

HE RAWA RARAUNGA HAUORA MŌ NGĀ TĀNGATA O AOTEAROA

AcceSS and Equity in Transplantation (ASSET)

TECHNICAL REPORT











Acknowledgements and Disclaimers

The analysis presented in this report was undertaken by the ASSET team. The interpretation is theirs alone.

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Collaborators (in alphabetical order): Andrew Kindon, Donald McIntyre, Drew Henderson, Katy Bell, Matthew Hobbs, Neeraj (Bean) Dhaun, Paul Manley, Reshma Shettigar, Rick Lomax, Rob Burrell, Samira Bell, Shona Livingstone, Suetonia Green and Tim Driscoll.

We would like to acknowledge the contributions of former investigators (in alphabetical order): John Irvine and Patrick Kelly.

This report was written by Angela C Webster and Rachel B Cutting.

ASSET website: www.assetkidneyresearch.org

AcceSS and Equity in Transplantation (ASSET)

Ethics approval for this project was granted by the University of Sydney Human Research Ethics Committee. HRC reference number: 2020/HE000871. Date received: 25 March 2021. The AcceSS and Equity in Transplantation (ASSET) study was out of scope for the Health and Disability Ethics Committee and not required.

Study Details: The ASSET study facilitates a systems-based approach to investigate equity in access to kidney failure health services in Aotearoa New Zealand. Through a collaborative framework, ASSET investigators use a linked data platform of national registries and administrative health datasets to conduct population-based health services research. This platform also supports future service planning by identifying areas where the health system can be strengthened to improve equitable access. ASSET fosters meaningful partnerships with researchers and health professionals, including those with Māori whakapapa and expertise in Māori engagement and Kaupapa Māori research methodologies.

Aims:

1. Access to kidney care: quantify the patient journey on the kidney waitlist and transplantation, identifying who is disadvantaged and at what point in the process.

Published work

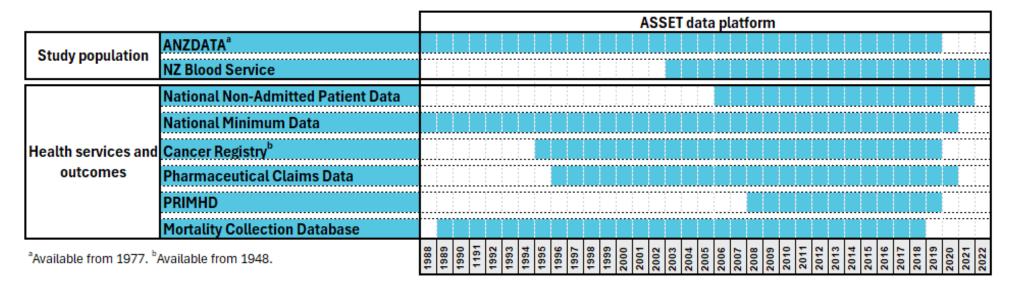
- 1.1 AcceSS and Equity in Transplantation (ASSET) New Zealand: Protocol for population-wide data linkage platform to investigate equity in access to kidney failure health services in New Zealand
- o <u>1.2 Geographic variation in kidney failure and transplantation in Aotearoa New</u> <u>Zealand: A population-based data linkage study</u>
- o <u>1.3 In-center hemodialysis and patient travel time in Aotearoa New Zealand: A nationwide geospatial and data linkage study</u>

Continuing work

- o 1.4 Ethnicity data collection in the Access and Equity in Transplantation (ASSET) Database in people with advanced chronic kidney disease: a clinical quality audit
- o 1.5 Rates of deceased donor kidney transplantation in highly sensitised patients in Aotearoa New Zealand: a data linkage analysis
- o <u>1.6 Landscape of mental illness in kidney failure: a three-nation comparison</u> between Australia, New Zealand and Scotland
- o <u>1.7 Waitlisting dynamics for kidney transplantation in Aotearoa New Zealand:</u> <u>suspensions, transplantation and deaths</u>
- 2. Impact of comorbidity on care: evaluate the impact mental illness on accessing best kidney care, and how people with kidney failure access mental healthcare.
 - Published work
 - Continuing work
 - o <u>2.1 Mental health in patients with kidney failure in Aotearoa New Zealand: a descriptive cohort analysis</u>
 - o <u>2.2 Mental health service utilisation following kidney transplantation in New</u> <u>Zealand: a population-based cohort study</u>

- o 2.3 Impact of mental illness on post-transplant outcomes in New Zealand: the ASSET-MH data linkage study
- 3. Uptake of primary preventative care: evaluate access to vaccination and cancer screening, for people with kidney failure.
 - Pending / in progress
- 4. Cost-effectiveness analysis: determine additional costs and health outcomes of equalising access to kidney transplantation.
 - Pending / in progress

Figure 1: ASSET data linkage platform as of 25/8/2025



ASSET governance and consumer engagement:

The Operations Committee manages the day-to-day running of ASSET and related projects, overseeing data linkage processes, approvals, data storage, and transfers (Figure 2). The Steering Committee is responsible for study planning, design, and outputs, providing oversight and making key decisions about the data platform, study projects and research direction. The Steering Committee currently includes three Māori representatives and two consumer representatives. They provide input on health service delivery, represent consumer values and preferences, support cultural inclusion, and help share research findings through consumer networks.

Figure 2: Schema of ASSET governance structure includes a planned External Advisory Committee, Data Reference Groups, and a Consumer Engagement Committee, which are yet to be established. The current supporting team consists of higher degree research and coursework students.



Funding

On the 25 August 2020, ASSET received 34,798.49 NZD from the Ross Bailey Nephrology Trust.

On the 01 November 2020, ASSET received \$30,000 NZD from the Health Research Council Research Activation Grant 2.

On the 20 June 2021, Brenda Rosales as part of ASSET NZ was awarded the Mark Cocks Award of \$5000 from Transplant Australia.

Applying Kaupapa Māori Research Methodologies:

The ASSET team prioritises Māori health advancement and are committed to provide Kaupapa Māori Research methods.

Kaupapa Māori Research incorporates Māori knowledges, worldviews, perspectives and practices. It is designed to guide and inform the approaches of research with Māori.

Kaupapa Māori research draws on a range of influences:

- o Historical Māori experiences with, and perceptions about research,
- o Māori perspectives about the world,
- o Māori values and expectations around ethics,
- o Māori cultural values and practices,
- o Māori knowledge,
- The place and status of Māori people, language and culture in society and the world.

A Kaupapa Māori approach forces a Māori researcher to think through ethical, methodological and cultural issues from all perspectives, before, during and after research.

Māori beliefs, values and experiences are centralised and normalised, rather than being marginalised or viewed through the dominant Westernised lens.

Kaupapa Māori theory based on six principles.

- o Principle 1 Self-Determination relative autonomy; control over one's own life and cultural well-being. Allowing Māori control of key decision making, able to make choices and decisions reflective of culture, political, economic and social preferences.
- o Principle 2 Cultural Aspiration validating and legitimating cultural aspirations and identity. Māori ways of knowing, doing and understanding the world are considered valid in their own right. In acknowledging their validity and relevance it also allows spiritual and cultural awareness and other considerations to be taken into account.
- Principle 3 Cultural Preferred Pedagogy teaching and learning practices unique and preferred to Māori.
- Principle 4 Socio-economic Mediation alleviation of socio-economic difficulties and disadvantage experienced by Māori communities. Acknowledges successful Māori developed initiatives for addressing socioeconomic issues.
- Principle 5 Extended Family Structure incorporating cultural structures emphasizing the collective rather than the individual. Extended family structure: the Whānau; understand connection between researcher, researched and research.
- Principle 6 Collective Philosophy Shared, collective vision and philosophy. Aspirations of the community.

Output Synopsis as of 31 July 2025

Output	Number
Manuscripts	8
Published	3
In press	0
In preparation	5
Reports	1
Conferences	17
National National	13
International	4
Students	
HDR	3
Johanna Birrell	
Jackie Hazelhurst	
Angela Jackson	
HDC	2
Prasad Ravi	
Amy Thomas	

AIM 1 PUBLSHED MANUSCRIPTS

1.1 AcceSS and Equity in Transplantation (ASSET) New Zealand: Protocol for population-wide data linkage platform to investigate equity in access to kidney failure health services in New Zealand

Investigators: Rachel Cutting, Angela Webster, Nicholas Cross, Heather Dunckley, Ben Beaglehole, Ian Dittmer, John Irvine, Curtis Walker, Merryn Jones, Melanie Wyld, Patrick Kelly, Kate Wyburn, and Nicole De La Mata.

Summary: This protocol paper describes the development of the AcceSS and Equity in Transplantation (ASSET) linked data platform, designed to investigate inequities in access to kidney transplantation and kidney failure services in New Zealand. Kidney transplantation is the preferred treatment for most people with kidney failure, but access is not equitable across all population groups. ASSET will deterministically link national registry and administrative health data, using National Health Index (NHI) numbers, for approximately 15,000 patients and 1,500 living donors from 2006 to 2019, with plans for ongoing updates through future data linkages. By integrating multiple data sources, ASSET will enable researchers to examine how factors such as ethnicity, sex, geographic location, multimorbidity, and socioeconomic status influence transplant access and outcomes. This platform aligns with national policy priorities, including Te Whatu Ora's (formally New Zealand's Ministry of Health) commitment to achieving health equity and meeting obligations under Te Tiriti o Waitangi, by generating evidence to inform targeted, equity-focused improvements in kidney health service delivery.

Dissemination/Awards: This study was presented at the following conferences:

1. 2022 Australia and New Zealand Society of Nephrology Annual Scientific Meeting, by Rachel Cutting

Rachel Cutting, Angela Webster, Nicholas Cross, Heather Dunckley, Ben Beaglehole, Ian Dittmer, John Irvine, Curtis Walker, Merryn Jones, Melanie Wyld, Kate Wyburn, Nicole De La Mata, Access and equity in transplantation (ASSET) New Zealand: a cohort study using data linkage, 2022, https://anzsnevents.com/15804/

Publication: Cutting RB, Webster AC, Cross NB, Dunckley H, Beaglehole B, et al. (2022) AcceSS and Equity in Transplantation (ASSET) New Zealand: Protocol for population-wide data linkage platform to investigate equity in access to kidney failure health services in New Zealand. PLOS ONE 17(8):

e0273371. https://doi.org/10.1371/journal.pone.0273371

Link/access: https://doi.org/10.1371/journal.pone.0273371

1.2 Geographic variation in kidney failure and transplantation in Aotearoa New Zealand: A population-based data linkage study

Investigators: Johanna Birrell, Angela Webster, Nicholas Cross, Tim Driscoll, Heather Dunckley, Ben Beaglehole, Ian Dittmer, Curtis Walker, Merryn Jones, John Irvine, Melanie Wyld, Kate Wyburn, Nicole De La Mata.

Summary: This paper used the ASSET linked data platform to examine geographic variation in access to kidney transplantation across Aotearoa New Zealand. The study included 7,704 individuals who commenced kidney replacement therapy between 2006 and 2019 and assessed rates of waitlisting and transplantation across District Health Boards (DHBs). The analysis showed substantial variation in waitlisting and transplantation rates by DHB, even after adjusting for demographic, clinical, and socioeconomic factors. For example, compared to transplanting DHBs (regions containing a transplant unit; used as a reference), patients in remote DHBs had significantly lower likelihood of achieving the transplantation target (adjusted odds ratio 0.38; 95% CI 0.27-0.54). The study highlights that geographic location is an important and potentially modifiable factor influencing access to transplantation in New Zealand. These findings emphasise the need for targeted health policy interventions to address regional inequities and ensure fairer access to transplantation services, aligning with national goals to promote equity in healthcare delivery.

Dissemination/Awards: This study was presented at the following conferences:

- 1. 2023 Australia and New Zealand Society of Nephrology Annual Scientific Meeting, by Johanna Birrell
 - Johanna Birrell, Angela Webster, Nicholas Cross, Heather Dunckley, Ben Beaglehole, Ian Dittmer, John Irvine, Curtis Walker, Merryn Jones, Melanie Wyld, Kate Wyburn, Nicole De La Mata, 2023, https://anzsnevents.com/18673/
- 2. 2023 Royal Australasian College of Physicians Trainee Research Award for Excellence in the Field of Adult Medicine, Aotearoa New Zealand, by Johanna Birrell
- 3. 2024 Internal Medicine Society of Australia and New Zealand (IMSANZ) Conference New Zealand, by Johanna Birrell
- 4. 2024 American Transplant Congress, Philadelphia, US, by Nick Cross

Story maps:

1. Kidney replacement therapy in Aotearoa New Zealand, Regional epidemiology and key performance indicators, by Johanna Birrell https://storymaps.arcgis.com/stories/35b8bb67d5544076b0526793ceb2eb5b

Publication: Birrell JM, Webster AC, Cross NB, Driscoll T, Dunckley H, Beaglehole B, Dittmer I, Walker C, Jones M, Irvine J, Wyld ML, Wyburn KR, De La Mata NL. Geographic variation in kidney failure and transplantation in Aotearoa New Zealand: A population-based data linkage study. Nephrology (Carlton). 2024 Dec;29(12):941-954. doi: 10.1111/nep.14409. Epub 2024 Oct 28. PMID: 39467040.

Link access: <u>10.1111/nep.14409</u>

1.3 In-center hemodialysis and patient travel time in Aotearoa New Zealand: A nationwide geospatial and data linkage study

Investigators: Johanna Birrell, Angela Webster Nicholas Cross, Andrew Kindon, Matthew Hobbs, James Hedley, Tim Driscoll, Dr Nicole De La Mata.

Summary: This study used the ASSET linked data platform to examine the impact of travel time on access to in-center hemodialysis (ICHD) services across Aotearoa New Zealand from 2006 to 2019. Researchers assessed how travel time influenced dialysis modality choice and generated interactive maps to support renal service planning. The analysis revealed that patients living further from to dialysis centers were independently less likely to receive ICHD and more likely to receive home-based dialysis. These findings highlight significant geographic disparities in dialysis access and outcomes, and need for policy interventions to improve service accessibility and equity in delivery of kidney care.

Story maps:

 Dialysis in Aotearoa New Zealand, Geo-spatial mapping of modalities and patient travel time, by Johanna Birrell https://storymaps.arcgis.com/stories/f0301ade9f55475fa9d7606b39b7118a

Dissemination/Awards: This study was presented at the following conferences:

1. 2024 Australia and New Zealand Society of Nephrology Annual Scientific Meeting, by Johanna Birrell

Johanna Birrell, Angela Webster, Nicholas Cross, Andrew Kindon, Matthew Hobbs, James Hedley, Tim Driscoll, Dr Nicole De La Mata, Impact of travel time on dialysis modality in Aotearoa New Zealand 2024,

https://anzsnevents.com/23342/

2. 2024 Digital Health Week New Zealand, by Johanna Birrell

3. 2024 Australia and New Zealand Society of Nephrology New Zealand Chapter Meeting, by Prasad Ravi,

Trends in dialysis modality and patient travel time in Aotearoa New Zealand: a nationwide geospatial and data linkage study. Bruce Morrison Award.

Story maps:

1. Dialysis in Aotearoa New Zealand, Geo-spatial mapping of modalities and patient travel time, by Johanna Birrell

https://storymaps.arcgis.com/stories/f0301ade9f55475fa9d7606b39b7118a

Publications: Birrell JM, Webster AC, Cross NB, Kindon A, Hobbs M, Hedley JA, Driscoll T, De La Mata NL. In-Center Hemodialysis and Patient Travel Time in Aotearoa New Zealand: A Nationwide Geospatial and Data Linkage Study. Kidney International Reports. 2025; Online ahead of print. https://doi.org/10.1016/j.ekir.2024.12.028

Link access: 10.1016/j.ekir.2024.12.028 External Link

AIM 1 CONTINUING WORK

1.4 Ethnicity data collection in the Access and Equity in Transplantation (ASSET) Database in people with advanced chronic kidney disease: a clinical quality audit

Investigators: Jackie Hazelhurst, Curtis Walker, John Kearns, Merryn Jones, James Hedley, Rachel Cutting, Nicholas B. Cross, Lutz Beckert, Suetonia C. Green, Angela Webster

Summary: We assessed the accuracy of ethnicity recording for Māori and Pacific Peoples in the ANZDATA registry by comparing it with hospitalisation data (National Minimum Dataset) using standardised methods. Among 7,678 people who commenced kidney replacement therapy in Aotearoa New Zealand between 2006 and 2019, there was high sensitivity for identifying Māori (94.6%) and Pacific Peoples (90.4%), with specificities above 98%. Agreement between datasets was strong (Cohen's kappa >0.81). Ethnicity misclassification for Māori was associated with a shorter time to transplantation (HR 2.20), but not with mortality. For Pacific Peoples, agreement in ethnicity recording was not associated with transplantation or mortality. Despite the use of non-standardised methods, ANZDATA showed consistently high agreement with hospital data across the study period.

Dissemination/Awards: This study was presented at the following conferences:

 2024 Australia and New Zealand Society of Nephrology Annual Scientific Meeting, by Jackie Hazelhurst

Jackie Lee Hazelhurst, Curtis Walker, John Kearns, Merryn Jones, James Hedley, Rachel Cutting, Nicholas B. Cross, Lutz Beckert, Suetonia C. Green, Angela Webster Ethnicity data collection in the Access and Equity in Transplantation (ASSET) Database in people with advanced chronic kidney disease: a clinical quality audit, 2024, https://anzsnevents.com/26435/

2. 2024 Australia and New Zealand Society of Nephrology New Zealand Chapter Meeting, by Jackie Hazelhurst

Jackie Lee Hazelhurst, Curtis Walker, John Kearns, Merryn Jones, James Hedley, Rachel Cutting, Nicholas B. Cross Lutz Beckert, Suetonia C. Green, Angela Webster, Ethnicity data collection in the Access and Equity in Transplantation (ASSET) Database in people with advanced chronic kidney disease: a clinical quality audit, 2024, https://anzsnevents.com/26435/

1.5 Rates of deceased donor kidney transplantation in highly sensitised patients in Aotearoa New Zealand: a data linkage analysis

Investigators: Amy Thomas, James Hedley, Reshma Shettigar, Nicholas Cross, Angela Webster,

Summary: This study aimed compare the observed rates of kidney transplantation between highly and non-highly sensitised patients on the deceased donor waiting list in Aotearoa New Zealand, to inform potential changes in the National Kidney Allocation Scheme. Patients listed for deceased donor kidney transplantation between 1st January 2006 and 31st December 2019 were identified using linked health data from the ASSET platform. Highly sensitised patients were defined as a panel reactive antibody (PRA) ≥80%, then stratified into PRA groups of 80-94%, 95-98% and ≥99%. 2,715 patients were identified, with 17.7% being highly sensitised. The analysis showed that highly sensitised patients on the deceased donor waiting list in Aotearoa New Zealand experience reduced rates of kidney transplantation. The lowest rates are seen in patients with a panel reactive antibody of ≥99%, which highlights this group as a key target population for future modifications to the National Kidney Allocation Scheme.

1.6 Landscape of mental illness in kidney failure: a three-nation comparison between Australia, New Zealand and Scotland

Investigators: James Hedley, Grant Sara, Angela Webster, Ben Beaglehole, Nicholas Cross, Samira Bell, Neeraj (Bean) Dhaun, Donald McIntyre, Shona Livingstone

Summary: Upcoming. Our hypothesis: people with mental illness have lower rates of transplantation. We will compare prevalence of mental illness in people with kidney failure and time to transplantation by mental illness using similar definitions across three countries: New South Wales Australia, New Zealand, and Scotland.

Dissemination/Awards: This study was presented at the following conferences:

1. 2025 The Transplantation Society of Australia and New Zealand (TSANZ), by James Hedley

1.7 Waitlisting dynamics for kidney transplantation in Aotearoa New Zealand: suspensions, transplantation and deaths

Investigators: Nicole De La Mata, Nicholas Cross, Heather Dunckley, Ben Beaglehole, John Irvine, Curtis Walker, Ian Dittmer, Merryn Jones, Patrick Kelly, Kate Wyburn, Angela Webster

Summary: We sought to describe the journey of patients waitlisted for their first kidney transplantation in Aotearoa New Zealand, including suspensions, return to waitlist, transplantation, and death. We included all incident patients waitlisted for their first transplant in Aotearoa, during 2005–19, using the ASSET linked data platform. Of 2631 patients entering Aotearoa NZ kidney transplant waitlist, 1457 (55%) were transplanted, 270 (10%) were still waiting, 334 (13%) were suspended and 570 (22%) died while waiting. 1542 (59%) were suspended at least once, of which most (51%) spent <6 months suspended per episode. Median time from waitlist entry to transplant increased with more suspensions, from 1.0 year (IQR:0.4–1.9) for those never suspended to 4.2 years (IQR:3.0–5.7) for those suspended ≥ 2 times. At 1-year, the probability of transplant was 27% (95% CI: 25%–29%), active on waitlist was 74% (95% CI: 72%–76%), suspended was 24% (95% CI: 22%–26%) and death was 2% (95% CI:2%–3%). The probability of transplant at 5-years was 60% (95% CI: 58%–62%), active on waitlist was 8% (95% CI:7-9%), suspended was 16% (95% CI: 15%-18%) and 16% (95% CI: 14%–17%) died. Nearly two-thirds of people waitlisted for kidney transplant in Aotearoa will be suspended at least once, resulting in much longer time until transplant. Further research should explore whether patient or clinical factors are associated with disparities in being suspended and returning to waitlist.

Dissemination/Awards: This study was presented at the following conferences:

1. 2023 Australia and New Zealand Society of Nephrology (ANZSN) Annual Scientific Meeting, by Nicole De La Mata

Nicole De La Mata, Nicholas Cross, Heather Dunckley, Ben Beaglehole, John Irvine, Curtis Walker, Ian Dittmer, Merryn Jones, Patrick Kelly, Kate Wyburn, Angela Webster, Waitlisting dynamics for kidney transplantation in Aotearoa New Zealand: suspensions, transplantation and deaths, https://anzsnasm.com/18571/

AIM 2 CONTINUING WORK

2.1 Mental health in patients with kidney failure in Aotearoa New Zealand: a descriptive cohort analysis.

Investigators: Prasad Ravi, Nicole De La Mata, Angela Webster, Nicholas Cross, James Hedley, Heather Dunckley, Ben Beaglehole, Ian Dittmer, John Irvine, Curtis Walker, Merryn Jones, Melanie Wyld, Kate Wyburn.

Summary: We examined whether pre-existing mental illness affects access to the deceased donor kidney transplant waitlist in Aotearoa New Zealand. The study included all adults who started dialysis between 2008 and 2019. Mental illness (MI) was defined as prior mental health service use, with severe MI (sMI) as inpatient psychiatric admissions, and medicated MI as dispensing of psychiatric medications. Among 5,643 waitlisted patients, 12% had pre-existing MI, 5% had sMI, and 2% had medicated MI. MI and sMI were more common among younger patients, those of European ethnicity, and those with higher comorbidity. Psychiatric medication use was more likely in females and people living in non-urban areas. Compared to those without mental health service use, patients with MHSU but no medication were less likely to be waitlisted (aHR 0.60), while those receiving medications were more likely to be waitlisted (aHR 2.30). Although mental health service use overall was associated with reduced access to the transplant waitlist, patients receiving psychiatric medications had higher waitlisting rates.

Dissemination/Awards: This study was presented at the following conferences:

- 1. 2025 European Society of Transplantation, poster by Prasad Ravi, presented by Angela Webster.
- 2. 2024 Internal Medicine Society of Australia and New Zealand (IMANZ) New Zealand, by Prasad Ravi.
- 3. 2024 Australia and New Zealand Society of Nephrology Annual Scientific Meeting, by Prasad Ravi.

Saiprasad Ravi, James Hedley, Nicole L De La Mata, Ben Beaglehole, Nicholas Cross, Heather Dunckley, John Irvine, Curtis Walker, Merryn Jones, Kate Wyburn, Angela Webster. How does mental illness impact access to the kidney transplant waitlist in Aotearoa New Zealand? 2024,

https://anzsnevents.com/26436/

- 4. 2023 Australia and New Zealand Society of Nephrology Annual Scientific Meeting, by Prasad Ravi.
 - Saiprasad Ravi, Nicole L De La Mata, Ben Beaglehole, Nicholas Cross, Heather Dunckley, John Irvine, Curtis Walker, Ian Dittmer, Merryn Jones, Patrick Kelly, Kate Wyburn, Angela C Webster 2023, https://anzsnevents.com/18561/
- 5. 2022 Australia and New Zealand Society of Nephrology, by Nicole De La Mata Nicole De La Mata, Angela Webster, Nicholas Cross, Heather Dunckley, Rachel Cutting, Ben Beaglehole, Ian Dittmer, John Irvine, Curtis Walker, Merryn Jones,

Melanie Wyld, Patrick Kelly, Kate Wyburn 2024, https://anzsnevents.com/15796/

2.2 Mental health service utilisation following kidney transplantation in New Zealand: a population-based cohort study

Investigators: Trishala Sharma, James Hedley, Nicole De La Mata, Angela Webster, Nicholas Cross, Ben Beaglehole, Melanie Wyld, Kate Wyburn

Summary: This study examines the impact of kidney transplantation on mental health service utilisation in individuals with pre-existing mental illness in New Zealand. Using data from the ASSET linkage platform, we identified a national cohort of adults who received their first kidney transplant between July 2015 and December 2020 and who had a history of mental health service use (MHSU). Individuals were classified as having either severe or persistent mental illness (SPMI) or mild/moderate mental illness, based on their prior MHSU. We calculated and compared mental health service use—across inpatient admissions, community-based care, and medication dispensing—over the five years before and after transplantation, adjusting for demographic, clinical, and donor-related characteristics. Preliminary results show increased hospital admissions in the first year following transplantation (IRR: 2.13; 95% CI: 0.79-5.19), as well as a gradual increase in community mental health services and pharmaceutical dispensing over time. This study provides valuable evidence on patterns of psychiatric care in a high-risk population and helps inform strategies to improve continuity and quality of mental health care in the context of transplantation.

2.3 Impact of mental illness on post-transplant outcomes in New Zealand: the ASSET-MH data linkage study

Investigators: Nicole De La Mata, Angela Webster, Nicholas Cross, Heather Dunckley, Rachel Cutting, Ben Beaglehole, Ian Dittmer, John Irvine, Curtis Walker, Merryn Jones, Melanie Wyld, Patrick Kelly, Kate Wyburn

Summary: We evaluated the impact mental illness has upon post-transplant outcomes, including graft failure and death, in kidney transplant recipients in New Zealand. Mental illness affected 6% of the 1,499 kidney transplant recipients, where 81 had moderate and 15 had severe mental illness. There were 101 graft failures (7%) and 82 deaths (6%) in those without mental illness, compared to 7 graft failures (7%) and 12 deaths (13%) in those with mental illness. After allowing for age, sex, calendar year and prior dialysis time, mental illness was not associated with a higher risk of graft failure (HR:1.20, 95%CI:0.55-2.64, p=0.65), but was associated with twice the risk of death (HR:2.00, 95%CI:1.07-3.75, p=0.03). People with mental illness have greater risk of death post-transplant, but not graft failure compared to people without mental illness. Transplantation offers an opportunity to engage with mental health services to reduce post-transplant mortality.

Dissemination/Awards: This study was presented at the following conferences:

- 2022 Australia and New Zealand Society of Nephrology (ANZSN) Annual Scientific Meeting, by Nicole De La Mata Nicole De La Mata, Angela Webster, Nicholas Cross, Heather Dunckley, Rachel Cutting, Ben Beaglehole, Ian Dittmer, John Irvine, Curtis Walker, Merryn Jones, Melanie Wyld, Patrick Kelly, Kate Wyburn, Impact of mental illness on posttransplantation outcomes in New Zealand: the ASSET-MH data linkage study, https://anzsnasm.com/15796/
- 2. 2023 European Renal Association Congress European Dialysis and Transplantation Association, by Nicole De La Mata

 Nicole De La Mata, Angela Webster, Nicholas Cross, Heather Dunckley, Rachel

 Cutting, Ben Beaglehole, Ian Dittmer, John Irvine, Curtis Walker, Merryn Jones,

 Melanie Wyld, Patrick Kelly, Kate Wyburn, Impact of mental illness on post
 transplantation outcomes in New Zealand: the ASSET-MH data linkage study,

 https://academic.oup.com/ndt/article/38/Supplement 1/gfad063c 3159/719535

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