

## Antimicrobial Usage Rounds in Intensive Care Units

### Introduction

Multi-disciplinary antimicrobial use rounds are a valuable tool to improve the quality of antimicrobial use in the intensive care unit.

Face-to-face rounds with an antimicrobial team are considered to be most beneficial although it is recognised that not all facilities have direct access to these services. Where services are limited teleconferencing or videoconferencing at least weekly or more in larger units has been suggested as a method to ensure patients receive the most appropriate antimicrobial therapy.

#### Suggested team composition

- ICU medical officer
- Infectious diseases medical officer
- Microbiologist
- Pharmacist
- ICP/CNC

It is important to structure rounds to ensure all participants are enabled to provide accurate advice. To support this process all microbiology results and current antimicrobial therapies for admitted patients should be reviewed prior to each round.

#### Suggested round processes

- Discuss each admitted patient in turn, focusing on those who are receiving antibiotics.
- Examine clinical situation, what the function of treatment is (prophylaxis, empiric or directed treatment)
- Recommend necessary changes - switches to directed treatment, cessation of prophylaxis, cessation/end dates for empiric or directed treatment
- Recommend additional investigations in patients with potentially undiagnosed infection
- Review previous treatment decisions and patient outcome as required
- Perform necessary infection control procedures such as hand hygiene during the round ensuring compliance by visiting liaison staff
- Consider documenting the round treatment change decisions and usage appropriateness (see example audit tool)
- Utilise educational opportunities as they arise
- Feed information back to the Intensive care unit