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Fact Sheet

REDUCCTION – REDUcing the burden of dialysis Catheter ComplicaTIOns: a National approach

March 2017

The George Institute for Global Health

Facts:

- In an average Australian Dialysis unit, dialysis catheters result in between 15 and 33 episodes of bacteraemia per year; 2 and 4 deaths per year and cost $330k-$770k per year.
- Currently there is no systematic approach to this problem, either in measurement or implementation of the existing research evidence.
- This project will establish measurement and evidence-based implementation systems to reduce harmand costs nationally.

Partners:

The George Institute for Global Health

Supporters:

24 Partners including health departments, renal units, consumer groups and the ANZDATA Registry

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National Health and Medical Research Council, (NHMRC)

Background:

Healthcare associated infections (HAI) cause significant and life-threatening harm to patients and incur major additional costs. Patients with kidney disease are especially susceptible to HAI, due to the harm associated with central dialysis catheter use. These catheters, essential to the delivery of life-sustaining dialysis treatment, are widely used and are a major driver of blood stream infection and increased mortality seen in patients receiving dialysis.

REDUCCTION
REDUcing the burden of dialysis
Catheter ComplicaTIOns: a National approach

Aims:

The REDUCCTION Partnership Project, has the following aims:

1. To define the national, clinical and economic burden of dialysis catheter infections in Australia.
2. To implement an evidence-based and systematic intervention package using a stepped-wedge cluster design with the objective of reducing dialysis catheter related bacteraemia.
3. To establish a framework for monitoring dialysis catheter related bacteraemia and sustaining improvements from the intervention phase.

Methods:

- This evidence implementation study will use a stepped-wedge, cluster trial design, involving over 35 renal dialysis units across Australia.
- The study intervention is a multifaceted, evidence-based intervention (encompassing components of care throughout dialysis catheter use) applied at a unit level, with the timing of the study intervention randomly determined.
- The major outcomes will be catheter-related bacteraemia and infection.

Impact:

- The project will form the basis of first coordinated national approach to reduce dialysis catheter bacteraemia.
- Such an approach has the potential to reduce thousands of cases of dialysis catheter-associated infections, with associated reductions in morbidity and healthcare expenditure.

Contact:

To find out more about the REDUCCTION trial and its principal investigators Dr. Martin Gallagher, Renal & Metabolic Divison and Dr. Sradha Kotwal or The George Institute for Global Health, please contact:

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