



QUALITY CARE WORKSHOP 2023

Australian and New Zealand
Society of Nephrology

ABN 87 008 505 502

INTRODUCTION

The second annual Australian and New Zealand Society of Nephrology (ANZSN) Quality Care Workshop took place on Wednesday 17 May 2023 with over 80 participants. This year there was an emphasis on the best ways to utilise data to implement change. The program began with an excellent presentation by our international plenary speaker Dr Maoliosa Donald on implementation of quality improvement in Canadian kidney care. Further presentations on development of nationwide quality improvement projects in the United Kingdom provided opportunities for learning and consideration of implementation of quality improvement projects in Australia and New Zealand.

A government perspective on how to use data to improve care was provided by Diane Watson, Bureau of Health information and Suchit Handa, Australian Commission of Safety and Quality in Health Care. Stephen McDonald provided an overview of the activities of ANZDATA and plans for the future. Integral to the future is data linkage from multiple organisations, to use existing data in meaningful ways to drive improvement in kidney care.

The final session showcased quality improvement projects across Australia and New Zealand. In addition to kidney care projects, Jonathan Morris provided insights into quality improvement projects in obstetrics and methods that could be translated into kidney care.

Feedback highlighted the importance of efficient utilisation of data to drive change and sharing of quality improvement methodology to increase participation by all those involved in kidney care.

ANZSN acknowledges the Traditional Custodians of Country throughout Australia, recognises their unique cultural and spiritual relationships to the land, waters and seas and their immense contributions to society, and pays respects to Ancestors and Elders, past and present. ANZSN acknowledges and respects iwi and hapū as tangata whenua of Aotearoa and is committed to upholding the principles of Te Tiriti o Waitangi (the Treaty of Waitangi). To read our statement on Indigenous Health [click here](#).



PLENARY SPEAKER

Dr Maoliosa Donald - Cumming School of Medicine, University of Calgary

Maoliosa joined us live from Canada to speak about Implementation in real-world practice – Canadian nephrology experience. How do we use quality improvement and implementation science to improve the outcomes and experiences for patients with kidney disease by applying the knowledge to action framework?

Gaps in care identified include access to comprehensive education resources, relevant resources for the relevant stage of kidney disease and communication and support from nephrologists.

Co-designing kidney care initiatives identified that patients want

- credible, tailored support
- tangible, accessible and relevant information
- topics important to patients
- to remove barriers to self-management
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A health tool – My kidneys My health was developed in Canada that was user friendly, had credible content and was customisable.

Sustainment initiatives require

- monitoring of usage
- evaluation of outcomes – determine if content is relevant, what is the impact, are there gaps in accessibility
- sustainment of knowledge use – adapt and improve implementation strategies, scalability

Contacts and resources

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https://twitter.com/ICDC_Research

www.mykidneysmyhealth.com

www.ckdpathway.ca

www.kidneyfailurerisk.com

SESSION ONE DATA TO ACTION



Professor Stephen McDonald – Executive Officer ANZDATA

Perspective on ANZDATA (centre -specific) outputs

Stephen gave an overview of the current and future activities of ANZDATA. This included publication of annual individual hospital reports and six-monthly Quality Indicator Reports, governance, and circulation of the reports, and plans to expand data collection and reporting.

A current ANZDATA initiative is to better understand how well stakeholders, including clinicians, health administrators and the general public, understand the data presented in reports, how best to present the data and how effective the reports are as tools for driving quality improvement.

A recent project investigated consumers' views of quality indicator information in kidney failure care, considerations for public reporting and advantages and disadvantages of patients knowing this information about dialysis and transplant centres. Overall consumers trust and support public reporting, despite apparent disempowerment due to the inability to choose or change treatment centres.

The future of quality Indicator collection and analysis will rely heavily on data linkage and using existing data better rather than collecting more.



Dr Diane Watson - Bureau of Health information

Making Data Work to Improve Patient Care and Experience

The key steps in making data work for you

- Patient experience and outcomes
- Data collection
- Actionable information
- Local interpretation and local decision
- Action to improve



Currently, the majority of quality improvement efforts concentrate on data collection. The ideal approach is to spend that majority of time on actions to improve.

What does good practice look like?

- Determine what information about patient experiences and outcomes are essential
- What new data are needed, and what already exists to make actionable information
- New data collection based on cost and benefits, optimising future potential (e.g., linkage)

Actionable information:

- Objective, timely, accurate and meaningful
- Collaborative engagement between clinicians and measurement experts = best practice analytics
 - Attribution to hospitals and units, account for differences in case mix, appropriate comparators and times series.
 - Time and effort to ensure findings are meaningful - clear succinct and hierarchical

Local interpretation, local decisions:

- Pools local evidence to increase insights
- Governance at a local level with clear roles at clinical and management levels to ensure good information exchange, escalation and monitoring of impact, clear expectations of capacity/capability and timing of change.

Action to improve:

Local clinical leadership - levers for change including capacity and capability, monitoring, corrections, and escalation. Early detection of impact of and clinically significant changes to outcomes.



Suchit Handa - Australian Commission of Safety and Quality in Health Care

Using data to prioritise effort

The Australian Commission of Safety and Quality in Health Care (ACSQHC) aims to ensure the health system is sustainable, better informed, supported and organised to deliver safe and high-quality care.

Work of the ACSQHC includes development of standards, registries frameworks, reporting of hospital acquired complications, atlas of variation, and Patient Reported Outcome Measures (PROMs).

IPOS-Renal – is a validated short PROM survey (11 questions), combining the most common symptoms patients with kidney disease experience plus additional items from IPOS on concerns beyond symptoms, such as information needs, practical issues, and family anxiety.

The Framework for Australian Clinical Quality Registries 2nd edn moves towards achieving national reporting, updates guidance on clinical quality registry requirements' specification, infrastructure and technical standards, provides guidance on governance arrangements for Clinical Quality Registry (CQR) organisations and reporting requirements and outlier management, and updates the National Health Information Arrangements. The ACSQHC aims for the framework to be endorsed by October 2023.

www.safetyandquality.gov.au

SESSION ONE LEARNINGS AND OUTCOMES

The main learning from this session was the need for actionable data. There needs to be a cultural shift from collection of data to use of that data to drive actions which improve quality of care. Before data is collected there needs to be a plan for how that data is going to be used to improve quality of care. The usefulness of data in driving improvement is highly dependent on the quality of data collected. The involvement of staff at a local level is essential for success. Local staff not only need to be engaged in the design of quality improvement initiatives but to ensure that they are ready for action.

There is also a need for accountability from the bottom up. Data needs to be tailored to specific stakeholders so that it is presented in a way that is relevant to them. In order to achieve buy in for quality improvement at a health management level, it needs to be presented in a way that demonstrates health system efficiencies and benefits, whereas clinicians need to be presented with data that identifies modifiable clinical practices that will impact outcomes.

Actions:

- Enlist and resource quality improvement champions within units.
- Improve access to units/clinicians to download and utilise ANZDATA data.
- Tailor data to be meaningful to specific stakeholders.

SESSION TWO THE INTERNATIONAL EXPERIENCE



Nick Selby Improving AKI - UK AKI e-alert experience

The clinical need for acute kidney injury (AKI) care is driven by poor outcomes, variation in care and lack of specific therapies.

Local experience Aims of the e-alert system are to systematically identify cases of AKI, be hospital wide, and provide rapid reporting and monitoring at an organisational level.

Challenges included – information technology (IT) issues, no clear definition of baseline creatinine, joint nephrology/biochemistry/IT requirements, and funding. The program used a combination of human and IT algorithm based on the AKINetwork creatinine criteria and up to 12-month baseline. The program reported a false positive rate of 1.7% and false negative rate of 0.2%. Of note however, the e-alert system is only a tool in the diagnosis and monitoring of AKI.

National Experience

The NHS England algorithm, based on KDIGO guidelines, defines baseline levels on individual basis, programmed within lab software, and creates an AKI warning. Think Kidney is an NHS campaign to improve the care of people at risk of, or with, acute kidney injury. The NHS England algorithm outperformed other creatinine-based algorithms. Collection and analysis of AKI outcomes across units had variable results.

Tackling AKI trial hypothesis – a complex intervention for AKI, delivered at an organisational level, will improve standards of care delivery and lead to better patient outcomes.

The Tackling AKI trial resulted in no alteration of 30-day mortality, but a reduced hospital length of stay and improved detection of AKI. Implementation of Tackling AKI trial resulted in a cost saving of £732 (\$1455 Aus) per admission.



Graham Lipkin: Get It Right First Time (GIRFT) program - UK Nephrology Experience

Getting It Right First Time (GIRFT) is a national program designed to improve the treatment and care of patients through in-depth review of services, benchmarking, and presenting a data-driven evidence base to support change. It aims to improve the quality of care within the NHS by reducing unwarranted variations, bringing efficiencies and improving patient outcomes.

Data linkage – The study authors visited all 52 adult nephrology units in England and analysed existing data sources and registries and created novel linkages and surveys of practice and process which resulted in a data pack for each individual unit. Analysis identified both exemplary outcomes and unwarranted variation. Linkages identified new information such as the cost of hospital admission based on kidney replacement therapy (KRT) modality, causes of hospital admission, and amputation rates among patients with diabetes.

Results of GIRFT:

Networks and peer support

GIRFT identified limited accountability and inadequate interaction between commissioners and clinicians, variability of quality improvement networks across units, inadequate quality improvement leadership and training.

Advanced kidney care clinics had a highly variable and often inadequate workforce, limited shared decision making, and inadequate conservative care pathways.

Access to kidney transplantation

There was substantial variation between units in access to kidney transplant wait listing prior to starting dialysis. After 2 years of KRT, there was still 2-to-3-fold variation in waitlisting.

Issues responsible for variation included lack of “transplant first” culture, inconsistent criteria for waitlisting, staff and clinic capacity for assessment, lack of funding mechanisms and long delays in specialist tests.

Vascular access

Definitive vascular access – only 2 units achieved a target of 67% vascular access. Success was associated with predominance of day case surgery, Advance Kidney Care Clinic organisation and culture, coordination of vascular access, adequate surgical and operating theatre capacity, vascular access monitoring and maintenance, and interventional radiology capacity. Financial Incentives to increase vascular access had little effect.

Home therapy –There was a threefold difference in prevalent home dialysis patients across units

Infection in dialysis patients - Infection is the leading cause of kidney patient admission and death. There is wide variation in peritonitis and bacteraemia across units.

Multi-professional workforce and quality improvement – There are wide variations in workforce across units. There is a key role for pharmacy in nephrology services. There are major opportunities for advanced clinical practice and pharmacy consultant roles to improve service quality and safety.

Implementation

The GIRFT report provided 18 recommendations and action measures. The national report was accepted by the NHS and the Renal service transformation program was developed with the support of specialist societies.

Learnings

- Engage the multi-professional team.
- Value of timely data and data linkage
- Importance of investing in quality improvement, assurance and leadership training
- Focus on workforce; invest in supporting extended roles
- Role of pharmacists and allied health in workforce
- Critical role for regional networks and patient experience
- Focus on staffing and quality improvement in advanced kidney care clinics
- Importance on peer review and peer support in quality improvement
- Accountability of both commissioners and clinicians is key.

SESSION TWO

LEARNINGS AND OUTCOMES

Learnings from major quality improvement initiatives in the UK demonstrated the importance of multidisciplinary teams and benefits of a national approach. Data collection at a local level and large-scale data linkage was able to provide more granular data in individual units in context with comparisons to other units UK wide. Resourcing of infrastructure to allow networking and a coordinated approach to quality improvement is essential. Central to both the GIRFT and AKI projects was the utilisation of Electronic Management Systems (EMS) to allow linkage and provide actionable data. Polling at ANZSN DNT indicated that EMS across Australia vary in their usefulness and accessibility for linkage.

Actions:

- Develop action points that are linked to quality indicators
- Chose a high priority quality improvement issue to be targeted, create a campaign and provide actions to address the issue
- Advocate for resourcing of quality improvement in units.
- Advocate for at least state based linkable Electronic Management Systems
- Identify and acknowledge exemplary units and identify what they are doing differently

SESSION THREE QUALITY IMPROVEMENT PROJECTS

Jonathan Morris - A national approach to a safe reduction in preterm and early term births

The National Preterm Birth Prevention Collaborative consists of over 50 hospitals working together to prevent preterm births (before 39 weeks). Seven key strategies have been identified and endorsed by the collaborative. The aim of the program is to safely reduce the rate of preterm and early term birth by 20% across participating maternity services by March 2024. The plan, do, study, act cycle was used to develop clinical decision support processes. 48 hospitals are currently involved collecting data weekly or monthly on staff and patient education and involvement, interventions and birth outcomes.

Sophy Fan - AKI e-alert pilot project – The Royal Melbourne Hospital (RMH)

The AKI e-alert pilot project aimed to assess benefits of implementing an acute kidney injury (AKI) service at a quaternary hospital involving an AKI e-alert system and care bundle.

Internationally, AKI electronic alerts ('e-alerts') have been reported to increase detection of AKI and improve patient and healthcare outcomes, especially when used in conjunction with multi-faceted AKI 'care bundles'.

The AKI service at RMH utilised the hospital electronic medical record system (EMR) to provide e-alerts to identify AKI in multi-day admission patients (>24hrs) under any surgical unit, and an AKI bundle (in EMR) to allow self-referral and communication of management. AKI education programs for surgical unit medical/nursing staff were also conducted.

Over the 12-month study period, 10.1% of surgical patients were complicated by AKI. Compared to baseline data, there was lower involvement of ICU and CCU, lower requirement for kidney replacement therapy (KRT), shorter hospital stays and decreased inpatient mortality.

The AKI pilot project reported a successful program improving hospital patient flow, early AKI detection and management and overall outcomes of surgical patients with AKI.

Dharmenaan Palamuthusingam - Evaluating the concordance of recording of comorbidities between clinical quality registries and hospital admission datasets.

Analysis of clinical data held by ANZDATA is a means of monitoring the quality of healthcare delivered however this relies on the quality of data collected and recorded. The aim of the project was to compare the reasons for admission listed in the hospital admission data sets (HAD) with conditions listed as comorbidities by ANZDATA. Conditions compared included coronary artery disease, diabetes mellitus, chronic lung disease, cerebrovascular disease, and peripheral vascular disease. There was good concordance between the datasets for diabetes mellitus, but poor concordance for coronary artery disease. Comorbidities were reported at a higher rate in ANZDATA datasets than in HAD. This may be due to differences in definitions and overidentification. Data linkage will allow an increase in specificity of comorbidities reported by ANZDATA and improve quality of analysis for health service planning.

Scott Crawford - Service Quality Group - A new way to do audit and quality improvement

The current audit framework in New Zealand has a lack of structure, strategic direction and understanding of the importance of focusing on equity. There are no tools to connect people aware of existing resources, with no translation into quality improvement. Although people are motivated to be involved there are barriers to successful implementation.

The new Service Quality Group aimed to provide a fit-for-purpose framework that is relevant, provides tools and resources, has a strategic direction, connects people and has a focus on equity. Each division of the service quality group is a multidisciplinary team. The audit central page allows users to submit an audit proposal which will be assessed and endorsed by the Service Quality Group and provides a step-by-step process for conducting the audit, monitoring and implementation of quality improvement.

SESSION THREE LEARNINGS AND OUTCOMES

There are excellent quality improvement projects undertaken both in kidney care and other specialties. Discussion groups highlighted the need to share the processes and methods for developing effective quality improvement projects across the sector with all involved in kidney care from Heads of Units to staff on the floor. Quality improvement needs to be acknowledged as a science and be recognised in career progression. Although most kidney care staff would like to be involved in driving quality improvement projects, barriers include excessive workloads and lack of support and resources from institutions.

Actions

- Develop a way to share quality improvement projects with peers
- Advocate for acknowledgement of quality improvement as a science by
 - Inclusion as a session or prize at DNT or ASM
 - Promotion of courses and qualifications available in this space.

Dr Brian Doucet - Adolescent and Young Adult (AYA) Transition of Renal Care

This work aimed to deliver fit for purpose kidney care to adolescents and young adults (AYA) with kidney disease living in the Metro North HHS catchment in alignment with national and international clinical practices. This would be achieved by developing a model of care to support best practice care for AYA with kidney disease by delivering an AYA Kidney Clinic for Metro North and evaluating the performance and outcomes of the clinic.

An adolescent and young adult model of care was developed to guide the project. A pilot clinic has now been running since September 2022 and included patients post-transplant, dialysis and pre dialysis. It is attended by a nephrologist, transplant CNC, pharmacist, dietician and youth worker. There are plans to incorporate psychologist and social services.

A plan, do, study, act methodology approach to quality improvement has been used. Quantitative outcomes have been developed and evaluation surveys will be used in the future based on effectiveness, patient experience, reach, implementation fidelity, cultural safety, efficiency and sustainability.

CONCLUSION

The Quality Care Workshop continues to evolve to find ways to best promote quality improvement in kidney care. An important aspect of this is the development of a quality improvement culture in kidney care units that involves all staff from dialysis nurses to senior management. This includes providing staff with the skills and resources required to develop effective quality improvement projects. Future Quality Care Workshops will aim to increase involvement of nursing and allied health staff involved in kidney care. The 2024 Quality Care Workshop will be co-badged with both ANSZN and the Renal Society of Australasia (RSA). The format will be designed to optimise participation and involvement of as many kidney care staff as possible.

If you would like to provide input into the structure and content of future Quality Care Workshops, please complete the following survey [Quality Care Workshop Survey](#)