaide (AU): ANZ DATA; 2022 [cited 2024 Jan 25]. Available from: www.anzdata.org.au
- Huria T, Palmer S, Beckert L, et al. Inequity in dialysis related practices and outcomes in Aotearoa/New Zealand: a Kaupapa Māori analysis. *Int J Equity Health.* 2018;17(1):27. doi: 10.1186/s12939-018-0737-9.
- Australia and New Zealand Dialysis and Transplant Registry. End Stage Kidney Disease in Aotearoa New Zealand [Internet]. Adelaide (AU): ANZ DATA; 2018 [cited 2024 Jan 25]. Available from: https://www.anzdata.org.au/wp-content/uploads/2019/09/c09_aotearoa_2018_ar_2019_v1.0_20200415.pdf
- Caring for Australians and New Zealanders with Kidney Impairment. CKD management for Māori in Aotearoa New Zealand [Internet]. Sydney (AU): CARI; 2023 [cited 2024 Jan 25]. Available from: <https://www.cariguideelines.org/aotearoa-new-zealand-full-guidelines/>
- Howell, M. KHA-CARI Guidelines Development Manual [Internet]. NSW (AU): KHA-CARI; 2015. Available from: https://www.cariguideelines.org/wp-content/uploads/2020/06/KHACARI_Guideline_development_-manual.pdf
- Guyatt G, Oxman AD, Akl EA, et al. GRADE guidelines: 1. Introduction—GRADE evidence profiles and summary of findings tables. *J Clin Epidemiol.* 2011;64(4):383-94. doi: 10.1016/j.jclinepi.2010.04.026.
- Harfield S, Pearson O, Morey K, et al. Assessing the quality of health research from an Indigenous perspective: the Aboriginal and Torres Strait Islander quality appraisal tool. *BMC Med Res Methodol.* 2020;20(1):79. doi: 10.1186/s12874-020-00959-3.
- Levey AS, Eckardt KU, Tsukamoto Y, et al. Definition and classification of chronic kidney disease: a position statement from Kidney Disease: Improving Global Outcomes (KDIGO). *Kidney Int.* 2005;67(6):2089-100. doi: 10.1111/j.1523-1755.2005.00365.x.