

Addressing antibiotic resistance in regional Victoria using telecommunication consultation

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Background: Our regional hospital was faced with a challenge to implement an antimicrobial stewardship (AMS) program. AMS objectives are to improve patient outcomes by optimising antimicrobial use, ensure cost effective therapy and reduce antimicrobial resistance. Models that have been used in metropolitan areas would not be appropriate in regional areas due to limited access to key health professionals. Our hospital identified two key individuals that were needed to form the AMS team. A dedicated onsite AMS pharmacist and access to expert advice from an infectious disease physician. The pharmacist was at the bedside and physician was on the phone with remote computer access to the hospital's IT system. This team would assess prescribing of all monitored antimicrobials and provide valuable recommendations.

Aim: To evaluate the AMS team influence on prescribing of antibiotics.

Method: The AMS program was evaluated by retrospectively analysing the last six months data. The preliminary findings examined 30 AMS recommendations. The appropriateness of antibiotics was assessed using the 'Therapeutic Guidelines Antibiotics' and by the AMS team.

Results: Out of the 30 recommendations made, 93% concurred with the Therapeutic guidelines. The most common recommendation given by the AMS team was duration of antibiotics (43%), change administration of intravenous to oral antibiotics (27%), cease antibiotics (23%), plan for oral antibiotics (13%), seek further infectious disease consultation (13%), additional monitoring required (7%) advice on frequency/dose change (6%) and increase antibiotic cover (3%). Out of the 30 recommendations made by the AMS team 77% of the recommendations were implemented by the prescribing team.

Conclusion: The AMS team is providing valuable recommendation to the prescribing team which will reduce antimicrobial resistance. The AMS team assists prescribing clinicians to meet best practice, which improves the cost effectiveness for the Australian health system. AMS in the regional hospital is a new development. Ongoing review on how to improve implementing an AMS program using telecommunication is required.