

THE IMPACT ON ANTIBIOTICS

The impact on antibiotics (Vancomycin, doxycycline and teicoplanin) prescribed for the commonest infection due to AMR, MRSA infection, was assessed as a tertiary outcome. The study was not powered for this outcome, which was reported in Appendix 2 of the trial's technical report (1). Data were supplied as units of issue and converted into defined daily doses (DDDs) using WHO Collaborating Centre for Drug Statistics Methodology classifications (2). The intention to treat analysis showed a significant reduction in prescription on ACE wards (IRR of 0.83 [0.80, 0.87]; $p < 0.0001$). The per protocol analysis showed a significant effect in both ITUs (IRR 0.59 [0.56-0.67]; $p < 0.0001$) and ACE wards (IRR 0.49 [0.45-0.53]; $p = 0.000$) with an effect of fidelity to intervention on ACE wards (estimated IRR per form returned 0.93 [0.91-0.95]; $p < 0.0001$).

These findings should be interpreted with caution as the trial was not powered for this outcome, which may have been influenced by other infection control interventions, although such secular trends might at least partially accounted for in the stepped wedge analysis. However they are consistent with the views of the UK AMR strategy, the O'Neill report that better infection control practice, especially hand hygiene, will reduce the demand for antibiotics, by preventing infections requiring antimicrobial treatment, including those due to AMR organisms, thus preserving the efficacy of existing antibiotics. Full results are in the technical report (reference 1)

(1) Stone S, Fuller C, the NOSEC/FIT investigators (2012) *Report to the Patient Safety Research Programme*. Available: <http://www.birmingham.ac.uk/Documents/college-mds/haps/projects/cfhcp/psrp/finalreports/PS029FinalReportStone.pdf> (Accessed 2 August 2016)

(2) WHO Collaborating Centre for Drug Statistics Methodology, *ATC classification index with DDDs 2005*. Oslo 2004.