A Nephrology KPI Program for Australia and Aotearoa New Zealand - Report of the Key Performance Indicator Working Group

The ANZSN Council established the Key Performance Indicator (KPI) Working Group in 2017 to develop a nephrology KPI program for Australia and Aotearoa New Zealand.

The development of a coordinated KPI program is one way to improve practice and reduce variations in nephrology care and deliver better, safer outcomes for patients with kidney disease.

Delivering its report and recommendations in 2019, Council has endorsed the following KPIs for implementation in partnership with clinicians, clinical registries and governments in Australia and Aotearoa New Zealand.

ANZSN's KPI Program

Adopting the principle that KPIs should be simple, relevant, actionable and measurable, the ANZSN's KPI Program includes the following recommended indicators:

1. Incidence of peritonitis in patients treated with peritoneal dialysis (PD)

Numerator: Number of peritonitis episodes
Denominator: PD patient-years
Report Frequency: Quarterly and annually

Why this KPI? - Peritonitis is the leading cause of PD technique failure and contributes to increased hospitalisation and mortality.

Note: This KPI is unchanged from the current PD peritonitis KPI reported by ANZDATA

2. Dialysis access planning at commencement of dialysis

2A. All dialysis access planning

Numerator: Number of new patients with kidney failure starting haemodialysis (HD) with an arteriovenous fistula (AVF) or arteriovenous graft (AVG), or starting PD
Denominator: Total number of patients starting kidney replacement therapy (KRT) with dialysis
Report Frequency: Quarterly and annually

Why this KPI? - Successful planning for commencement of dialysis includes access for both PD and HD.

Determination of the most appropriate form of vascular access should be at the individual patient level.

Commencement of dialysis with an AVF or AVG or PD catheter is associated with reduced risk of sepsis and mortality compared with a vascular access catheter.

2B. Vascular access at first HD

Numerator: Number of new patients with kidney failure starting HD with an AVF or AVG
Denominator: Total number of patients starting KRT with HD
Report Frequency: Quarterly and annually

Note: This KPI is unchanged from the current vascular access KPI reported by ANZDATA

Why this KPI? - Determination of the most appropriate form of vascular access should be at the individual patient level.

Commencement of HD with an AVF or AVG is associated with reduced risk of sepsis and mortality compared with a vascular

access catheter and is recommended by current guidelines.

2C. HD vascular access planning

Numerator: Number of new patients with kidney failure starting HD with an AVF or AVG
Denominator: Number of patients on HD at 3 months
Report Frequency: Quarterly and annually

Why this KPI? - Determination of the most appropriate form of vascular access should be at the individual patient level.

Commencement of HD with an AVF or AVG is associated with reduced risk of sepsis and mortality compared with a vascular access catheter and is recommended by current guidelines. This KPI expands on KPI 2(B) by excluding patients planned to have PD or pre-emptive transplantation but who may have had to commence KRT with HD and required a vascular access catheter.

2D. PD catheter planning

Numerator: Number of new patients with kidney failure starting PD at first dialysis
Denominator: Number of patients on PD at 3 months
Report Frequency: Quarterly and annually

Why this KPI? - Commencement of dialysis with PD avoids a central dialysis catheter. A patient planned for PD but without a PD catheter ready for use may start HD with a central dialysis catheter, with associated increased risk of infection and mortality.

3. Transplantation wait-listing

Numerator: Number of patients aged ≥2 years and <65 years who are transplanted or "active" on the wait list within 6 months of KRT start
Denominator: Number of patients having KRT for <6 months plus aged ≥2 years and <65 years.
Report Frequency: Semi-annually and annually

Why this KPI? - Transplantation is associated with the best survival and quality of life of any KRT. Access to transplantation requires either a living kidney donor or wait-listing on the deceased donor list. Failure of eligible patients to be wait-listed will restrict transplantation as a treatment option for patients.

4. ANZDATA annual data survey timeliness

Numerator: Cumulative total number of renal units that have reported their annual dataset each month following 31 December
Denominator: Total number of renal units
Report Frequency: Monthly and annually

Why this KPI? - ANZDATA is relevant for service planning, research, and quality assurance. Ensuring that annual data is submitted promptly will allow timely reporting by ANZDATA.

5. KRT modality

The KPI annual report will include details of KRT modality for incident patients and prevalent patients by renal service.

Why this KPI? - KRT modalities vary among renal services. Transplantation is the preferred modality of KRT, while home dialysis therapies have been associated with better quality of life for patients and lower health care costs compared with facility HD.

Key Performance Indicators for future consideration

6. HD catheter related bacteraemia

Central dialysis catheters are the least preferred form of vascular access for HD but are also essential for providing dialysis when no alternative access is available. Catheters are associated with increased healthcare-associated infections and mortality. Minimising infection rates will improve patient outcomes.

Numerator: Number of catheter related bloodstream infections
Denominator: Total HD catheter days
Report Frequency: Quarterly and annually

This information is not currently collected by ANZDATA and would require increased data collection at sites with both time and cost implications. A database would also be required for data collation and reporting.

The value of collecting and reporting this KPI will be revisited in the future, including in the context of the REDUCCTION project.

Reviewing the ANZSN KPIs

To ensure the KPIs remain fit for purpose the ANZSN will establish the Quality Indicators and Registries Sub-Committee (QIRSC) with medical, nursing, allied health and consumer representation.

Replacing the KPI Working Group, and reporting to the Policy and Quality Committee, the QIRSC will:

- advise on the development, review and collection of nephrology related clinical and quality indicators;
- develop strategies to advocate for the adoption of nephrology related clinical and quality indicators and the resourcing of related clinical quality registries;
- advise on strategic partnerships to support 'closing the loop' on performance indicators and related quality and safety matters by government health authorities; and
- participate in forums with relevant authorities to support the consideration and advice on remediation of poorly performing units or services particularly where the performance raises patient safety issues.

Next steps
The ANZSN will publish its recommended KPIs, implement its new Quality Indicators and Registries Sub-Committee and work with the ANZDATA Registry to move toward implementation.

Once the KPIs are fully implemented, we will work with the ANZDATA Registry and governments in Australia and Aotearoa New Zealand to promote the uptake of the KPIs and the implementation of appropriate actions to address outlier performance amongst renal units. In addition, we will work with ANZDATA, KHA and KHNZ to promote the results to consumers and present the data in a patient-appropriate format.

ANZSN Key Performance Indicator Working Group

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

A/Professor Nicholas Gray (Chair)
Dr Eric Au
Dr Doris Chan
Professor Martin Gallagher
Dr Drew Henderson
A/Professor Lukas Kairaitis
A/Professor Nigel Toussaint
Dr Melanie Wyld
Dr Sally Kellett
Professor Matthew Jose
Professor Stephen McDonald

ANZSN Council Portfolio Co-Leads
Professor Neil Boudville, President
Dr Annabel Martin, Councillor

Thank you
Appreciation is extended to ANZDATA for its support in running data checks to validate the KPIs prior to finalisation.

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

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Numerator: Number of new patients with kidney failure starting HD with an AVF or AVG
Denominator: Total number of patients starting KRT with HD
Report Frequency: Quarterly and annually

Note: This KPI is unchanged from the current vascular access KPI reported by ANZDATA

Why this KPI? - Determination of the most appropriate form of vascular access should be at the individual patient level.

Commencement of HD with an AVF or AVG is associated with reduced risk of sepsis and mortality compared with a vascular

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2C. HD vascular access planning

Numerator: Number of new patients with kidney failure starting HD with an AVF or AVG
Denominator: Number of patients on HD at 3 months
Report Frequency: Quarterly and annually

Why this KPI? - Determination of the most appropriate form of vascular access should be at the individual patient level.

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2D. PD catheter planning

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Report of the Key Performance Indicator Working Group of the Australian and New Zealand Society of Nephrology (ANZSN)

2020

Executive Summary of Recommendations

The ANZSN Key Performance Indicator (KPI) Working Group, formed as a subcommittee of the Clinical Policy and Advisory Committee (CPAC) was established in 2018 to assist with the development and implementation of a co-ordinated nephrology KPI Program in Australia and New Zealand (ANZ).

Following review of KPIs across numerous jurisdictions and consultation with Transplantation Society of Australia and New Zealand (TSANZ), Australian and New Zealand Paediatric Nephrology Association (ANZPNA) and at the 2019 Dialysis Nephrology and Transplant Meeting in Glenelg, South Australia, the KPI Working Group makes the following recommendations:

1. That the ANZSN adopts and recommends to ANZDATA the reporting of eight (8) KPIs
2. That the ANZSN recommends to ANZDATA the production, distribution and publication of an annual KPI Report
3. That the ANZSN develop and implement a governance structure, including consumer representation, to review and revise the proposed KPIs
4. That the ANZSN KPI Working Group continues to operate as a subcommittee of CPAC
5. That the ANZSN engages with the Australian Commission on Safety and Quality in Healthcare through the National Clinical Quality Registry (CQR) Strategy 2019-2029 to explore opportunities for funding and data collection in Australia
6. That the ANZSN engages with the National Renal Advisory Board (NRAB) and Health Safety and Quality Commission in Aotearoa New Zealand to explore opportunities for data collection and reporting in New Zealand
7. That the KPI Working Group report is made available to members
8. That the ANZSN seeks consumer input into this report with the aim of publishing a “consumer version”

Background

People with chronic kidney disease (CKD) experience significant morbidity, mortality and poorer quality of life than the general population. Efforts to improve practice and reduce variations in clinical care across nephrology services may translate into better and safer outcomes for people with CKD. KPIs are one method to improve service delivery and quality of care.

The ANZSN formed a KPI Workgroup which first met in March 2018. Terms of Reference are included in Appendix 1 and membership in Appendix 2. In summary, the Workgroup was tasked with reviewing the current 2 KPIs reported by ANZDATA and supporting the development and implementation of additional KPIs relevant to the care of people with kidney disease. Further, the Workgroup was to provide advice to ANZSN regards reporting and evaluation processes.

An effective KPI should be:

- Simple
- Relevant to nephrology health professionals and consumers across Australia and New Zealand
- Aligned to the strategic goals of an organisation(s)
- Actionable – the institution must be able to impact the KPI results
- Measurable

The Workgroup explored KPI activity in nephrology in Australia, New Zealand (NZ), and the rest of the world where possible. The Victorian Renal Clinical Network endorsed 6 KPIs in 2012 and has been the most successful State to implement and sustain nephrology KPIs (1). Queensland developed KPIs in 2016 but they were never implemented. Similarly, KPIs were proposed in New South Wales, Western Australia and South Australia.

New Zealand has had the National Renal Advisory Board (NRAB) to support the provision of renal services, including developing and maintaining renal care standards (2). Examples of what the NRAB has reported include haemodialysis vascular access, catheter-associated bacterial infections, frequency, duration and adequacy of haemodialysis, peritonitis rates, and anaemia management.

ANZDATA has been reporting 2 KPIs, vascular access at first haemodialysis (HD) and peritoneal dialysis (PD) peritonitis rates, every quarter since 2012. These KPIs were developed by a small workgroup (a subcommittee of the old Dialysis Nephrology and Transplant Committee) and have not been reviewed by ANZSN since implementation. They are reported by secure electronic communication to Heads of Renal Units. An example is shown in Appendix 3.

International experience with nephrology KPIs is variable. Examples included Registry-based programs such as REIN (in France), UKRR (in the United Kingdom), Scottish Registry; or national data entry and analysis such as in the Netherlands. The United States has a Quality Incentive Program, where a portion of payment to dialysis facilities is linked to facility performance on quality of care indicators.

The Workgroup reviewed all KPIs and quality measures that were obtained from the literature and, when available, direct correspondence with nephrologists internationally. Consideration was given to their relevance and ease of collection in the ANZ environment. The Workgroup concluded that KPIs would most easily be collected and reported from ANZDATA, an established Clinical Registry

that involves all ANZ renal units. The Workgroup consulted TSANZ and ANZPNA in developing draft KPIs. These draft KPIs were modelled by ANZDATA and then presented and discussed with the wider nephrology community at the DNT Workshop in September 2019. This feedback enabled the Workgroup to finalise proposed KPIs for ANZ.

Key Performance Indicators recommended for implementation

1. Incidence of peritonitis in patients treated with peritoneal dialysis

Numerator: Number of peritonitis episodes

Denominator: PD patient-years

Report Frequency: quarterly and annually

Comments:

Relapsing peritonitis should be counted as a single episode

Recurrent and repeat episodes should be included as separate episodes

Patients with a catheter in-situ yet to commence dialysis are excluded

Note: This KPI is unchanged from the current PD peritonitis KPI reported by ANZDATA

Rationale: Peritonitis is the leading cause of PD technique failure and contributes to increased hospitalisation and mortality.

2. Dialysis access planning at commencement of dialysis

A. All dialysis access planning

Numerator: Number of new ESKD patients starting HD with an AVF or AVG, or starting PD

Denominator: Total number of patients starting kidney replacement therapy (KRT) with dialysis

Report Frequency: quarterly and annually

Comments: Report will include all dialysis starts and excluding “late referrals”

Rationale: Successful planning for commencement of dialysis includes access for both PD and HD. Determination of the most appropriate form of vascular access should be at the individual patient level. Commencement of dialysis with an AVF or AVG or PD catheter is associated with reduced risk of sepsis or mortality compared with a vascular access catheter.

B. Vascular access at first haemodialysis

Numerator: Number of new ESKD patients starting HD with an AVF or AVG

Denominator: Total number of patients starting KRT with haemodialysis

Report Frequency: quarterly and annually

Comments:

Report will include all haemodialysis starts and excluding “late referrals”

Note: This KPI is unchanged from the current “vascular access” KPI reported by ANZDATA

Rationale: Determination of the most appropriate form of vascular access should be at the individual patient level. Commencement of haemodialysis with an AVF or AVG is associated with reduced risk of sepsis and mortality compared with a vascular access catheter and is recommended by current guidelines.

C. HD vascular access planning

Numerator: Number of new ESKD patients starting HD with an AVF or AVG

Denominator: Number of patients on HD at 3 months

Report Frequency: quarterly and annually

Comments: Report will include all starts and excluding “late referrals”

Rationale: Determination of the most appropriate form of vascular access should be at the individual patient level. Commencement of haemodialysis with an AVF or AVG is associated with reduced risk of sepsis or mortality compared with a vascular access catheter and is recommended by current guidelines. This KPI expands on KPI 2(B) by excluding patients planned to have PD or pre-emptive transplantation but who may have had to commence KRT with HD and required a vascular access catheter.

D. PD catheter planning

Numerator: Number of new ESKD patients starting PD at first dialysis

Denominator: Number of patients on PD at 3 months

Report Frequency: quarterly and annually

Comments: Report will include all starts and excluding “late referrals”

Rationale: Commencement of dialysis with PD avoids a central dialysis catheter. A patient planned for PD but without a PD catheter ready for use may start HD with a central dialysis catheter, with associated increased risk of infection and mortality.

3. Transplantation wait listing

Numerator: Number of patients aged ≥2 years and <65 years who are transplanted or "active" on the wait list within 6 months of KRT start

Denominator: Number of patients having KRT for <6 months and aged <65 years

Report Frequency: semi-annually and annually

Comments: Report will also include this KPI reported for an "index" group (age ≥2 years and <65 years, non-diabetic, non-Aboriginal, non-Maori, non-Pacific Islander)

Rationale: Transplantation is associated with the best survival and quality of life of any KRT. Access to transplantation requires either a living kidney donor or wait-listing on the deceased donor list. Failure of eligible patients to be wait-listed will restrict transplantation as a treatment option for patients.

4. ANZDATA annual data survey timeliness

Numerator: Cumulative total number of renal units that have reported their annual dataset each month following 31 December

Denominator: Total number of renal units

Report Frequency: monthly and annually

Rationale: ANZDATA is relevant for service planning, research, and quality assurance. Ensuring that annual data is submitted promptly will allow timely reporting by ANZDATA.

5. Kidney Replacement Therapy (KRT) modality

The KPI annual report will include details of KRT modality for incident patients and prevalent patients by renal service.

Comments: Report will include numbers and percentage of modality type (transplant, PD, HHD, facility HD)

Rationale: KRT modalities vary among renal services. Transplantation is the preferred modality of KRT, while home dialysis therapies have been associated with better quality of life for patients and lower health care costs compared with facility HD.

Key Performance Indicators for future consideration

6. HD catheter related bacteraemia

Numerator: Number of catheter related blood stream infections

Denominator: Total HD catheter days

Report Frequency: quarterly and annually

Comments: Report will include tunnelled and non-tunnelled catheters

Rationale: Central dialysis catheters are the least preferred form of vascular access for HD but are also essential for providing dialysis when no alternative access is available. Catheters are associated with increased healthcare-associated infections and mortality. Minimising infection rates will improve patient outcomes.

Comments:

This information is not collected by ANZDATA. It would hence require increased data collection at sites with both time and cost implications. Furthermore, a database would be required for data collation and reporting. The REDUCCTION project may help clarify the feasibility of this proposed KPI. The Australian Council of Healthcare Standards has reported this KPI but voluntary data submission by hospitals is limited (see below).

Governance

Reporting of KPIs

The Workgroup acknowledges that while ANZSN may make recommendations regarding KPIs, the South Australian Health and Medical Research Institute as the governing body of ANZDATA is ultimately responsible for decisions regarding the adoption and reporting of KPI data produced by ANZDATA.

The KPI Workgroup proposes reporting data as follows:

1. In general, data will be reported as identified tables.
2. Quarterly and semi-annual KPIs (which will include 12 month rolling data where appropriate) will be reported via the ANZDATA secure website to Heads of Units.
3. Production of an Annual KPI Report. This would include full year results of KPI data following data lock of the annual ANZDATA survey results. The KPI Report would complement the ANZDATA Individual Hospital Reports.
4. The KPI Report would be available via the ANZDATA secure website for Heads of Units. In Australia, it would further be delivered to Hospital and Health Service Chief Executives with a recommendation to submit to the relevant patient safety and quality committee. In New Zealand, it would be delivered to NRAB and the District Health Board Chief Executive with a recommendation to submit to the relevant patient safety and quality committee.

5. A version of the KPI Annual Report would be available on the ANZDATA website with a link to the Report on the ANZSN website.

Review of KPIs

As mentioned in the introduction, KPIs need to be aligned to the strategic goals of organisations and be relevant to health care professionals and consumers. It is therefore important that KPIs are reviewed for relevance and performance regularly, and changes made as required to ensure they remain fit for purpose. Further, KPIs may identify some "outlier" services, performing above or below the standard of their peers. Ensuring appropriate governance to manage "outlier" results is important for the ANZSN, ANZDATA, Health Services, renal units, and consumers.

The Workgroup recommends establishment of an ongoing KPI group that would report to CPAC (pending review of the current ANZSN structure). Membership could include:

1. Representative of CPAC
2. ANZSN Council lead
3. ANZDATA representatives x 2
4. Kidney Health Australia/Kidney Health New Zealand/consumer representatives
5. NRAB representative
6. Nephrology surgeon representative
7. RSA representative
8. ANZSN Nephrologist representative(s) (non-Council)
9. Health administrator, RACMA or Patient Safety and Quality representative

The tasks of the ANZSN KPI group would include:

1. Review the appropriateness and relevance of the KPIs
2. Recommend removal or addition of KPIs
3. Provide ongoing communication with the wider ANZSN community at relevant forums (e.g. DNT Workshop)
4. Identify clinical experts should individual renal services approach ANZSN to seek external input or review of their performance.
5. Pursue future directions relevant to KPIs identified in this report

The Workgroup acknowledges that other areas of responsibility lie outside the remit of ANZSN and sit more appropriately with ANZDATA. These include:

1. Review of KPI data for accuracy and completeness
2. Production of an Annual KPI Report
3. Review of ANZDATA Individual Hospital Reports
4. Implementation of a process for notification of data to Renal units and their relevant Hospital and Health Service (Australia) or NRAB (NZ)

Future directions

The area of clinical quality has numerous interested parties. In Australia, these include the Australian Commission on Safety and Quality in Healthcare (ACSQHC), Australian Council on Healthcare Standards (ACHS), specialist societies, state health authorities and governments, and

clinical registries. In New Zealand, renal clinical quality is overseen by the National Renal Advisory Board (NRAB) with other stakeholders including DHB and ANZDATA. Healthcare consumers and organisations such as Kidney Health Australia and Kidney Health New Zealand have an important role and interest in clinical quality.

The Australian Draft National Clinical Quality Registry (CQR) Strategy 2019-2029 (3) aims to maximise the potential of CQR's to provide clinicians, health service managers, patients and other stakeholders with ongoing, risk adjusted, benchmarked feedback on clinical practice and patient outcomes, to improve the standard of care. Strategic objectives, actions, and lead organisations are detailed in the table below (3).

Strategic objectives	**Action**	**Action Lead**
1.National CQRs are based on clinician/patient partnerships	• Support the development of effective national CQR partnerships between clinicians and patients	Australian Commission on Safety and Quality in Health Care (ACSQHC)
2.National CQRs are quality assured, efficient and cost effective	• Ensure that national CQRs are quality assured: ○ Update ACSQHC's *Framework for Australian clinical quality registries* and develop a CQR Standard for assessment of CQRs ○ Develop and implement a CQR accreditation scheme to accredit against the Standard • Develop and implement a National CQR communication and collaboration plan and hub • Facilitate streamlining of external barriers (e.g. ethics approval and treatment site governance processes) to the efficient establishment and operation of CQRs	ACSQHC ACSQHC ACSQHC, Aust. & state/territory govts Australian, state/territory govts, ACSQHC, AIHW
3.The potential value of national CQR data is maximised	• Identify and create an environment that supports the provision of, and timely access to, data and/or tailored CQR information for consumers, health care providers and funders • Facilitate national CQR digitalisation, data linkage, interoperability and integration with Australia's health information systems and infrastructure	Australian & state/territory govts, ACSQHC, AIHW AIHW, Australian Digital Health Agency
4.National, prioritised CQRs are sustainably funded	• Develop a sustainable funding model for national, prioritised CQRs, with current funders and major beneficiaries of CQR data and outputs	Australian & state/territory governments, ACSQHC

The document identifies that challenges facing CQRs include ethics approval, requests for access to CQR data, identification and management of outliers, and lack of sustainable and sufficient funding. The ACSQHC is charged with leading most of these objectives with funding sourced from government.

Another organisation with an interest in the area of clinical quality is the ACHS. This organisation has collected a set of internal medicine clinical indicators since the mid-1990s with direct reporting by health care organisations. Data collection peaked in 2001 but has since decreased, limiting meaningful analysis. In the 2018 report (4), data was provided on haemodialysis AVF access associated blood stream infection and haemodialysis centrally inserted cuffed line access associated blood stream infection by 17 and 13 health care organisations respectively. There were no other clinical indicators relevant to nephrology in the report. As identified above, the Workgroup believes

dialysis catheter related bacteraemia is a worthwhile KPI but is limited by the burden of data collection. ACHS does not appear to adequately provide this data, and the Workgroup believes this possible KPI should remain on hold. In the absence of other clinical indicators relevant to nephrology, the Workgroup does not believe the ACHS will provide value for ANZSN at this time.

New Zealand has the NRAB (2) tasked with advising the Ministry of Health on renal care and monitoring renal care services in New Zealand. NRAB reports a number of KPIs, most of which can be extracted from ANZDATA. Ongoing engagement with the NRAB will be important for sustainability of KPIs. The NRAB will need to develop a NZ specific governance model for management of outliers in partnership with the Ministry of Health and potentially the Health Quality and Safety Commission.

In summary, the Workgroup believes that ANZDATA provides the most effective and efficient source for KPIs. The National Clinical Quality Registry (CQR) Strategy 2019-2029 will be important for ANZDATA and may provide an opportunity for ANZDATA to source funds for KPI data analysis. Engagement with both ACSQHC and NRAB will be important for the proposed KPI Group into the future. Engagement with state health authorities also needs to be pursued.

Conclusions

The KPI Workgroup has reviewed KPIs across numerous jurisdictions and proposed eight KPIs to be implemented in Australia and New Zealand. Appropriate governance will be critical to the future success of KPIs in ANZ and will require engagement with stakeholders and government entities, both from ANZSN and ANZDATA. The initial KPIs proposed are easy to implement and have the support of the wider nephrology community.

References

1. Toussaint et al. Implementation of Renal Key Performance Indicators: promoting improved clinical practice. *Nephrology* 2015; 20: 184-193
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Abbreviations

ACHS = Australian Council on Healthcare Standards

ACSQHC = Australian Commission on Safety and Quality in Healthcare

ANZ = Australia and New Zealand

ANZDATA = Australia and New Zealand Dialysis and Transplant Registry

ANZPNA = Australia and New Zealand Paediatric Nephrology Association

ANZSN = Australian and New Zealand Society of Nephrology

AVF = arteriovenous fistula

AVG = arteriovenous graft

CPAC = Clinical Policy and Advisory Committee

CQR = Clinical Quality Registry

DHB = District Health Board

DNT = Dialysis Nephrology and Transplant Committee/Workshop

ESKD = end stage kidney disease

KRT = kidney replacement therapy

HD = haemodialysis

HHD = home haemodialysis

KPI = key performance indicator

Late referral = referred to a renal service less than 3 months from start of kidney replacement therapy

NRAB = National Renal Advisory Board

NZ = New Zealand

PD = peritoneal dialysis

REIN = French Renal Epidemiology and Information Network

REDUCCTION = Reducing the burden of dialysis Catheter Complications: a National approach

TSANZ = Transplantation Society of Australia and New Zealand

UKRR = United Kingdom Renal Registry

Appendix 1: ANZSN Key Performance Indicator Working Group Terms of Reference

1. Role

(a) The ANZSN (**Society**) Key Performance Indicator (KPI) Working Group is a subcommittee of the Clinical Policy and Advisory Committee (**CPAC**), and provides advice to CPAC and support to the Society in relation to the development and ongoing monitoring of a co-ordinated nephrology KPI Program in Australia and New Zealand.

(b) The aim of measuring nephrology KPIs is to drive quality improvement by:

(i) providing comparability within and between nephrology services;

(ii) engaging and supporting clinicians to improve the quality of their local care delivery system;

(iii) acting as 'flags or alerts' to identify good practice patterns; and

(iv) providing transparency to policy-makers and the public.

2. Functions

(a) The ANZSN KPI Working Group functions are:

(i) To support the development and implementation of a nephrology KPI program across each of the nephrology units in Australia and New Zealand to inform decision making and drive quality improvement in care.

(ii) To represent the interests of all those across the nephrology health sector who will use the KPI program outputs by ensuring that the KPI program outputs meet user requirements.

(iii) To provide strategic specialist advice and support to the Society on reporting mechanisms and evaluation processes to ensure that the indicator data are of high-quality and relevant.

(iv) To assist with the selection and development of relevant nephrology KPIs that support change. This includes establishing the definitions, measurement and targets that support assessment against the KPIs.

(v) To assist the Society with the identification of areas for improvement based on analysis of the nephrology KPI data.

(vi) To communicate, consult and disseminate the KPI outputs to their respective interest group, program area, organisation, and/or internal and external stakeholders.

(vii) To identify and seek funding opportunities to enable implementation of the nephrology KPI program in Australia and New Zealand.

3. Membership

(a) The membership of the KPI Working Group should represent the broad nephrology community. Membership should therefore reflect the diversity in culture, gender, and workforce needs of the Society. General members must be ordinary members of the Society.

(b) The KPI Working Group must comprise of no less than 8 and no more than 10 members and should include:

(i) 6 ordinary members of the Society (minimum 1 New Zealand representative);

(ii) 1 representative of the Australian and New Zealand Paediatric Nephrology Society **(ANZPNA)**

(iii) 1 affiliate member of the Society

(iv) 2 ex-officio members from the ANZDATA Executive or Steering Committee.

4. Terms of appointment

(a) All general members will hold office for a term of two years, and will be eligible for reappointment, subject to application procedures.

(b) The Chair must:

(i) be elected by the Council; and

(ii) must not be an ex officio member

(c) The Chair must call for expressions of interest to join the KPI Working Group as required to fill vacant memberships, giving those interested one calendar month to express their interest.

(d) The Council will select members of the KPI Working Group from those who have expressed an interest in consultation with the Chair.

(e) Members will cease to be a member of the KPI Working Group if they:

(i) resign from the Working Group by giving one month's notice in writing to the Chair of the Working Group; or

(ii) cease to be a member of the Society.

5. Meetings

(a) The KPI Working Group shall a minimum of 4 teleconference meetings, including one face-to-face meeting during the ASM, per calendar year.

(b) The Chair may also call a special meeting of the Working Group to be held by teleconference, with members being given at least seven days' notice of the meeting.

(c) The Chair must:

(i) issue the Agenda for a meeting two-weeks before the meeting;

(ii) ensure all items are referred for additional advice to appropriate other subcommittees of the Council, where appropriate;

(iii) ensure all discussion items end with a decision or action; and

(iv) nominate an acting-chair from the Working Group to act in the Chair's place, as required.

(d) A quorum of members:

(i) must be present before a meeting may proceed; and

(ii) is constituted by six (6) members, including the Chair (or nominated acting-Chair),

(e) The Working Group may make a decision by a show of hands, or where demanded by a member entitled to vote, a ballot. The Chair of the Working Group will have a deliberative and, in the case of equal votes, a casting vote.

(f) The Working Group may make a decision without a meeting if all Working Group members sign their consent on a document (which may have counterparts), which states the decision.

(g) No business may be considered at a meeting of the Working Group until the minutes of the previous meeting have been confirmed or otherwise disposed of. No discussion of the minutes is permitted except as to their accuracy.

(h) Minutes of a meeting must be confirmed by resolution and signed by the Chair at the next meeting. Minutes confirmed and signed in that way will be taken as evidence of proceedings of that meeting.

6. Secretariat

The Society will provide administrative support to the Chair of the KPI Working Group for the operational aspects of the Working Group.

7. Reporting

(a) The Chair of the KPI Working Group will report to the Council via CPAC twice yearly.

(b) Recommendations and strategic plans will be discussed at CPAC.

(c) All Working Group meeting minutes will be forwarded to the Society.

(d) Additional written reports will be provided to the Council at the Council's request.

8. Confidentiality

All business of the Working Group that members should understand is confidential must be treated as confidential. Members are not to disclose any confidential information to anyone outside the Working Group and are to treat this material with the utmost care and discretion.

9. Conflict of Interest

(a) A Working Group member must declare any conflict of interest annually (and updated as required in the interim) to the Chair if they, their partner or close family friend has a direct financial or other interest which influences, or may appear to influence, proper consideration or decision-making by the Working Group on a matter or proposed matter.

(b) In the case of a declared conflict of interest. The Chair must:

(i) determine the nature of that member's permitted participation, whether that is full participation in the Working Group's handling of that issue, capacity to discuss the issue but not to vote on the issue, a prohibition on discussing or voting on the issue, or departure from the meeting while that issue is being handed;

(ii) advise the person concerned of the Chair's determination; and

(iii) report the determination to the Working Group.

10. Amendments

(a) The Working Group may review these Terms of Reference at any time.

(b) The Working Group may recommend that these Terms of Reference be altered.

(c) The recommended alteration takes effect on approval by the Council

11. Funding of the KPI Working Group

(a) The KPI Working Group may develop a budget to Council for discussion and approval.

Appendix 2: Membership

Nicholas Gray (Chair)

Eric Au

Doris Chan

Andrew Henderson

Lukas Kairaitis

Nigel Toussaint

Melanie Wyld (affiliate member)

Sally Kellett (ANZPNA Member)

Stephen McDonald (ANZDATA - ex officio)

Matthew Jose (ANZDATA – ex officio)

Kamal Sud (ANZSN Council Portfolio Lead)

Shaune Noble (Secretariat)

Appendix 3: Example of current ANZDATA KPI Report

Not included