

# In the hand of our clinicians

## Introduction

The current process for updating and disseminating antimicrobial prescribing recommendations was recognised as inadequate, with insufficient access to clinicians and limited version control.

The emergence of antimicrobial resistant bacteria is of major concern to world societies. Existing Hunter New England Antimicrobial guidelines provided an underpinning framework for appropriate antimicrobial use, however the project aimed to use available technology to provide more current, easily accessible, decision support information for clinicians around antimicrobial prescribing.

## Key activities

A website was developed which was accessible from Android and iPhone mobile phones and desktop computers. This allowed for greater version control and provided opportunity for engagement with hard to reach groups e.g. rural GPs/Visiting Medical Officers and clinicians on-call.

The use of mobile phones appealed to the digital generations who make up junior medical, pharmacy and nursing workforce. A 2012 orientation week survey of the Junior Medical Officer Prevocational Workforce found that while 100 per cent owned a smartphone, 30 per cent were android and any program would require multiple platform access. The Hunter New England Application Development Team were engaged to develop the website within the Hunter New England Network to meet all the functional requirements the project requested, within available resources.

## Key achievements

In six months following launch, the website received 1700 sessions with 2100 page views.

The project improved quick clinician access to guidelines, which help the prevention and treatment of health associated infections. Successful stewardship programs have been implemented within Hunter New England Local Health District which aim to optimise individual patient care while minimising the development and spread of antibiotic resistant microorganisms. Compliance with guidelines is a major component of this.

### NATIONAL ANTIMICROBIAL UTILISATION SURVEILLANCE PROGRAM

**Contributor: JOHN HUNTER HOSPITAL**

The antimicrobial utilisation rates provided in this report are calculated using the number of defined daily doses (DDDs) of the antimicrobial agent or class consumed each month per 1,000 occupied bed days. Rates reported for this hospital are for total hospital use. Antimicrobial classes reported are 3rd/4th generation cephalosporins (ceftriaxone, cefotaxime, ceftazidime, cefepime), glycopeptides (vancomycin, teicoplanin), carbapenems (meropenem, imipenem/cilastatin), fluoroquinolones (ciprofloxacin, moxifloxacin, norfloxacin), aminoglycosides (gentamicin, tobramycin, amikacin) and anti-pseudomonal penicillins plus beta-lactamase inhibitor (piperacillin/tazobactam, ticarcillin/clavulanate). The corresponding national rates based on pooled data from all similarly-peered contributing hospitals are also reported.

Some contributors were unable to supply data for this report, therefore the comparator rates presented in this report may not be entirely representative of national use within this peer group, and may differ from those reported when additional data are available.

In all charts included in this report, H = hospital use, N = national program use. National program usage is indicated by a broken line in each case.

Enquiries regarding information contained in this report should be directed to the Senior Pharmacist, National Antimicrobial Utilisation Surveillance Program (ph 08 74257169 or [antibo@health.sa.gov.au](mailto:antibo@health.sa.gov.au)).

#### 1. TOTAL HOSPITAL USE BY ANTIMICROBIAL CLASS

Total hospital antimicrobial utilisation rates for the period January 2011 to April 2014 are displayed in charts 1 and 2.

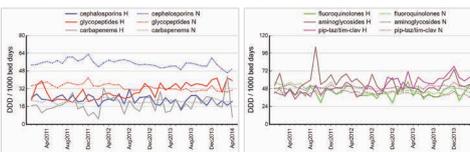


Chart 1: Total hospital usage of 3rd/4th generation cephalosporins, glycopeptides and carbapenems.

Chart 2: Total hospital usage of fluoroquinolones, aminoglycosides and anti-pseudomonal penicillins plus beta-lactamase inhibitor.

HNE LHD Quality Use of Medicines Committee Health Hunter New England Local Health District

**HNEQUM.com.au**

HNE Medication Guidelines for your PC/Tablet or Phone (iPhone or android)

QR code access for your phone/tablet