



FESTIVAL OF CONTAGIOUS IDEAS 2016



NEW SOUTH WALES
HEALTH INNOVATION
Symposium 2016

Harry Collins Award

Right bug, right drug - every patient, every time Central Coast Local Health District

Challenge

Inappropriate and overuse of antimicrobials drives the emergence of antimicrobial resistance, increases rates of healthcare-associated infection and compromises patient safety. Despite measures such as antimicrobial restriction, clinicians did not have a good understanding of the importance of appropriate antimicrobial use, we were using a significantly broader spectrum antimicrobials than peer hospitals and antimicrobial prescribing was largely influenced by past experience rather than evidence-based guidelines.

The aim of this project was to implement and develop an Antimicrobial Stewardship (AMS) program to improve the safe and appropriate use of antimicrobials, reduce patient harm and decrease the incidence of antimicrobial resistance.



Solution

An ongoing multi-pronged approach is being undertaken, which involves stakeholder engagement, implementation of a decision support and approval system with an associated antibiotic protection policy, developing guidelines, ward rounds, regular auditing, education and feedback, quality improvement projects and monitoring outcomes. Importantly, these activities help to facilitate real-time review of antimicrobial prescriptions to ensure appropriate choice, dose, frequency, route of administration and duration of therapy for best possible care of patients with or at risk of infection.

Results

Since implementation of the AMS program 18 months ago, we have achieved and maintained a 50% reduction in the use of third-generation cephalosporins (Graph 1) and fluoroquinolones, as well as a 25% overall improvement in guideline-concordant prescribing.

There are ongoing challenges with behavioural and attitude change of recalcitrant prescribers but overall there has been excellent overall uptake and clinician buy-in. Ongoing work is being done to further develop and extend the scope of the program.



Acknowledgments

Pharmacy Department, Central Coast Local Health District, NSW, Australia
Department of Microbiology and Infectious Diseases, Pathology North Central Coast, NSW, Australia