



Non-Medical Prescriber Antimicrobial Stewardship Rounds

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Context

It is well documented that optimal antimicrobial stewardship programmes need to be multi-disciplinary^{1,2}, although, historically, the stewardship agenda has been addressed by the medical and/or pharmacy profession. This project aimed to promote the key concepts of stewardship using a pharmacist and nurse partnership, which is both unique and innovative.

Improvement Issue

Promote optimal antimicrobial management and create a multidisciplinary approach to infection management within 2 surgical inpatient areas.

Process

The Advanced Nurse Practitioner (ANP) for stewardship along with the Advanced Antimicrobial Pharmacist (AP) attended one consultant led ward round on each ward per week for a period of six months.

Improvement Strategy

As part of the ward round process the ANP/AP prompted interventions around antimicrobial management and encouraged compliance with antimicrobial policy - more specifically indication, route, duration, suitability for IVOST and review of microbiology so as to streamline treatment.

Acceptability of suggested interventions by the surgical team formed one of the process measurements. The improvement project was split into two phases.

Results Evidence

The prevalence of antimicrobial use remained steady across both phases of the intervention, as did compliance with agent choice. The number of interventions made by the AP and ANP between the first and the latter phase in both clinical areas reduced significantly to 14% (ward A) and 9% (ward B) ($p < 0.0001$) demonstrating that a behaviour change had been adopted. Although not statistically significant, the number of interventions accepted by the surgical teams increased in both ward areas to 100%. This suggests that over time, the AP and ANP gained credibility and the confidence of the surgical teams.

Ward A - 124 patients on antimicrobials

	Antimicrobial prevalence	Compliance with policy	No of NMP interventions	No of interventions accepted
Phase 1	33% (75/228)	94% (71/75)	36 (53% 36/68)	27 (75% 27/36)
Phase 2	28% (49/177)	96% (47/49)	7 (14% 7/49)	7 (100% 7/7)

Ward B - 126 patients on antimicrobials

	Antimicrobial prevalence	Compliance with policy	No of NMP interventions	No of interventions accepted
Phase 1	32% (72/225)	93% (67/72)	36 (50% 36/72)	28 (77% 28/36)
Phase 2	27% (54/202)	98% (53/54)	5 (9% 5/54)	5 (100% 5/5)

Future Steps

This project can be further developed in the future by introducing a pharmacist and nurse led ward round in other clinical areas to see if the positive results are repeated in other clinical specialties. Developing a work program for nursing staff to compliment ward round intervention would be hugely beneficial. Liaising with the clinical ward pharmacist so they can continue to educate and integrate themselves into the team while addressing the stewardship agenda.

REFERENCES

1. Scottish Government. Scottish Management of Antimicrobial resistance Action Plan 2014-18 (ScotMARAP2). 2014
2. BSAC. Antimicrobial Stewardship: From Principles to Practice. 2017