



FESTIVAL OF
**CONTAGIOUS
IDEAS** 2016



NEW SOUTH WALES
HEALTH INNOVATION
Symposium 2016

Harry Collins Award

Central line infection prevention in newborns Sydney Local Health District

Challenge

Central lines are a vital part of care for our sick newborn patients, providing a stable portal for provision of life-saving medications and the necessary nutrition that babies need to grow.

However, they come with complications, of which central line-associated blood stream infection (CLABSI) is one. Prevention of CLABSI is a key objective for improvement of patient safety and reduction of mortality, morbidity, hospital stay and costs.

After an audit in 2012, we found that CLABSI rates in our Newborn Care Unit were high compared to NSW benchmarking data. We were determined to find solutions to reduce infection rates.



Solution

We introduced a bundle of evidence-based interventions to reduce the number of CLABSI. The bundle was implemented via a structured education program, featuring interactive problem-focused learning scenarios to teach specific skills. We included skills such as insertion and maintenance of central lines, as well as others such as hand hygiene, assertiveness training to facilitate staff empowerment and audit feedback to give positive encouragement to staff. We created a central line policy to clarify and define interventions.

Results

We performed a retrospective cohort analysis to document central line use and infection rates before and after the intervention. Results showed significantly reduced central line use and dwell time, and sustained reduced CLABSI rates. The project highlights the substantial impact on clinical practice that can be made within one nursery, and that this translated into significant reductions in CLABSI. It was initiated locally, implemented through education and utilising CORE values, and generalisable to other neonatal units.

