Development and implementation of a standardised antimicrobial stewardship audit to improve benchmarking across a region.

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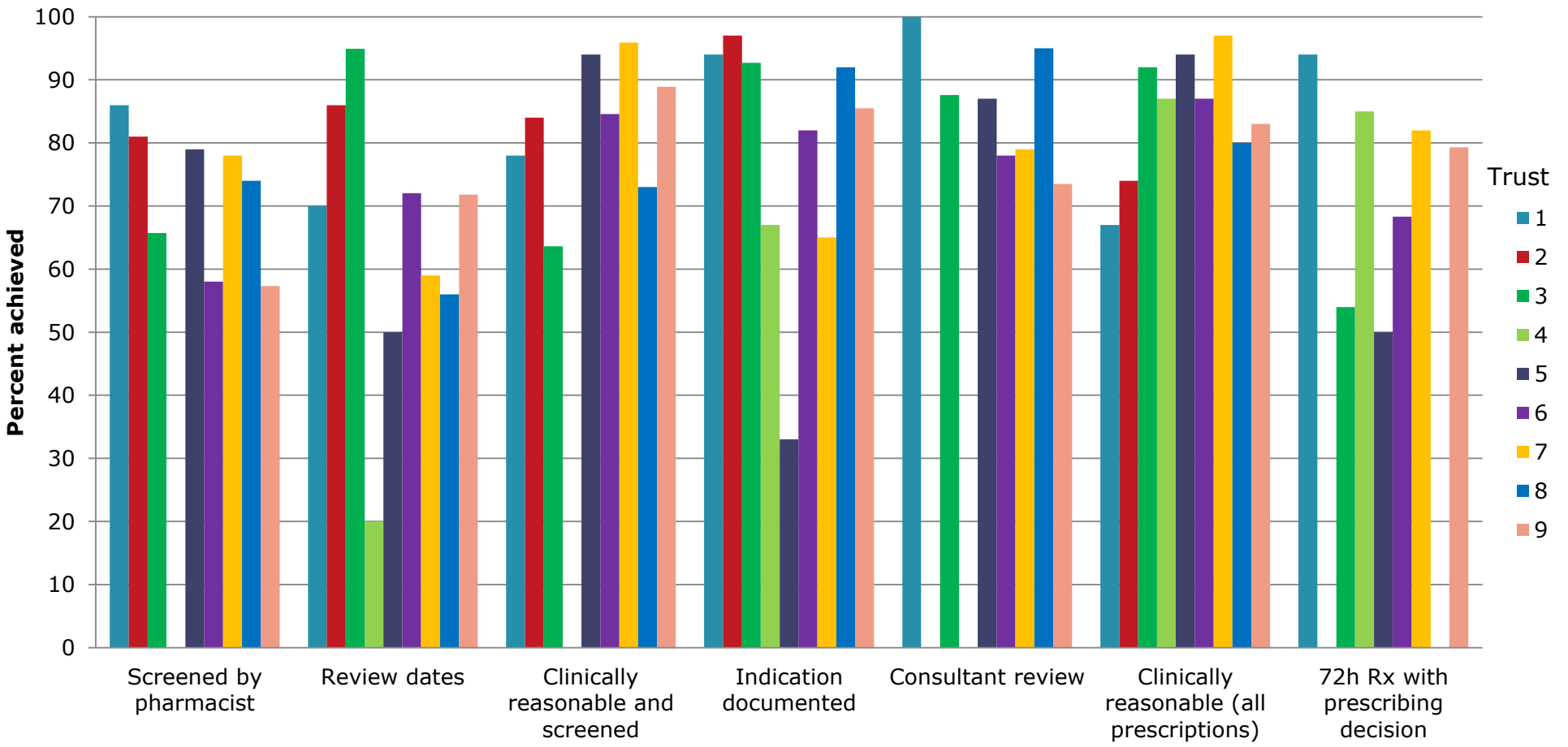
Background: Acute trusts are encouraged to benchmark antimicrobial quality assurance measures to provide an additional context to consumption data.[1] The regional antimicrobial pharmacists group share antimicrobial consumption data but this does not take into account differences between hospitals including patient mix. Antimicrobial prescribing quality indicators shared contain inequalities including differences in the profession (Dr vs pharmacist), ownership of area (own vs peer ward) and knowledge of staff collecting and interpreting data. These differences may bias the results preventing effective benchmarking and quality improvement.

Objectives: To develop and implement a standardised audit methodology using the same patient mix and speciality of staff examining antimicrobial stewardship indicators across a range of teaching and district general acute NHS Trusts within a region.

To achieve 90% in the following audit standards:
Standard 1: patients clinically screened by pharmacist
Standard 2: have a Stop / review date / duration on prescription indication documented on prescription chart
Standard 3: patients who had been screened by a pharmacist where choices were clinically reasonable
Standard 4: indication documented on prescription chart
Standard 5: patients reviewed by a Consultant
Standard 6: antimicrobial choice clinically reasonable
Standard 7: prescriptions >72 hrs with a prescribing decision documented in the notes

Methods: Quality indicators, audit standards, data collection criteria and patient specialties applicable to all hospitals in the region were discussed and agreed. Trust antimicrobial pharmacists collected and analysed data on 100 patient cases (10 each from Respiratory, Urology, Medical admissions, Surgical admissions, Orthopaedics, Haematology/Oncology and 20 patients each from Gastro/vascular surgery and General medicine/care of the elderly.) between November and December 2015.

Percent audit standard achieved



Results: Data submission varied between Trusts due to the variation of resources between Trusts. Ranges and means are reported.

- Standard1: Pharmacist screen: (range 57-86%) mean 72 %
- Standard 2: Stop/review date documented: (range 20-95%) mean 64%
- Standard 3: Screened and reasonable: (range 64 - 96%) mean 83%
- Standard 4: Indication documented: (range 33-97%) mean 79%
- Standard 5: Consultant review; (range 73.5-100%) mean 86%
- Standard 6: Antimicrobial choice reasonable: (range 67-97%) mean 85%
- Standard 7: 72 hour prescribing decision: (range 50-94%) mean 73%

Conclusions: This audit allowed a more consistent approach to data collection; patient mix was comparable as was data interpretation. Although some Trusts achieved the desired standard in several indicators, there was no indicator where the whole region achieved the standard set and there was still a wide variation in many parameters. This data is useful to highlight to individual Trusts where they are outliers and should focus efforts to improve stewardship locally and regionally. The audit has encouraged sharing of best practice across the region. This audit will be repeated annually across the region, allowing effective comparisons to be drawn. Further development of this initiative will take variation in resources available to participating organisations into consideration.

References1. Public Health England. Start Smart - Then Focus Antimicrobial Stewardship Toolkit for English Hospitals. 2015. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/417032/Start_Smart_Then_Focus_FINAL.PDF (assessed 10/6/2016)

Abstract ID 4728