Supporting Information

Supplementary material

This appendix was part of the submitted manuscript and has been peer reviewed.
It is posted as supplied by the authors.

Appendix to: McDonald SP, Cundale K, Davies CE, et al. Am I on the list? Clinician-reported factors for kidney transplantation non-waitlisting among Aboriginal and Torres Strait Islander people with end-stage kidney failure: a cross-sectional study. *Med J Aust* 2025; doi: 10.5694/mja2.52698.

Section 1. STROBE checklist and Transplant Assessment Stage form

Table 1. STROBE Statement Checklist

	Item No	Recommendation	Page No
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	1
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	1-2
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	3-4
Objectives	3	State specific objectives, including any prespecified hypotheses	4
Methods			
Study design	4	Present key elements of study design early in the paper	4
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	4-5
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants	5
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	5
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	4
Bias	9	Describe any efforts to address potential sources of bias	11
Study size	10	Explain how the study size was arrived at	4-5
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5-6
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	6
		(*b*) Describe any methods used to examine subgroups and interactions	6

		(*c*) Explain how missing data were addressed	6
		(*d*) If applicable, describe analytical methods taking account of sampling strategy	N/A
		(*e*) Describe any sensitivity analyses	6
Results			
Participants	13*	(*a*) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	7
		(*b*) Give reasons for non-participation at each stage	N/A
		(*c*) Consider use of a flow diagram	N/A
Descriptive data	14*	(*a*) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	7
		(*b*) Indicate number of participants with missing data for each variable of interest	N/A
Outcome data	15*	Report numbers of outcome events or summary measures	7-8
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	Table 1, Supplementary tables 1-3
		(*b*) Report category boundaries when continuous variables were categorized	N/A
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	N/A
Discussion			
Key results	18	Summarise key results with reference to study objectives	7-8
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	10-11
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of	8-10

		analyses, results from similar studies, and other relevant evidence	
Generalisability	21	Discuss the generalisability (external validity) of the study results	11
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Acknowledgements

Figure 1. Transplant Assessment Stage form created for auxiliary National Indigenous Kidney Transplantation Taskforce data collection (version 2019.3.09)*

ANZDATA Registry

Transplant Assessment Stage

Form **TA**

(Assessment Pathway to Kidney Transplant - NIKTT Pilot)

This form is additional to the main data form

Complete this form at the end of **Survey period for Transplant Assessment Stage Outcome**
Send form to the ANZDATA Registry by fax +61 8 8128 4769 or scan and email to anzdata@anzdata.org.au

REGISTRY NO	INITIAL HOSPITAL	HOSPITAL MRN	CURRENT HOSPITAL	HOSPITAL MRN	PHYSICIAN

SURNAME	GIVEN NAMES	DATE OF BIRTH			GENDER

Complete this section, with the TRANSPLANT ASSESSMENT STAGE as at 31-December, end of survey.

SURVEY	ASSESSMENT STAGE	OUTCOME REASONS	OTHER (SPECIFY)

Comments :

TRANSPLANT PATHWAY OUTCOME CODES

CODE	ASSESSMENT STAGE
AE	Eligibility assessment not yet conducted
AW	Eligible - workup commenced but not completed
AT	Eligible - workup complete, awaiting assessment by transplanting unit
NS	Not eligible - temporary contra-indications
NT	Not eligible - permanent contra-indications
NR	Not ready to pursue a transplant - patient preference
WL	Already on waitlist
LD	Living donor transplant pathway
NA	Not applicable

CODE	OUTCOME REASON
1	Cancer
2	Cardiovascular Disease
3	Infection
4	High BMI / Obesity
5	Patient declined transplantation (Specify)
98	Other comorbidities (Specify)
99	Other (Specify)

* Reproduced with permission from the Australia and New Zealand Dialysis and Transplant Registry. Transplant Assessment Stage [form TA]. Adelaide: ANZDATA, 2019. https://www.anzdata.org.au/wp-content/uploads/2020/01/TxAssessmentStage_TA.pdf (viewed Sept 2024).

Section 2. Authors' response to the CONSIDER Statement

Governance
This research was developed under the governance of the National Indigenous Kidney Transplantation Taskforce (NIKTT), co-led by Aboriginal, Torres Strait Islander, and non-Indigenous leaders. NIKTT embeds Indigenous knowledges, lived experience, and cultural authority in all decision-making processes. Preparation of this manuscript followed the same governance principles, ensuring Indigenous leadership guided research focus, interpretation, and dissemination.
Prioritization
The study responds to priorities identified by Aboriginal and Torres Strait Islander people living with kidney disease, who have consistently called for greater transparency in transplantation pathways. It was endorsed by the NIKTT Data Working Group following community-partnered consultations, and contributes to national health equity efforts, such as the development of a data equity dashboard.
Relationships (Indigenous stakeholders/participants and Research Team
This research was conducted through the established and ongoing relationships within the NIKTT, which includes Aboriginal, Torres Strait Islander, and non-Indigenous researchers, clinicians, and data custodians. Our team includes Torres Strait Islander and Aboriginal women who are clinician-researchers, community engagement specialists, and emerging health equity researchers. Non-Indigenous members have longstanding partnerships with Aboriginal and Torres Strait Islander communities and are accountable to NIKTT's governance and to the patients and families our work seeks to serve. Team members have worked collaboratively for several years, and relationships have been developed and maintained through mutual trust, regular engagement, and shared purpose.
Methodologies
This study involved retrospective analysis of clinician-reported reasons for non-waitlisting for kidney transplantation, using data from the Australia and New Zealand Dialysis and Transplant Registry (ANZDATA). The analysis was designed and interpreted through the lens of Aboriginal and Torres Strait Islander health equity. It was grounded in the priorities identified by Aboriginal and Torres Strait Islander patients, families, and leaders through the NIKTT, and embedded within a broader program of community-led systems reform. Interpretation of the findings was co-led by Aboriginal and Torres Strait Islander researchers and advocates, whose lived and professional expertise guided both the framing of inequity and the articulation of response. Although the data were not originally generated through Indigenous research methodologies, the approach to analysis and reporting centres Indigenous perspectives on justice, sovereignty, and data use. This reflects a deliberate commitment to reframing conventional clinical datasets in ways that support Indigenous data sovereignty, inform community-driven change, and support the interpretation of findings through both epidemiological evidence and cultural knowledge of systemic inequity, racism, and structural barriers in care.
Participation
This study analysed data collected through routine clinical care and submitted to ANZDATA, a national clinical quality registry. Aboriginal and Torres Strait Islander individuals were not directly recruited, and no additional burden was placed on patients or communities. Instead, the project focused on improving system-level understanding of transplantation inequities using data provided by renal units. To support this analysis, NIKTT co-developed a voluntary "Transplant Assessment Stage" form to capture clinician-reported reasons for non-waitlisting. The prioritisation, analysis, and dissemination of this work were endorsed by both the NIKTT Data Working Group and the ANZDATA Aboriginal and Torres Strait Islander Health Working Group, with alignment to Indigenous data sovereignty principles and national community-identified priorities. All data use

was conducted under existing ANZDATA governance structures and ethics approvals. No biospecimens were collected, and no individually identifiable information was transferred outside the registry. Indigenous leadership guided the framing and interpretation of the data, and findings are being shared to inform systems change, in line with community expectations and principles of collective accountability.

Capacity

This project was guided by the expertise of Professor Jaqui Hughes, a Torres Strait Islander nephrologist and clinician-researcher, who provided senior Indigenous leadership throughout the design, analysis, and interpretation. Additional input came from Aboriginal team members Kelli Karrikarringka Owen, who brought lived experience and cultural insight, and Matilda D'Antoine, an Aboriginal project officer whose involvement contributed to her early-career development in research. While the core data analysis and manuscript preparation was conducted by non-Indigenous team members, the project contributed to research capacity by embedding Indigenous perspectives into interpretation and dissemination.

Analysis and interpretation

This project deliberately applied a strengths-based and critically reflexive lens to challenge deficit-based narratives that have historically dominated kidney care discourse. Rather than accepting clinician-reported terms such as "non-compliance" at face value, the analysis reframed such responses to focus on "patient safety," redirecting scrutiny toward systemic and institutional responsibilities. Interpretation was led by both Indigenous and non-Indigenous team members, with Professor Jaqui Hughes playing a key role in guiding the framing and language. Findings were carefully reviewed to ensure that outputs would support positive systems change rather than pathologise patients. Authorship reflects equity in contribution, with Indigenous leadership appropriately acknowledged.

Dissemination

Preliminary findings were shared with the NIKTT Data Working Group and included in the final NIKTT report to the Commonwealth, contributing to broader reflections on equity in access to transplantation. Elements of the analysis have also been presented at academic and clinical forums to raise awareness of systemic barriers and clinician decision-making. While targeted community dissemination is still to be undertaken, the published findings are intended to inform ongoing advocacy for improved data transparency and accountability in kidney care. Future dissemination will be guided by NIKTT's evolving governance structure and used to support efforts such as the data equity dashboard/platform and engagement with renal units and policymakers.

Section 3. Supplementary data

Table 1. Reported reasons for not waitlisting people receiving dialysis at 31 December 2020 and not yet on the kidney transplantation waiting list, by age group

	0-24 years	0-24 years	25-44 years	25-44 years	45-64 years	45-64 years	65 years or older	65 years or older
Reason for non-listing	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous
Total number	32	9	310	211	1225	974	2277	370
Eligibility not assessed	1 (3%)	2 (22%)	28 (9%)	21 (10%)	173 (14%)	105 (11%)	238 (10%)	23 (6%)
Workup incomplete	11 (34%)	3 (33%)	93 (30%)	51 (23%)	236 (19%)	178 (18%)	98 (4%)	23 (6%)
Awaiting transplant assessment	3 (9%)	2 (22%)	9 (3%)	15 (7%)	26 (2%)	19 (2%)	9 (<1%)	2 (<1%)
Temporary contraindication	8 (25%)	0	100 (32%)	69 (31%)	280 (23%)	207 (21%)	163 (7%)	28 (8%)
Permanent contraindication	1 (3%)	1 (11%)	35 (11%)	49 (22%)	370 (30%)	407 (42%)	1673 (73%)	279 (75%)
Patient choice	3 (9%)	0	14 (4%)	6 (3%)	62 (5%)	42 (4%)	62 (3%)	9 (2%)
Already on waitlist	2 (6%)	1 (11%)	27 (9%)	10 (4%)	75 (6%)	16 (2%)	32 (1%)	6 (2%)
Live donor pathway	3 (9%)	0	4 (1%)	0	3 (<1%)	0	2 (<1%)	0

Table 2. Reasons cited among those for whom a response of temporary or permanent contraindication to transplantation was recorded, by ethnicity, 2020

	Under 65	Under 65	Under 65	Under 65	Over 65	Over 65	Over 65	Over 65
	Non-Indigenous	Non-Indigenous	Aboriginal and Torres Strait Islander	Aboriginal and Torres Strait Islander	Non-Indigenous	Non-Indigenous	Aboriginal and Torres Strait Islander	Aboriginal and Torres Strait Islander
Reason	Absolute number	Proportion (95% CI)	Absolute number	Proportion (95% CI)	Absolute number	Proportion (95% CI)	Absolute number	Proportion (95% CI)
Total number of people	794		733		1836		307	
Cancer	86	10.8% (8.7% - 13%)	28	3.8% (2.4% - 5.2%)	178	9.7% (8.3% - 11.0%)	18	5.9% (3.2% - 8.5%)
Cardiovascular Disease	216	27.2% (24.1% - 30.3%)	194	26.5% (23.3% - 29.7%)	558	30.4% (28.3% - 32.5%)	91	30% (25% - 35%)
Infection	22	2.8% (1.6% - 3.9%)	45	6.1% (4.4% - 7.9%)	22	1.2% (0.7% - 1.7%)	9	3% (1% - 5%)
High Body Mass Index / Obesity*	207	26.1% (23.0% - 29.1%)	163	22.2% (19.2% - 25.2%)	163	8.9% (7.6% - 10.2%)	30	9.8% (6.5% - 13%)
Patient Declined Transplantation	7	0.9% (0.2% - 2%)	6	0.8% (0.2% - 2%)	46	2.5% (1.8% - 3.2%)	6	2% (0.4% - 4%)
Other Comorbidities	135	17.0% (14.4% - 19.6%)	193	26.3% (23.1% - 29.5%)	480	26.1% (24.1% - 28.2%)	76	25% (20% - 30%)
Other	192	24.2% (21.2% - 27.2%)	233	31.8% (28.4% - 35.2%)	600	32.7% (30.5% - 34.8%)	128	41.7% (36.2% - 47.2%)

Reason Not Reported	32	4.0% (2.7% - 5.4%)	10	1.4% (0.5% - 2.2%)	45	2.5% (1.7% - 3.2%)	3	1% (0.0% - 2%)

*As determined by individual respondents

Table 3. Prevalence of key responses among main categories and free-text responses, by age and ethnicity, 2020

	Under 65	Under 65	Under 65	Under 65	Over 65	Over 65	Over 65	Over 65
	Non-Indigenous	Non-Indigenous	Aboriginal and Torres Strait Islander	Aboriginal and Torres Strait Islander	Non-Indigenous	Non-Indigenous	Aboriginal and Torres Strait Islander	Aboriginal and Torres Strait Islander
Reason	Absolute number	Proportion (95% confidence interval)	Absolute number	Proportion (95% confidence interval)	Absolute number	Proportion (95% confidence interval)	Absolute number	Proportion (95% confidence interval)
Total number of people	794		733		1836		307	
Age	18	2.3% (1.2% - 3.3%)	26	3.5% (2.2% - 4.9%)	772	42.0% (39.8% - 44.3%)	124	40.4% (34.9% - 45.9%)
High Body Mass Index / Obesity*	207	26.1% (23.0% - 29.1%)	163	22.2% (19.2% - 25.2%)	163	8.9% (7.6% - 10.2%)	30	9.8% (6.5% - 13%)
Cancer	86	11% (8.7% - 13%)	28	3.8% (2.4% - 5.2%)	178	9.7% (8.3% - 11.0%)	18	5.9% (3.2% - 8.5%)
Cardiovascular Disease	216	27.2% (24.1% - 30.3%)	194	26.5% (23.3% - 29.7%)	558	30.4% (28.3% - 32.5%)	91	30% (25% - 35%)
Cognitive Impairment	12	1.5% (0.7% - 2.4%)	10	1.4% (0.5% - 2.2%)	13	0.7% (0.3% - 1.1%)	5	2% (0.2% - 3%)
Infection	22	2.8% (1.6% - 3.9%)	45	6.1% (4.4% - 7.9%)	22	1.2% (0.7% - 1.7%)	9	3% (1% - 5%)
Other Medical	104	13.1% (10.8% - 15.4%)	172	23.5% (20.4% - 26.5%)	183	10.0% (8.6% - 11.3%)	53	17% (13% - 22%)

Patient Declined Transplantation	7	0.9% (0.2% - 2%)	7	1% (0.3% - 2%)	50	2.7% (2.0% - 3.5%)	6	2% (0.4% - 4%)
Patient Safety	70	8.8% (6.8% - 11%)	105	14.3% (11.8% - 16.9%)	13	0.7% (0.3% - 1.1%)	11	3.6% (1.5% - 5.7%)
Smoking	29	3.7% (2.3% - 5.0%)	42	5.7% (4.0% - 7.4%)	24	1.3% (0.8% - 1.8%)	5	2% (0.2% - 3%)
Mental Health	30	3.8% (2.5% - 5.1%)	10	1.4% (0.5% - 2.2%)	11	0.6% (0.2% - 1.0%)	0	0.0% (0.0% - 0.0%)
Social Issues	9	1% (0.4% - 2%)	22	3.0% (1.8% - 4.2%)	4	0.2% (0.0% - 0.4%)	0	0.0% (0.0% - 0.0%)
Substance Use	11	1.4% (0.6% - 2.2%)	39	5.3% (3.7% - 6.9%)	2	0.1% (0.0% - 0.3%)	1	0.3% (0.0% - 1%)

*As determined by individual respondents