THE LANCET Infectious Diseases

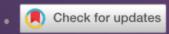
ARTICLES | VOLUME 16, ISSUE 9, P1017-1025, SEPTEMBER 01, 2016

Antimicrobial stewardship across 47 South African hospitals: an implementation study

Dr Adrian J Brink, MD 🔌 🖂 • Angeliki P Messina, BPharm • Prof Charles Feldman, DSC • Prof Guy A Richards, PhD •

Prof Piet J Becker, PhD • Prof Debra A Goff, PhD • et al. Show all authors • Show footnotes

Published: June 13, 2016 DOI: https://doi.org/10.1016/S1473-3099(16)30012-3



Summary

References

Article Info

Linked Articles

Related Specialty

Collections

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