

O654

Abstract (oral session)

Improving hospital antimicrobial prescribing using quality indicators

J. Sneddon, A. Patton, D. Nathwani*, E. Watson on behalf of the Scottish Antimicrobial Prescribing Group

Objective: To use quality indicators for antimicrobial prescribing to support reduction in Clostridium difficile infection (CDI) and improve prescribing practice. **Methods:** In 2008, the Scottish Antimicrobial Prescribing Group (SAPG) issued national guidance on restriction of antibiotics associated with high risk of CDI within antimicrobial prescribing policies. In 2009 Scottish Government introduced a target for a 50% reduction in CDI by 2011 and SAPG developed and implemented the following quality indicators to support achievement of this target. A. Indication recorded and empirical antibiotic choice compliant with local policy. Target $\geq 95\%$ compliance. B. Duration of surgical prophylaxis < 24 hours and choice compliant with local policy. Target $\geq 95\%$ compliance. In 2011 the CDI target was revised to use a 'best in class' approach and the quality indicators were revised to focus on achieving reliable and sustainable improvement. Indicator A required that any deviations from policy were documented. Indicator B focused on using a single dose in elective colorectal surgery **Results:** By March 2011 CDI rates in Scotland had reduced by 77%. For indicator A, in acute admission units median compliance was 93% for indication documented and 83% for compliance with local policy. For indicator B compliance was $> 90\%$ in a variety of surgical specialties. Following revision of the indicators, in September 2011 for indicator A median compliance was 93% for indication documented and 83% for compliance with local policy and analysis of information on deviation from policy showed common themes. A breakthrough collaborative of clinical teams comprising managers, medical, nursing and pharmacy staff was set up to map the process of prescribing an antibiotic and design tests of change to improve clinical practice. For indicator B, by September 2011 median compliance with antibiotic policy was 100% and median compliance with single dose was 95%. The measures are being integrated within the surgical checklist to achieve sustainability. **Conclusion:** Prescribing indicators are an effective means of improving antimicrobial prescribing. The combination of measures for scrutiny with improvement methodology can lead to reliable and sustainable improvements in prescribing practice.