




Antimicrobial stewardship across 47 South African hospitals: an implementation study

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Summary

Background

The available data on antimicrobial stewardship programmes in Africa are scarce. The aims of this study were to assess the implementation of an antimicrobial stewardship programme in a setting with limited infectious disease resources.

Methods

We implemented a pharmacist-driven, prospective audit and feedback strategy for antimicrobial stewardship on the basis of a range of improvement science and behavioural principles across a diverse group of urban and rural private hospitals in South Africa. The study had a pre-implementation phase, during which a survey of baseline stewardship activities was done. Thereafter, a stepwise implementation phase was initiated directed towards auditing process measures to reduce consumption of antibiotics (prolonged duration, multiple antibiotics, and redundant antibiotic coverage), followed by a post-implementation phase once the model was embedded in each hospital. The effect on consumption was assessed with the WHO index of defined daily doses per 100 patient-days, and the primary outcome (change in antibiotic consumption between phases) was assessed with a linear mixed-effects