

INNOVATION Awards 2013

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ASK (For Guidance) Collaborative Team

Introduction

Antimicrobial Stewardship Knowledge (ASK) is a collaborative multi-site project utilising an innovative computerised decision support program to improve antimicrobial usage within hospitals. Prior to implementation of ASK, hospitals used different manual methods to manage antimicrobial use. This presented limitations such as delayed identification and follow up of non concordant prescribing, labour intensive auditing and insufficient resources to support ongoing antimicrobial stewardship activities.

Aim

To improve antimicrobial usage by introducing an electronic decision support program that aligns prescribing with best practice guidelines, empowers staff and promotes antimicrobial stewardship.



The ISLHD team at the Wollongong Hospital

Method

- An electronic solution providing real time identification and auditing of antimicrobials was seen as an enabler to drive clinical improvement
- GuidanceMS was the electronic program selected. It was implemented using project methodology and overseen by a multi-district, multidisciplinary steering committee
- Extensive consultation on clinical guidelines and processes occurred with medical specialties, pharmacy departments, hospital executive, clinical councils, drug and therapeutics committees, and infection control at all sites prior to implementation (Figure 1)
- The rollout of GuidanceMS was staged over 7 months across 12 hospitals from March 2012 to November 2012.

Results

- Improved appropriateness of prescribing according to evidence-based clinical guidelines
- Shared knowledge between specialist and smaller centres
- Usage of many broad spectrum antibiotics has decreased relative to National Antimicrobial Utilisation and Surveillance Program (NAUSP) benchmarks
- Shift towards more targeted prescribing for pneumonia (figure 2 and 3)
- Program has been self-funded through reduction of antimicrobial costs of around \$0.5-1 million per annum
- High user satisfaction demonstrated though high program uptake and surveys
- Enabled sites to meet national accreditation standards
- Strong relationships and teamwork forged between ID clinicians, pharmacists, IT experts, executive and others

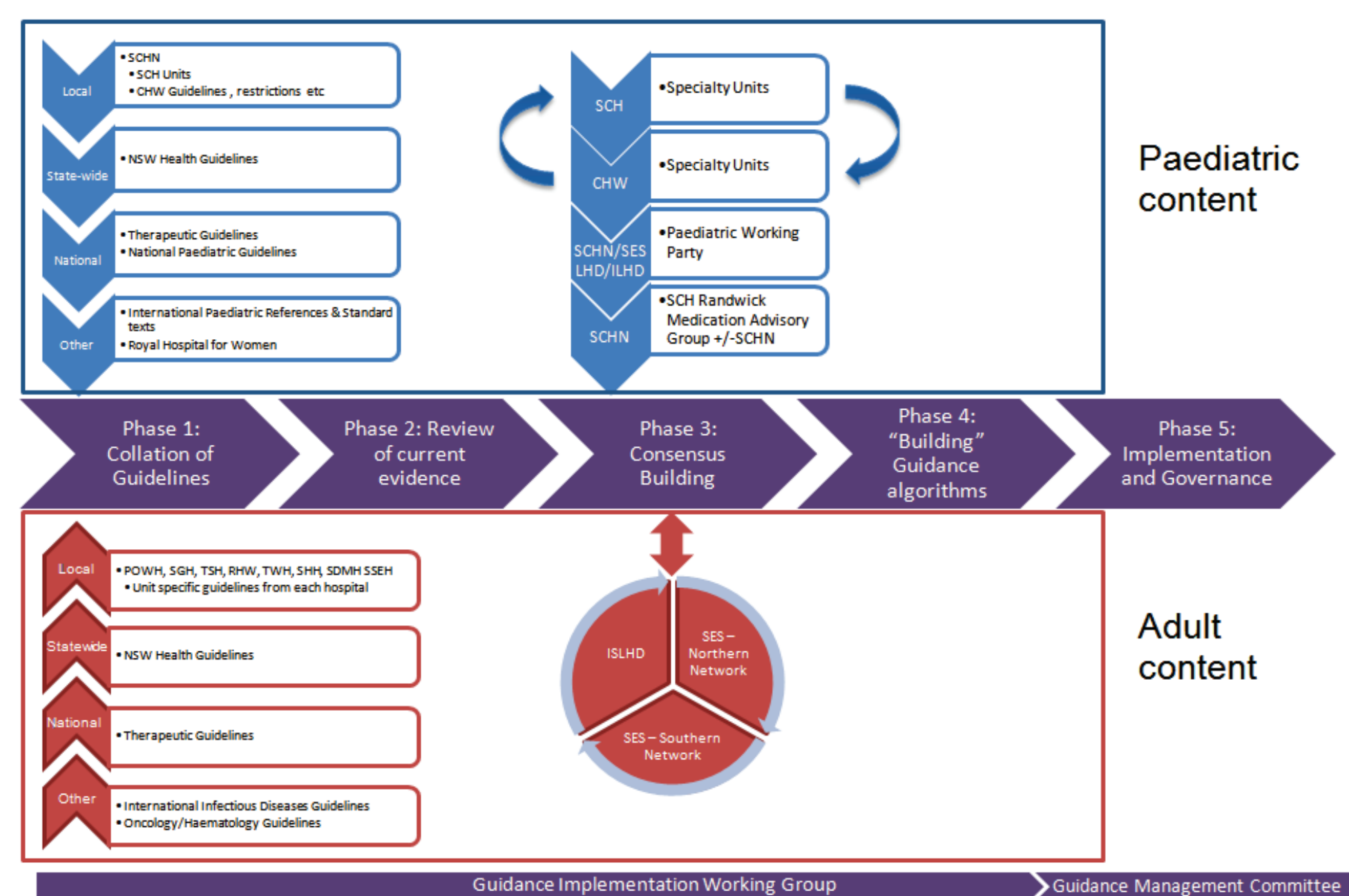


Figure 1. Content and Governance development of ASK. The project was a collaborative effort of twelve hospitals in three health districts. It incorporated input from numerous stakeholders from front line staff to hospital executive to develop the final product



The SESLHD team at launch of Guidance MS at St. George Hospital

Conclusion

The ASK project demonstrates how extensive collaboration led to the successful procurement and implementation of an innovative multi-site electronic decision support program to improve antimicrobial use across 12 urban and rural hospitals and 3 health districts.

We have transitioned from struggling to contain and manage excess antimicrobial prescribing to implementing a state of the art program that can be fully self-funded.

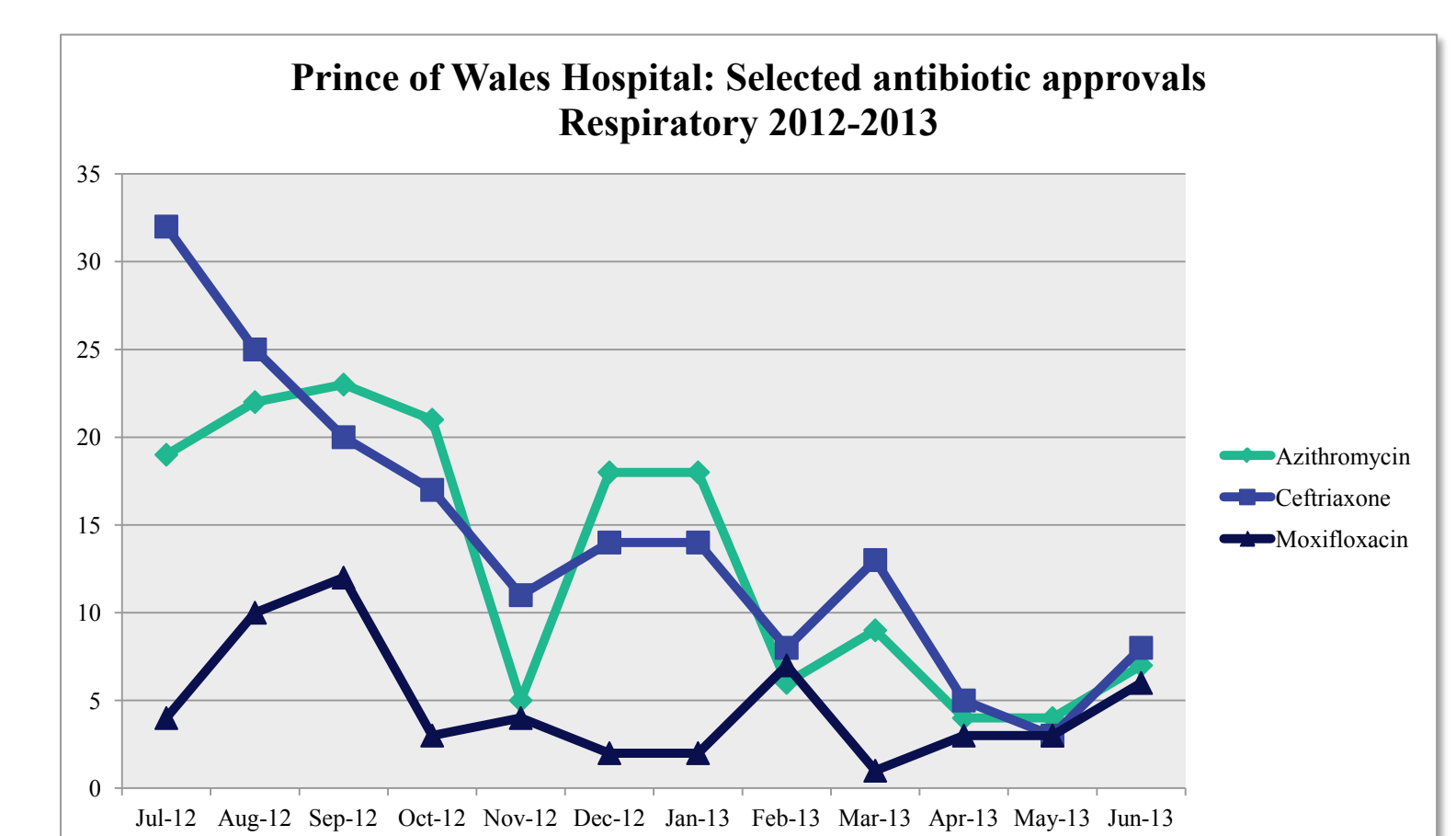


Figure 2. Reduction in the use of broad spectrum antimicrobials (azithromycin, ceftriaxone and moxifloxacin) in patient with community acquired pneumonia which occurred at Prince of Wales hospital post implementation of the ASK program.

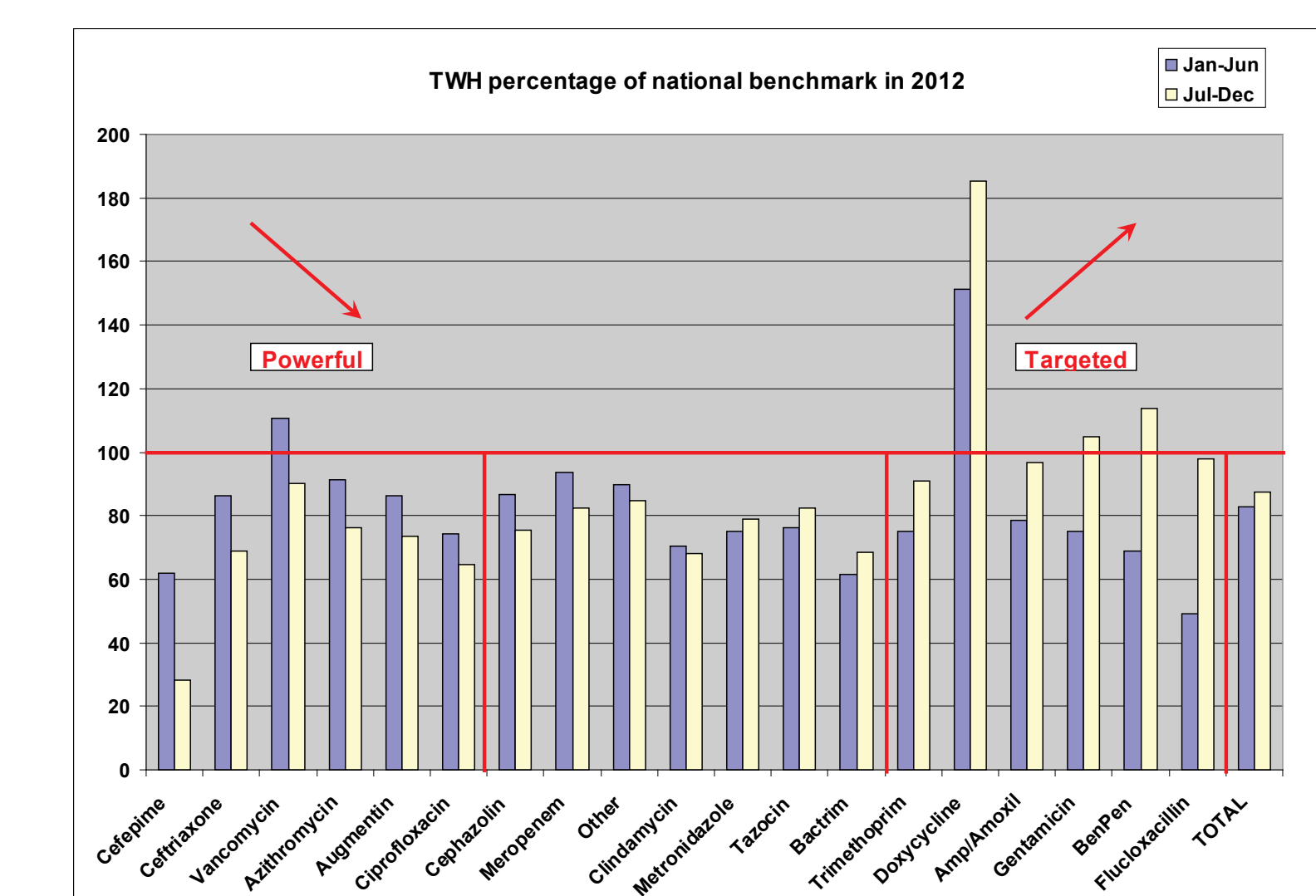


Figure 3. Shift in prescribing at Wollongong Hospital from using broad spectrum antibiotics to more narrow spectrum drugs as a result of the ASK program

Acknowledgements

SESLHD and ISLHD team:
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