Excellence in innovative implementation of clinical guidelines — the empowerment of the consumer with chronic kidney disease

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Introduction
In October 2011, the Caring for Australasians Renal Impairment (CARI) Guidelines (Kelly et al., 2005) and the Kidney Disease Outcomes Quality Initiative (KDOQI) (Vascular Access Working Group, 2006) were reviewed and developed into a care pathway to facilitate the new model of case management for all patients with chronic kidney disease. It has then subsequently been embedded into clinical practice.

The implementation of the above clinical guidelines was encompassed within an Accelerated Implementation Methodology (IMA, 2007). The project involved a number of multidisciplinary clinicians. A committee was set up to provide governance, monitoring and support to the champions during implementation. Each group was allocated a champion in the implementation of the guidelines into clinical practice. This has provided the commitment and leadership for this change process directly from within the Renal Service.

Comprehensive research and diagnostic activities were undertaken prior to the implementation. The review of the CARI guidelines (Kelly et al., 2005), New South Wales Health Renal Dialysis Costing Studies (NSW Dialysis costing Study, 2009), analysis of Australian and New Zealand Dialysis and Transplant Registry data (McDonald et al., 2012) was conducted to develop a framework for change of practice and service redesign. Further research was undertaken via patient/carer (consumers) interviews, staff interviews and multiple workshops involving a mix of multidisciplinary participants within the Renal Service to analyse the patient journey. The data and feedback of these research activities combined with the results of the literature search confirmed the key elements required to be implemented for the success in the implementation of the above guidelines.

Process of implementation
The clinical guidelines were implemented using the clinical redesign methodology. Gap analysis was conducted initially, to assess the pre-dialysis phase of a patient’s journey in the Renal Service. The process involved clearly defined phases, including initiation, diagnosis, solution, implementation and evaluation/sustainability of change, with implementation of specific clinical guidelines into clinical practice commencing in October 2011 and subsequently embedded into clinical practice.

Gap analysis from the multidisciplinary staff and the consumers revealed:
- Lack of a dedicated pathway defining the ideals of an appropriate patient journey.
- Lack of appropriate referrals to multidisciplinary clinicians, that is, allied health.
- Lack of clear guidelines on vascular access management in the pre-dialysis phase, in particular late referrals to surgeons resulting in increased and prolonged use of complication-prone dialysis catheters.
- Ineffective pre-dialysis education program.
- Home-based dialysis as first treatment option under-represented with a declining number in peritoneal dialysis (PD) and home haemodialysis numbers remaining stagnant.
- Lack of centralised data management system, leading to confused communication and fragmented and inaccurate information exchange.

Outcomes of clinical guidelines implementation
The demonstrated effectiveness of the change to clinical practice is described in the following case studies and overall measured findings:

(1) Case studies
These case studies are just two of the patient and carer experience interviews and staff interviews (n=44) which were conducted pre- and post-implementation of the guidelines. Pre-implementation interviews demonstrated a commonality of issues identified by patient, carer and staff; identifying a need for the implementation of the relevant guidelines. Post-implementation interviews have demonstrated increased improvement in care coordination, improved patient satisfaction with their care and better structure for the patient’s preparation for dialysis including psycho-social welfare.
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Pre-implementation on Patient A

The patient journey was described as “disjointed”, with a non-structured approach, leaving them and their carer “confused and not sure of what would happen next”. The “education was not effective, or individualised”, “Allied health support such as dietician and social worker were not seen until post-dialysis commencement”. There was no assessment undertaken to identify if renal psychological services were required.

Post-implementation on Patient B

The journey was described as “very good”, the individual and carer “received all the required education and support and that the involvement of the psychologist was really helpful”. “I saw the dietician and social worker and I did psychological assessment, with a visit to the psychologist” before starting dialysis and there was timely dialysis vascular access created and then carefully planned commencement of dialysis and training for home-based dialysis.

(2) A coordinated, structured and planned patient care journey

A pre-dialysis care pathway was developed in October 2011 based upon the published guidelines and has since been utilised. Since implementation, 100% of all new pre-dialysis patients have commenced on this structured, multidisciplinary care pathway, ensuring appropriate multidisciplinary planning, allowing for the initiation of dialysis therapy at an appropriate time.

The KDOQI Clinical Practice Guidelines for Vascular Access recommends appropriate planning allows time for a permanent access to be in place ready for the commencement of dialysis at the correct time. To implement this guideline, a dialysis access pathway links into the patient’s pre-dialysis care plan and is highlighted as a ‘care milestone’, ensuring appropriate time for preparation and placement of vascular access well in advance of the anticipated need for dialysis. Subsequent to the implementation of this project 100% of pre-dialysis patients now commence on a dialysis access pathway in line with the pre-dialysis care pathway. This has resulted in better coordination of care for the patients’ dialysis experience.

A psychological assessment tool has also been embedded within the care plan. All subsequent patients have undergone the assessment with referral to the renal services psychologist, where indicated. Previously indication for psychological assessment was ad hoc and inadequate.

(3) Increased uptake for home PD

The pre-dialysis care pathway, which is commenced when a patient first receives pre-dialysis education, has resulted in patients being educated earlier, allowing for better self-management, preparation time and empowerment. The direct impact of these changes has been demonstrated within home-based PD therapies. Prior to October 2011 home PD numbers were in decline to 30%; this has now reversed and increased by 6% in 12 months. This arrest and reverse in the numbers on PD also goes against the national and international trends, which has seen a continual decline in the numbers of patients opting for PD as the first treatment option with the latest published data accounting 19% of all dialysis patients nationally.

Successful implementation of the evidence-based guidelines is evident from the increased level of home PD uptake, increased patient satisfaction, and significant savings in expenditure of $1,025,000 p.a with no additional cost to either the patient or the organisation. It has also demonstrated that it is also cost-effective and creative in the approach to overcoming relevant barriers to implementation of the guidelines. The outcome of implementation of these guidelines may potentially contribute to develop new insights into the influence integrated care pathways have on modality planning and the empowering of patients towards self-management of their chronic kidney disease.

Conclusion

This project has succeeded in improving the experience of the patient journey and increasing the number of patients dialysing at home independently, which is the most beneficial form of maintenance dialysis for both the patients and the health care system. While hospitals face challenges of increased demand, the guidelines implemented by the Renal Service provide direction to meet these challenges and provide a real-life impact on patient welfare and capacity of the health system. Our model of implementation and the resources developed by our project can easily be adopted by other renal service providers. The success of this project is attributable to the dedicated clinical staff and governance model and the guidelines being embedded within this model of care provide a resilient supportive structure. The wide multidisciplinary staff involvement reflects their sustained commitment to the maintenance of beneficial change. This model of implementation can, by bridging the knowledge/practice gap, be replicated to produce sustainable, improved clinical and financial outcomes, improved quality of care, patient safety and fiscal efficiency.

The positive outcomes via the implementation of the clinical guidelines resulted in the awarding of a 2012 SWSLHD Quality Award and the project was a Finalist at the NSW Ministry of Health Award in 2012 and the winner for the 2013 National Lead Clinicians Groups Awards for Excellence in Innovative Implementation of Clinical Guidelines.

References


