



Promoting and Supporting Best Practice in Kidney Transplantation

The ANZSN Council established the Kidney Transplant Working Group in 2018 to provide advice on strategies to promote and support best practice in kidney transplantation.

Following the delivery of the Working Group's report and recommendations in 2020, Council endorsed the implementation of a range of Society led education, research and advocacy related strategies to support best practice kidney transplantation in Australia and Aotearoa New Zealand.

Strategic Action 1: Investing in targeted education programs

To better support healthcare professionals involved in the care of transplant donors and recipients, there is a need to deliver education material in various formats and venues.

What we'll do:

We will work with the Transplant Society of Australia and New Zealand (TSANZ) and the Australian and New Zealand Paediatric Nephrology Association (ANZPNA) to:

- develop a jointly badged capsule education program (with a paediatric component) to be delivered at our Annual Scientific Meeting which focuses on the clinical aspects of transplantation.
- develop jointly badged transplant specific webinars to showcase the latest in research and clinical practice in renal transplantation.

Targeting the needs of the renal workforce, we'll deliver these programs in a mix of face to face and virtual formats to help breakdown geographical, time and cost

barriers to participation in learning opportunities.

Strategic Action 2: Supporting multi-disciplinary research, education and practice

To support a multi-disciplinary approach to care delivery, there is a need to work with nursing and other renal workforce colleagues to share information and educational resources.

What we'll do:

We will work with the TSANZ, the Renal Society of Australasia (RSA) and the Transplant Nurses Association (TNA) to explore the potential to:

- develop a bi-monthly transplant specific newsletter providing information on research, clinical practice and policy innovation.
- work more closely to disseminate the newsletter and related research, practice, and policy updates through our Societies and networks.

In this way we hope to ensure that the renal workforce – no matter how they like to learn, or where they are located – have access to the latest educational material.

Strategic Action 3: Support shared care models to optimize outcomes

To better support the care of renal transplant donors and recipients, there is a need to look at models of care that support best practice across transplanting and non-transplanting centres.

What we'll do:

We'll work with the ANZPNA, TSANZ, RSA, TNA, Kidney Health Australia (KHA) and Kidney Health New Zealand (KHNZ) to:

- monitor the development of shared care models in renal transplantation and share outcomes of the latest research.
- share the learnings from renal units seeking to develop shared care models in Australia and Aotearoa New Zealand.
- include discussion on current models of shared care between transplanting and non-transplanting centres at the next or future ANZSN DNT Workshops.

Strategic Action 4: Addressing barriers to care from the patient's perspective

To better support transplant patients, particularly those in rural and regional areas receive the support they need, there is a need to break down the financial and social barriers to care.

What we'll do:

We will work with KHA and KHNZ to:

- explore and gain insight into the barriers that patients experience in accessing renal transplant care
- to explore specific social and financial barriers to care through the conduct of a consumer session at the next or future ANZSN DNT Workshop.
- use the insights gained from patients' experiences to develop a joint advocacy strategy to improve access to care in partnership with governments in Australia and Aotearoa New Zealand.

Strategic Action 5: Enabling research to deliver better outcomes

While our renal units are actively involved in research, and a significant number of patients are enrolled in clinical trials, not all clinicians and patients are as involved as they could be. Access to a clinical trials nurse is a major barrier to participation.

What we'll do:

- we will work with the Australasian Kidney Trials Network (AKTN) to identify practical strategies the ANZSN can support to enable greater trials participation by clinicians and patients, particularly those from rural and remote locations.

ANZSN Kidney Transplant Working Group

The ANZSN thanks the Kidney Transplant Working Group whose members gave freely of their time and expertise in developing the Working Group's report and recommendations:

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Thank you

Appreciation is extended to ANZSN, TSANZ, RSA and TNA members who completed the survey which informed the report and recommendations prepared by the Working Group.

What more information? – You can read the Working Group's report below.



TITLE: PROMOTING BEST PRACTICE IN KIDNEY TRANSPLANTATION SURVEY RESULTS

Prepared by the ANZSN Kidney Transplant Working Group

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INTRODUCTION

The Australian and New Zealand Society of Nephrology (ANZSN) Kidney Transplant Working Group (KTWG) is a time-limited subcommittee of the ANZSN Council which has been tasked to provide Council with advice on how to promote and support best practice in kidney transplantation within the scope of influence and resources of the ANZSN. To meet this brief, the KTWG designed a survey which asked nephrology trainees, nephrologists and nurses involved in the care of renal transplant recipients across Australia and New Zealand on what they perceive were important issues and barriers to delivering optimal outcomes for kidney transplant recipients.

METHODOLOGY

A survey was developed to address key issues of transplant education and access to transplant services for health professionals, perceived barriers to transplantation for potential renal transplant recipients and views on transplant research (See Appendix 1). The survey was sent out via email to the members of the ANZSN, Renal Society of Australasia (RSA) and the Transplant Nurses Association (TNA) of Australia and New Zealand. To improve uptake, email links were shared by members of the KTWG with the nephrologists, nurses and allied health professionals in their areas. Furthermore, a reminder was sent out through the weekly ANZSN newsletter. The survey period commenced in June 2019 and closed in August 2019. Data analysis was completed in November 2019. Results were reviewed and discussed by the KTWG during their meetings on the 8 August, 24 October and 21 November 2019.

SUMMARY OF KEY RESULTS

I. Demographics and current role in renal transplantation of survey participants

The survey was completed by 278 respondents, noting that not all respondents answered every question. Majority of the respondents were general nephrologists (n=132; 47.4%), followed by transplant nephrologists (n=47; 16.9%), transplant nurse/co-ordinators (n=31; 11.2%) and advanced trainees (n=23; 8.3%). The survey was also completed by paediatric nephrologists, other nurses and allied health professionals. Amongst the 273 respondents, 20.2% (n=55) practiced in either regional or remote centres. Amongst the 272 respondents, 137 worked in units with acute surgical services (50.4%) while 135 worked in units without an acute transplant surgical service (49.6%). The Committee made note of the underrepresentation of advanced trainees in this survey (23 v 135 advanced trainees across Australia and NZ). Majority of the respondents reported being in their current role for more than 10 years (n=136; 48.7%) while 84 (30.11%) had been in their current role for less than 5 years. There was representation from all states in Australia and from New Zealand.

With regards to the principal place of practice, majority of the respondents worked in metropolitan public hospital *with* acute surgical transplant service (n=131, 47.3%), followed by metropolitan public hospital *without* acute surgical transplant service (n=76, 27.4%), then regional or remote hospital without an acute surgical transplant service (n=50, 18.1%). With regards to number of RTR reviewed, 30.6% of respondents reported seeing <5 in the last month. With regards to number of potential RTR worked up, nearly half (49.6%) of the respondents reported working up less than 5 recipients in the last month.

Amongst the survey participants, 90.7% were involved in the long term care of renal transplant recipients (RTR) who were more than 1 month post-transplant. A significant proportion were also involved in potential RTR assessment (78.9%), living kidney donor (LKD) assessment (66.7%) and care of RTR who were less than 1 month post-transplant (55.2%). When respondents who worked in regional or remote areas (n=55) were compared with those from metropolitan areas (n=218), regional or remote practitioners were less likely to be involved in the peri-operative management of the RTR (regional/remote 9% vs metropolitan 46%) or manage RTR in the first month post-transplant (regional/remote 27% vs metropolitan 61%). Regional or remote practitioners reported similar involvement in LKD assessment (78%), potential RTR assessment (84%) and long term care RTR (>1month post-transplant) (89%) compared with those working in metropolitan areas (62%, 75% and 89%, respectively).

About half of the respondents were involved in transplant related research activities (50.4%). While 61% of metropolitan respondents reported being involved in transplant research activities, this was only reported by 31% of respondents from regional or remote areas.

II. Transplant Education

The respondents utilise a variety of educational resources and materials to keep up-to-date with their transplant knowledge. The most common reported resources were discussion with colleagues at local meetings (86.5%), followed by reading of journal articles (81.2%) and attendance at transplant courses/conferences (77.3%). There was no difference in education resources/materials utilised by the regional or remote practitioners compared with the metropolitan practitioners. Regarding formal transplant courses/conferences, more than half of the respondents reported attending the ANZSN Annual Scientific Meeting (55.2%), followed by international transplant meetings/courses (28%), TSANZ Annual Scientific Meeting (27.2%), then ANZSN Nephrology & Transplantation Update Course (24.5%). The TSANZ postgraduate course was attended by 11.9% of respondents while 13.8% attended the TSANZ Masterclass. Of note, 18% of respondents (n=47) had not attended any formal transplant course/conference in the preceding 2 years.

Amongst the 261 respondents, the preferred ways to receive transplant practice/policy were: directly via email (62.5%), ANZSN society email newsletter (57.9%), dissemination through the Head of service/unit (50.6%), dissemination through transplanting centre (39.9%) and policy update at annual scientific meetings (31.4%). About 10% of respondents nominated a preference to receiving policy updates via the ANZSN Kidney eLearning Hub. With regards to preferred ways to keep up to date with information on kidney transplantation, the preferred portals were: email newsletter (62.7%), Annual ANZSN Update Course (43.8%), webinars (39.2%), dissemination through transplanting centres (39.2%) and Annual TSANZ Postgraduate Course/Masterclass (31.1%). There was no difference in preference for updates on education and policy between the regional or remote and metropolitan respondents.

The respondents nominated the following key topics in transplantation that they were most interested to hear more about:

- 1) Transplant recipient work up and selection
- 2) Transplant Immunology

- 3) Post-Tx immunosuppression & Management of rejection
- 4) Living donor work up and long term follow-up
- 5) Post transplant infections [including BK virus nephropathy]

Other topics which were of interest included: post-transplant malignancy, organ allocation, management of metabolic and cardiovascular complications post-transplant and management of the highly sensitised patient.

III. Perceived Barriers to Kidney Transplantation

Majority (79.6%) of the respondents did not believe that their patients had lesser access to transplantation compared with other centres. When respondents who worked in regional or remote areas (n=48) were compared with those who were from metropolitan areas (n=198), 44% of regional or remote respondents reported that their patients had less access to transplant compared with 15% in those of worked in metropolitan areas. Of the 240 respondents, the most commonly reported perceived modifiable barriers to kidney transplant waitlisting were financial and social barriers in getting patients to attend appointments with a transplant team (54.6%), followed by difficulty with accessing cardiac investigations necessary for wait listing (33.8%), lack of a dedicated transplant coordinator (or inadequate FTE) (30.8%), and lack of interpreters and translated educational materials for non-English speaking patients (27.0%). Of the 87 respondents (36.3%) who reported other barriers, 33 were related to inadequate access to other specialty assessments, investigation or surgery (37.9%). Respondents from the regional or remote areas reported similar barriers to transplantation compared with the metropolitan respondents except for access to radiology services which was higher in the regional or remote respondents (25%) compared with the metropolitan respondents (11%). Respondents from non-transplanting centres were more likely to report the following as modifiable barriers to transplant waitlisting: lack of access to transplanting centre services/appointments (28.8% vs 17.5%), timeliness of transplanting centre response to referral (25.9% vs 15.3%) and transparent communication by transplanting centre (23.0% vs 8.8%).

About 59.9% of respondents felt that their units will require more support to manage post-transplant patients. The support needed were: more nursing/transplant coordinator FTE (64.9%), more nephrologist FTE (47.0%) followed by structured education around the care of a kidney transplant recipient (38.4%), structured yearly reviews using telehealth involving local nephrologists, transplanting centres and patients (35.7%) and regular discussion with transplant centre about patient issues (35.7%). Respondents from the non-transplanting centres were more likely to report a need for patient assessment by transplanting centre on request (14.8% vs 7.3%), regular discussion with transplanting centre (23.7% vs 16%) and structured education around the care of the kidney transplant recipient (25.9% vs 16.8%). A structured yearly review utilising telehealth and local nephrologists was supported similarly by respondents from both transplanting and non-transplanting centres (18.9% vs 19.3%).

IV. Transplant Research

A significant proportion of the respondents (66.7%) reported that their patients were enrolled in transplant trials. More metropolitan respondents (72%) were involved in transplant trials compared with the regional or remote respondents (46%). Amongst the 83 respondents who reported that

their patients were not involved in transplant research, the majority (85.5%) would like for their patients to be involved. A significant proportion of the respondent reported that transplant research played an important role in their units (56.5%) but only 48.3% of respondents reported having access to a research nurse. About 53.0% of respondents want/expect the transplanting centre to manage the trial if their patients were enrolled.

CONCLUSION

Majority of the 278 adult and paediatric nephrologists, advanced trainees, nurses and allied health staff involved in the care renal transplant recipients across Australia and New Zealand have ongoing involvement in the long term management of renal transplant recipients, as well as, work-up of both living donor and potential renal transplant recipients, regardless of their location of practice. Transplant education was accessed through a wide range of informal (discussion with colleagues) and structured educational opportunities (local and international conferences and courses). Beyond the traditional ways of delivering updates/education such as emails and conferences, webinars was also suggested as another avenue to receiving up-to-date information.

While majority of the overall respondents did not believe that their patients had lesser access to transplantation compared with other centres, more regional or remote respondents reported that their patients had lesser access to transplantation compared with those from the metropolitan areas. Financial and social barriers to attending appointments with a transplant team was the most commonly reported perceived modifiable barrier to kidney transplant waitlisting followed by reduced access to other specialty services. Respondents from regional or remote areas were more likely to report inadequate access to radiology investigation compared with the metropolitan respondents. On the other hand, respondents from non-transplanting centres were more likely to report a lack of access to transplanting centre services/appointments, timeliness of transplanting centre response to referral, and transparent communication by transplanting centre as modifiable barriers to transplant waitlisting.

Overall, respondents reported a need for increased nursing/doctor FTE, as well as, a structured education around the care of a kidney transplant recipient. Increased communication between transplanting and non-transplanting centres either through structured yearly review or regular case based discussion was also deemed important.

There is strong support for transplant research amongst the respondents but only half reported having access to a research coordinator/nurse.

RECOMMENDATIONS:

To address the learning needs of health professionals involved in the care of renal transplant donors and recipients, there is a need to deliver the education material in various formats and venues.

The KTWG recommends:

1. a capsule program which focuses on clinical aspects of transplantation at the ANZSN ASM given the high level of attendance by general nephrologists, advanced trainees and nurses.
2. that the TSANZ considers the rebranding of the TSANZ programs (Post graduate and Masterclass) as this is currently perceived as targeting a narrow (i.e. trainees) or 'elite'

market (e.g. “Update” rather than “Postgraduate”). Rebranding of the courses (particularly by TSANZ) may have the benefit of attracting a broader audience, which is important given that majority had continued involvement in the long-term care of transplant recipients.

3. the delivery of transplant specific webinars from conferences or courses through the ANZSN Kidney eLearning Hub which will allow for greater access to the education material particularly for those who are from outside the metropolitan regions and for those wherein travel cost is a concern.
4. that the ANZSN establishes a working group in collaboration with the Education and Training Committee, TSANZ, RSA and TNA to create a bi-monthly transplant specific newsletter (ie recent trial or policy updates) which can be disseminated through the ANZSN and other society newsletters or directly via email to the memberships of the ANZSN, TNA and RSA.
5. the development of a structured, shared care model between transplant and non-transplant nephrologists in the long term care of renal transplant recipients including a structured education program for staff.
6. the partnering between Kidney Health Australia, Kidney Health New Zealand and consumer representatives to further explore the financial and social barriers to accessing transplantation from a patient’s perspective.
7. that consideration is given to alternative models of funding for research staff to improve the participation of regional and remote patients in transplant trials.

APPENDIX 1: The Survey

The ANZSN Kidney Transplant Working Group (KTWG) was tasked to develop practical strategies to promote and support best practice in kidney transplantation. The KTWG developed a survey to help identify what nephrologists and nurses see are important issues and barriers to kidney transplantation.

1. What best describes your role?
 - Advanced trainee
 - General Nephrologist
 - Transplant Nephrologist
 - Paediatric Nephrologist
 - Transplant nurse/coordinator
 - Others (please specify): _____

2. How long have you been in your current role?
 - < 5 years
 - 5-10 years
 - >10 years

3. Which country and state do you practice in?
 - Australia
 - If in Australia, in which state do you practice in:
 NSW, VIC, QLD, SA, WA, NT, TAS
 - New Zealand

4. What best describes your principal workplace?
 - Metropolitan public hospital *with* an acute surgical transplant service
 - Metropolitan public hospital *without* an acute surgical transplant service
 - Metropolitan private hospital *with* an acute surgical transplant service
 - Metropolitan private hospital *without* an acute surgical transplant service
 - Regional public hospital *with* an acute surgical transplant service
 - Regional or remote hospital *without* an acute surgical transplant service
 - Other: _____

5. In your current role, please indicate if you are involved in any of the following activities (please tick all that apply):
 - Living kidney donor assessment
 - Deceased donor medical suitability assessment
 - Potential renal transplant recipient assessment
 - Acceptance of deceased donor allocation phone calls
 - Peri-operative care of renal transplant recipient
 - Care of the acute renal transplant recipient (<1 month post-transplant)
 - Long-term care of the renal transplant recipient (>1 month post-transplant)
 - Transplant related research activities

6. In your current role, how many renal transplant recipients have you reviewed in the last month?
 - <5
 - 6-20

- >20

7. In your current role, how many potential renal transplant recipients have you worked up in the last 6 months?

- <5
- 6-20
- >20

Section B: Tell us about your views on transplant education

1. In your current clinical practice, how do you keep up-to-date with your transplant knowledge? (please tick all that apply)

- Discussion with colleagues at local meetings
- Reading of journal articles
- Listening to podcasts or webinars
- Attendance to transplant courses or conferences (local or international)
- Others (please specify): _____
- I have not been involved in any specific transplant related educational activities.

2. In the last 2 years, please indicate if you have you attended any of the following formal transplant courses/conferences? (please tick all that apply):

- ANZSN Nephrology & Transplantation Update Course
- ANZSN Annual Scientific Meeting
- TSANZ Postgraduate Course
- TSANZ Masterclass
- TSANZ Annual Scientific Meeting
- Transplant nurses association Annual Scientific Meeting
- Other transplant meeting /workshop (including pharma sponsored meetings) (please specify): _____
- I have not attended any transplant-related education course or conference.

3. If there are any new developments in transplantation practice/policy, what is the best way of notifying you? (please tick all that apply):

- ANZSN society email newsletter
- TSANZ ad hoc email
- By email directly
- Dissemination through the Head of Service/Unit
- Dissemination through transplanting centre
- ANZSN Kidney eLearning hub
- Policy update at annual scientific meetings
- Via social media (if yes, what platform?) _____
- Others (please specify): _____

4. How would you like to receive up-to-date information on kidney transplantation (please tick all that apply)?

- Annual ANZSN Update Course
- Annual TSANZ Postgraduate Course/ Masterclass

- Transplant Nurses Association annual scientific meeting
- Attendance at other transplant conferences/symposiums (national or international)[please specify: _____]
- Webinars
- Via email newsletter
- Dissemination through transplanting centre
- ANZSN Kidney eLearning hub
- Others (please specify): _____
- I am unlikely to attend any transplant education program.

5. Nominate three key transplant topics which you would like more information on:

- a. _____
- b. _____
- c. _____

Section C: Tell us your views on barriers to transplantation

1. Do you believe that your patients have lesser access to transplantation than those at other centres?
 - Yes
 - No

2. What do you perceive are the current modifiable barriers to kidney transplant waitlisting for your patients? (please tick all that apply)
 - Lack of access to transplanting centre services/appointments
 - Timeliness of transplanting centre response to patient referrals
 - Transparent communication by the transplanting centre
 - Lack of transplant education opportunities for patients
 - Lack of a dedicated transplant coordinator (or inadequate FTE)
 - Inadequate nephrologist FTE for timely medical assessment locally
 - Lack of interpreters and translated educational materials for non-English speaking patients
 - Financial and social barriers getting patients to attend appointments with a transplant team
 - Difficulty with access to cardiac investigations necessary for waitlisting
 - Difficulty with access to radiological investigations necessary for waitlisting
 - Difficulty with access to other Specialty appointments necessary for waitlisting (eg gastroenterology / ID for patients with hepatitis): please specify: _____
 - Others (please specify): _____

3. With regards to management of post-transplant patient, do you feel that your centre would benefit from more support?

- Yes
- No

If yes, what support would be beneficial? (Tick all that apply)

- More Nursing / transplant coordinator FTE
- More Nephrologist FTE
- Regular patient assessment by transplant centre
- Patient assessment by transplant centre on request
- Regular discussion with transplant centre about patient issues
- Structured education around the care of a kidney transplant recipient
- Access to investigations and other specialty areas
- Structured yearly reviews using telehealth involving local nephrologists, transplanting centres and patients
- Other (please specify): _____

Section D: Your views and participation in transplant research

1. Are your patients enrolled in transplant trials?

- Yes
- No

If No, would you like them to be?

- Yes
- No

2. With regards to conducting research in your centre, please tick all the statements that you agree with or apply:

- Transplant research plays an important activity in my centre.
- I have access to a research nurse.
- If my transplant patients are enrolled in a trial, I would you want/expect the transplanting centre to manage the trial.
- Please provide any other comments about transplant research.

APPENDIX 2: The Survey Result

(not included)