

Meeting Briefing

National Clinical Renal Network

Due to MO:	3 November 2025	Reference	HNZ00102322
To:	Hon Simeon Brown, Minister of Health		
From:	Richard Sullivan, Executive National Director - Clinical		
Copy to:	N/A		
Security level:	In Confidence	Priority	Routine
Consulted:	n/a		
Proactive Release:	This title is proposed by Health NZ for proactive release		

Contact for phone discussion (if required)

Name	Position	Telephone	1st contact
Mary Cleary-Lyons	Director National Clinical Networks		x
Drew Henderson	Co-Lead National Renal Network		
Leanne Te Karu	Co-Lead National Renal Network		

Attachments

Appendix 1: Biographies of attendees

About the meeting

Purpose	Meeting with the National Clinical Renal Network
Date	Wednesday 5 th November
Time	15:30-15:50
Venue	Your office, Executive Wing
Expected attendees	Mary Cleary-Lyons, Director National Clinical Networks Dr Drew Henderson, Nephrologist Co-Lead National Renal Network, Health NZ Dr Leanne Te Karu, Pharmacist Prescriber Co-Lead National Renal Network, Health NZ [Note, biographies are attached as Appendix 1]
Health New Zealand Te Whatu Ora representatives	See above
Media	No media are expected

Background

1. The number of people living with kidney failure in NZ continues to increase. In 2023, there were 3,200 patients receiving treatment with dialysis and 2,374 patients living with a kidney transplant. This was a 13% increase compared with 2019, with a similar increase in both patients on dialysis and those who have undergone a kidney transplant.
2. The key driver of chronic kidney disease (CKD) is diabetes, with diabetic kidney disease being the cause of kidney failure in 50% of patients starting dialysis. There are significant inequities in the incidence of kidney failure, with Māori and Pacific peoples having three

and five times higher rates of kidney failure, respectively, than the non-Māori non-Pacific population in NZ.

3. Kidney failure significantly impacts life expectancy, a patient's ability to participate in daily activities (including employment), the participation of their wider family, and imposes substantial costs on the health system due to dialysis treatment. A formal costing study has not been conducted in New Zealand for over 10 years, but previous studies, when adjusted for CPI, suggest that the annual cost of haemodialysis care for an individual patient is approximately \$100,000.
4. The Renal Network was the first national network established. It commenced initial planning work in February 2024 and its workplan received endorsement in July 2024.
5. The Renal Network has a strategic group and four working groups. These focus on dialysis care, conservative care of kidney failure, chronic kidney disease prevention, and an informatics and quality group. All the workstreams are underpinned and validated by a patient and whānau voice group (Te Roopū Kahika) that has patient representation from across New Zealand.
6. The National Renal Network is closely linked with the National Renal Transplant Service, which oversees the delivery of renal transplant services for New Zealand.

Discussion

Kidney Failure and Prevention

7. There are two cohorts of patients who develop kidney failure:
 - Cohort 1 consists of patients with primary kidney disease. They require specific interventions whenever possible to slow the decline in kidney function. Diseases in this cohort include genetic kidney disorders, congenital abnormalities affecting the kidneys, and autoimmune and inflammatory kidney diseases.
 - Cohort 2, accounting 60- 65% of patients, is primarily driven by hypertension and diabetes, which are core components of cardiovascular-kidney-metabolic disease (CKM). This encompasses CKD, diabetes, gout, hypertension, heart disease, stroke, obesity and hyperlipidaemia (abnormally high levels of lipids (fats such as cholesterol or triglycerides) in the blood). There are common risk factors and preventative/early intervention strategies that apply across CKM.
8. The key to reducing the rates of morbidity and mortality from CKM is early identification (targeted screening) and interventions to reduce progression of CKM to organ-specific outcomes such as CKD, heart failure, myocardial infarction, or stroke.
9. In alignment with international best practice guidelines and feedback from patients and whānau with lived experience, the National Cardiac, Renal, Diabetes, and Stroke Networks have collaborated to develop best practice guidance for treating CKM.
10. This guidance differs from current cardiovascular risk factor guidance by incorporating additional risk factors (gout, proteinuria, CKD stage) and by focusing not only on cardiovascular (CV) risk but also on broader risks associated with CKM.

11. Two considerations for implementing the guidance are:
 - i. A proportion of people with CKM have already been identified and are being seen in Primary Care. The guidance will be valuable in ensuring there is consistency of management and a single point of reference.
 - ii. Some people are unidentified and therefore unmanaged. The intervention will need to be proactive and will require resourcing beyond those currently identified.
12. Albuminuria (urinary ACR) is an early, sensitive marker of both kidney damage and cardiovascular risk. This is independent of a person's diabetes status. There is a current gap in NZ where ACR is routinely tested in diabetes management but not in cardiovascular risk screening, meaning many people with early chronic kidney disease (CKD) and high cardiovascular risk remain undetected. Global guidelines recommend albuminuria testing in at risk populations as part of an integrated cardiovascular and renal risk stratification approach.
13. Primary care services currently lack the capacity to implement the guidance fully. Economic analyses conducted in NZ, Australia, and the European Union (EU) all demonstrate a return on investment of approximately \$10 for every \$1 invested.
14. An initial CKM implementation meeting was held involving primary care, secondary care, Iwi partners, community partners, population health, strategy and funding, and Pharmac. It was collectively determined that a disruption of the current preventative care model is needed, favouring ground-up approaches delivered by local communities. A key enabler for this is to utilise diagnostic information available through datasets held at labs, primary care, and secondary care to identify those at greatest risk.

Prevention Enablers for CKM

15. Solutions the network is considering, to reduce CKM burden and therefore prevent CKD progression, lie in proactively identifying people at the highest risk and providing wrap-around, multi-disciplinary support early. This would incorporate:
 - Targeted identification using the CKD Dashboard: Dashboards leveraging the National Data Platform could identify patients at highest risk, enabling proactive outreach and stratified care. This would also strengthen service planning and track patient outcomes and inequities over time.
 - Multi-disciplinary, community-based care "hubs"
The use of team-based delivery models — such as those validated in the UK— improves detection, optimises care, and enhances adherence. CKM capability could be integrated into other infrastructure to increase return on investment and ensure system consistency.
 - Medicines optimisation embedded within care hubs
Early use of guideline-driven therapies — including renin-angiotensin system (RAS) blockade, statins, nsMRAs, GLP1RAs and SGLT2 inhibitors — is essential to halting the progression of CKD and reducing cardiovascular events.
 - Another part of the solution to be considered is Pharmac funding of sodium-glucose co-transporter-2 (SGLT-2) inhibitors and non-steroidal mineralocorticoid receptor antagonist (ns-MRA) medications.

- SGLT-2 inhibitors and ns-MRA medications are internationally recognised standard of care for CKD, offering proven benefits in reducing kidney failure, cardiovascular events and hospitalisations. However, access remains limited in New Zealand.
- SGLT-2 inhibitors are funded only for patients with diabetes, not for CKD alone, while ns-MRAs are currently unavailable for any CKD patients
- Economic analysis in Australia and the EU has shown the cost benefit of these therapies for patients with CKD extends beyond prevention of kidney failure but also reduces admissions to hospital for heart failure, myocardial infarction and stroke, and their associated costs.

16. Together, these enablers would shift the system from late-stage intervention to early risk-based care, with significant benefit to individuals, whānau, and the health system

Dialysis for Kidney Failure

17. The need for dialysis continues to grow, driven by increasing CKM burden and ongoing inequities in early CKD detection. Programs to address this will not mitigate immediate demand for dialysis but should reduce long-term dialysis demand
18. Māori and Pacific peoples are disproportionately represented in late presentations, leading to preventable dialysis starts and higher morbidity.
19. Dialysis is delivered as either facility based haemodialysis (FHD) or as home based dialysis (HBD) which is either peritoneal dialysis or home haemodialysis.
20. HBD treatment if appropriate is more cost effective than FHD. For selected patients it provides excellent outcomes.
21. Due to comorbidities and social factors, HBD is not suitable for all patients. New Zealand remains at the forefront of HBD with 30% of patients dialysing at home, compared with 25% in Australia and <10% in many European countries.
22. The model of care for dialysis varies significantly across New Zealand. Metropolitan areas tend to favour FHD, with lower uptake of HBD. Notably, regions with higher FHD rates report lower standardised mortality rates.
23. Historically some regions limited access to FHD and relied heavily on HBD. This underinvestment in facility dialysis infrastructure had led to a capacity crisis for FHD in those regions.
24. FHD access is limited in rural New Zealand with many patients travelling long distances three times per week for dialysis, relocating to be close to a dialysis centre or choosing not to have dialysis treatment.

Modelling of demand

25. The Renal Network has been working with HNZ Infrastructure Investment Group to develop a robust model for predicting dialysis growth across New Zealand. The modelling utilises epidemiological data to estimate unmet need in areas with limited dialysis and renal service infrastructure. The model aims to reduce the variation in care across New Zealand by standardising the rate of FHD at 75%. This is currently the rate in Northern region and aligns with the region with lowest mortality rates.

26. Dialysis chair utilisation strategy, maximising usage of existing chairs can increase utilisation of each dialysis chair by 33% and reduce capital expenditure. However, it affects patient care by having patients' complete dialysis late at night. For small populations, this is advantageous due to family or work commitments; however, for the majority of patients who have comorbidity and a degree of frailty, this is not patient-centred care. There is consensus among Te Roopū Kahika (the lived experience voice), the network strategic group, and IIG that a two-shift-per-day model provides optimal care.
27. Dialysis capacity has two critical components. These are the physical spaces required to provide dialysis services and the workforce to enable patients to receive treatment.
28. The modelling has shown that, given population growth, demographic shifts and a potential change in dialysis model of care, there is the need for significant investment in dialysis infrastructure and staffing across the short to medium term.
29. The modelling parameters are as follows:
- Prevalence is based on Northern region with adjustments by region for age, ethnicity and gender.
 - Patients dialyse three times per week
 - 75% Facility Haemodialysis (not including community houses)
 - Two patient shifts per day
 - Six days per week
 - 90% occupancy

Region	Current Chair Number	Modelled Chair Number 2023	Modelled Chair Number 2028	Modelled Chair Number 2033	Modelled Chair Number 2038
Northern Region (currently most commonly operating three shifts per day)	281	390 (2 shifts per day)	443 (2 shifts per day)	498 (2 shifts per day)	550 (2 shifts per day)
Te Manawa Taki	95	179	203	225	245
Central	127	168	187	204	232
Te Waipounamu	48	157	180	199	216

30. Key Message 1: CKD is a growing, inequitably-distributed burden

- **Fact:** Kidney failure has increased 13% since 2019, with over 5,500 New Zealanders affected;
- **Inequity:** Māori and Pacific peoples experience 3–5 times the rate of kidney failure compared to other populations;
- **Impact:** CKD significantly shortens lives, reduces quality of life, and incurs significant costs for the system and society. Dialysis costs alone \$100K+ per patient annually, excluding infrastructure costs, loss of contribution to society from patients and primary care or hospitalisation costs;
- **Suggested approach:** *consider endorsing a national screening strategy focused on early identification and whānau-centred care to help reduce CKD (and CVD by default) burden in primary care, secondary care and dialysis centres. Health NZ also to consider adding ACR to CVD risk assessment and including family history of CKD, acute kidney injury and gout as risk factors.*

31. Key Message 2: We have a prevention strategy for CKM however, it needs resourcing

- **Fact:** Kidney failure is often an outcome of CKM. CKM encompasses CKD, diabetes, gout, hypertension, heart disease, stroke, obesity and hyperlipidaemia. CKM disease is the most significant cause of morbidity and mortality in NZ. It delays surgeries, burdens primary care and hospitals, and is associated with many cancers;
- **Solution:** National clinical networks have developed collaborative CKM guidance based on lived experience, international best practice and local context;
- **Evidence:** Prevention and early intervention can conservatively return \$10 for every \$1 invested;
- **Barrier:** Primary care lacks the resource to implement the guideline at scale;
- **Suggested approach:** *consider funding the rollout, on a needs basis, of community-based CKM prevention and treatment infrastructure, including:*
 - i. Workforce support;
 - ii. Digital screening tools (CKD Dashboard); and
 - iii. Expanded medication access (e.g. SGLT-2 inhibitors, ns-MRA which are standard of care medication across most OECD nations).

32. Key Message 3: Dialysis provision has reached a capacity crisis with inequitable access for rural patients

- **Capacity:** Haemodialysis units in most districts are operating at full capacity. For units that are not yet at capacity, most are projected to reach capacity within 2-3 year;

In Confidence

- **Access gap:** Many rural patients are more than an hour away from dialysis units. Some are declining treatment because of the travel burden;
- **Mortality concern:** New Zealand dialysis outcomes are worse than Australia's, with regions with high home based dialysis utilisation having poorest outcomes.
- **Future need:** Predictive modelling shows urgent need for workforce and infrastructure investment to ensure timely and equitable access to facility dialysis.
- **Suggested approach:** *consider further investment in dialysis services and infrastructure, prioritising access equity and future-proofing based on national demand modelling.*

Proactively released

Appendix 1: Biographies of attendees



Mary Cleary-Lyons – Mary has been Director of the National Clinical Networks programme since 2022, after initially joining Health New Zealand | Te Whatu Ora's national office on secondment from her role as General Manager, Design and Implementation at Capital, Coast and Hutt Valley. Prior to that she was General Manager Primary Care and Population Health at Southern District Health Board in Dunedin, which was her first role after settling in New Zealand from London with her Kiwi family.

With over 28 years in health and social care management in Ireland, the UK and Aotearoa, Mary has proven ability to run complex programmes with large interprofessional teams across public health, primary care, acute services and community and mental health services.

Mary is passionate about the National Clinical Networks and their purpose to deliver innovative models of care that provide accessible, high-quality services which ultimately contribute to more consistent health outcomes for all New Zealanders.



Dr Drew Henderson – Is the current Medical Director for Cancer, Chronic Conditions and Radiology at Waikato Hospital. He has been the Co-Chair of the National Renal Clinical network since 2024. He is also the Treasurer and Chair of the NZ Group of the Australia New Zealand Society of Nephrology.

He studied medicine at Glasgow University and completed advanced training in Nephrology and General Medicine at Ninewells Hospital Dundee, Scotland.

He became a consultant at Hawke's Bay Hospital in 2007 and was the first full time nephrologist based in Hawke's Bay. He worked there 2007-2011 and developed an independent renal service for Hawke's Bay, including the business case to develop the current Hawke's Bay Renal unit which opened in 2016.

Between 2011 and 2017 he was Head of Department of Renal Medicine at NHS Tayside, Dundee, Scotland. As well as practising as a nephrologist, he was Clinical Lead for Electronic Patient Records and Informatics lead for the Dundee University and NHS Tayside Academic Health Science Partnership. He has worked as a Consultant Nephrologist at Waikato since 2017 and was previously Head of Department between 2019-2022.

He has a diverse range of nephrological interests, from utilising big data to develop Key Performance Indicator Frameworks and utilisation of this to understand variation in outcomes, preventative models of care to reduce the prevalence of kidney through to genetic causes of kidney failure.



Dr Leanne Te Karu - is a general practice pharmacist prescriber, a health researcher, and national clinical leader known for her pragmatic and societal approach to system improvement.

She currently holds national leadership roles, including as Co-Lead of the National Clinical Renal Network and Co-Lead of the Cardiovascular Kidney Metabolic (CKM) Guideline Group. Leanne has used medicines use as a barometer to demonstrate health systems awareness and is actively involved in the implementation of initiatives that reduce medicines-related harm and improve access to safer, more effective care, particularly for those who

have the greatest need.

With governance experience across multiple domains and international collaborations, Leanne brings a solutions-driven perspective. Her leadership promotes practices that aim to improve care, reduce avoidable hospitalisations, and deliver greater value for investment.

Leanne is currently Director of the Easy Allo Trial (investigating equitable implementation of allopurinol in NZ) and contributes to several research projects focused on diabetes, antimicrobial stewardship, and medicines optimisation.

Proactively released