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Identification of barriers and implementation of strategies to improve timing and creation of appropriate access for new Haemodialysis Patients

Pamela Lopez-Vargas¹, Martin Gallagher², Jonathan Craig^{1,3}, Rowan Walker⁴, Paul Snelling⁵, Eugenia Pedagogos⁴, Nicholas Gray⁶, Murthy Divi⁷, Alastair Gillies⁸, Michael Suranyi⁹, Hla Thein¹⁰, Kevan Polkinghorne¹¹

¹centre For Kidney Research, The Children's Hospital At Westmead, New South Wales, Australia, ²concord Repatriation And General Hospital, New South Wales, Australia, ³school Of Public Health, University Of Sydney, New South Wales, Australia, ⁴north West Dialysis Services, Royal Melbourne Hospital, Victoria, Australia, ⁵royal Prince Alfred Hospital, New South Wales, Australia, ⁶nambour General Hospital, Queensland, Australia, ⁷gold Coast Hospital, Queensland, Australia, ⁸john Hunter Hospital, New South Wales, Australia, ⁹liverpool Hospital, New South Wales, Australia, ¹⁰middlemore Hospital, Auckland, New Zealand, ¹¹monash Medical Centre, Victoria, Australia

Background: Patients who commence haemodialysis with a functioning arteriovenous fistula (AVF) have less risk of infection, morbidity and mortality. Despite guidelines for timing and access type, AVF use at first dialysis varies greatly in Australian and New Zealand renal units.

Purpose: To identify the barriers to timely AVF creation and to develop and implement strategies to increase the use of AVF at first haemodialysis.

Methods: One New Zealand and 8 Australian renal units were chosen to participate in the evidence implementation project. Perceived and actual barriers to access creation were identified for each unit by using process maps, conducting group meetings and collecting data. Consensus strategies were developed with the units and are currently being implemented to improve the identification, surgical referral and AVF creation rates for CKD patients. Various strategies were used to achieve this.

Results: Most renal units perceived that five major barriers existed: absence of a central database for monitoring patients' records; no formal policies to guide referral of patients for pre-dialysis education, surgical referral or access creation; late referrals from the general practitioner (GP); long waiting times for surgical review and access creation; and patient denial about severity of disease. Baseline data indicates the actual barriers to be: the first two points listed above and late referral from nephrologist to surgeon. Waiting times for surgical review and access creation were less than perceived. Patient denial has been difficult to assess. Results from the implementation phase indicate improved rates of AVF use at first dialysis.

Discussion: The problem of delayed AVF formation is not due to late referrals from the GP or long surgical waiting times as thought but is caused by the lack of an effective dialysis preparation pathway within the renal units. Formal guidelines for units have been developed and are currently being implemented.