

Taking the sting out of UTI prescribing

An audit improving compliance with diagnostic and management guidelines for urinary tract infections in primary care

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INTRODUCTION

The aim of the audit was to reduce inappropriate antibiotic prescribing for urinary tract infections (UTIs) in non-catheterised females aged >16y across a primary care network (PCN) of approximately 45,000 patients.

UTIs constitute 1-3% of primary care consultations and 13.7% of community antibiotic prescriptions [1]. Ensuring we manage these in line with the guidelines is critical to practicing good antimicrobial stewardship (AMS) and avoiding treatment failure. Auditing practice across an entire PCN means high numbers of patients being impacted by outcomes.

METHODS

We audited two cohorts of female patients: Group A (16-65y) and Group B (>65y), over a 3 month period from 1st June to 31st August 2023.

In Group A, we randomly selected a sample of 20 non-pregnant female patients from a total of 500 who had been coded with a diagnosis of UTI or suspected UTI, or prescribed nitrofurantoin, trimethoprim, pivmecillinam or fosfomycin.

In Group B the inclusion criteria were wider to reflect the greater variability in the presentation of UTI in the >65 age group. We randomly selected 20 from 285 patients. Data was then input to the RCGP Target template [2] which focuses on correct diagnosis and management of UTI based on Public health [3] and NICE guidelines.

RESULTS

The audit found better compliance with guidelines for Group A (16-65y) than Group B (>65y). Correct diagnostic criteria were used for 95% vs 65% of encounters. Choice of antibiotic followed guidelines for 100% vs 80% of prescriptions, although the recommended course length was not commonly followed (33% vs 46%). Appropriate safety netting advice was provided for 100% vs 75% of patients.

Key areas identified for improvements were excluding vaginal symptoms (40% vs 10%) and sharing information on AMS (not documented in any of the audited encounters) and management of UTI based on NICE guidelines.

REFERENCES

1 NHS England Improving urinary tract infection treatment in peoples' homes [Internet]. England.nhs.uk. 2018. Available from: https://www.england.nhs.uk/atlas_case_study/improving-urinary-tract-infection-treatment-in-peoples-homes/

2 RCGP Urinary tract infection resource suite [Internet] RCGP Learning. Available from: <https://elearning.rcgp.org.uk/mod/book/view.php?id=12652&chapterid=467> (Accessed: 04 September 2024).

3 Diagnosis of urinary tract infections: quick reference tools for primary care [Internet]. GOV.UK. Available from: <https://www.gov.uk/government/publications/urinary-tract-infection-diagnosis>

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Diagnosis and management of UTI patients aged 16 to 65 years

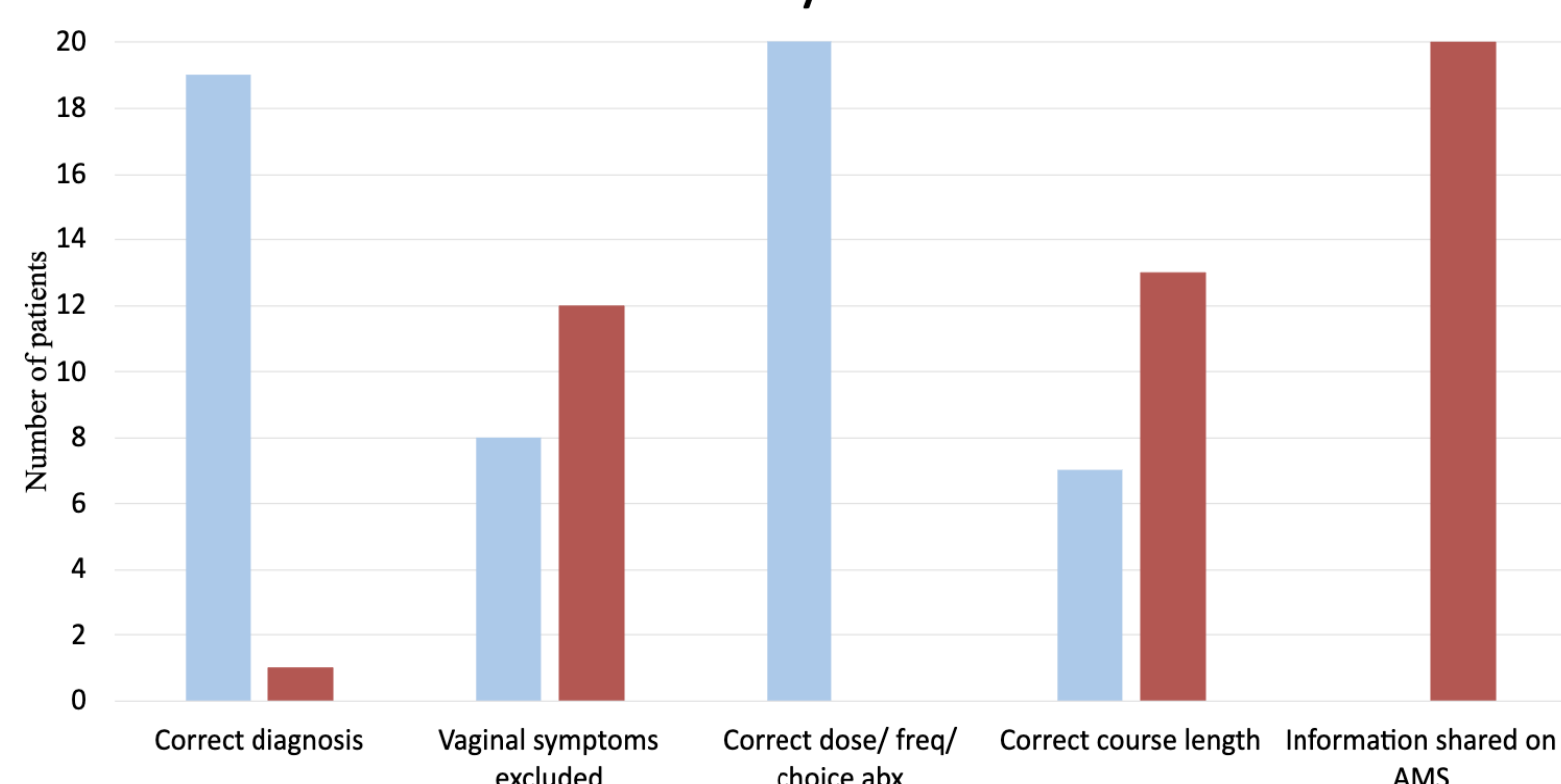


Figure 1 : Group A - displaying results of key measures from the RCGP Target guidelines [2]

Key:
■ Yes ■ No

Diagnosis and management of UTI patients aged >65 years

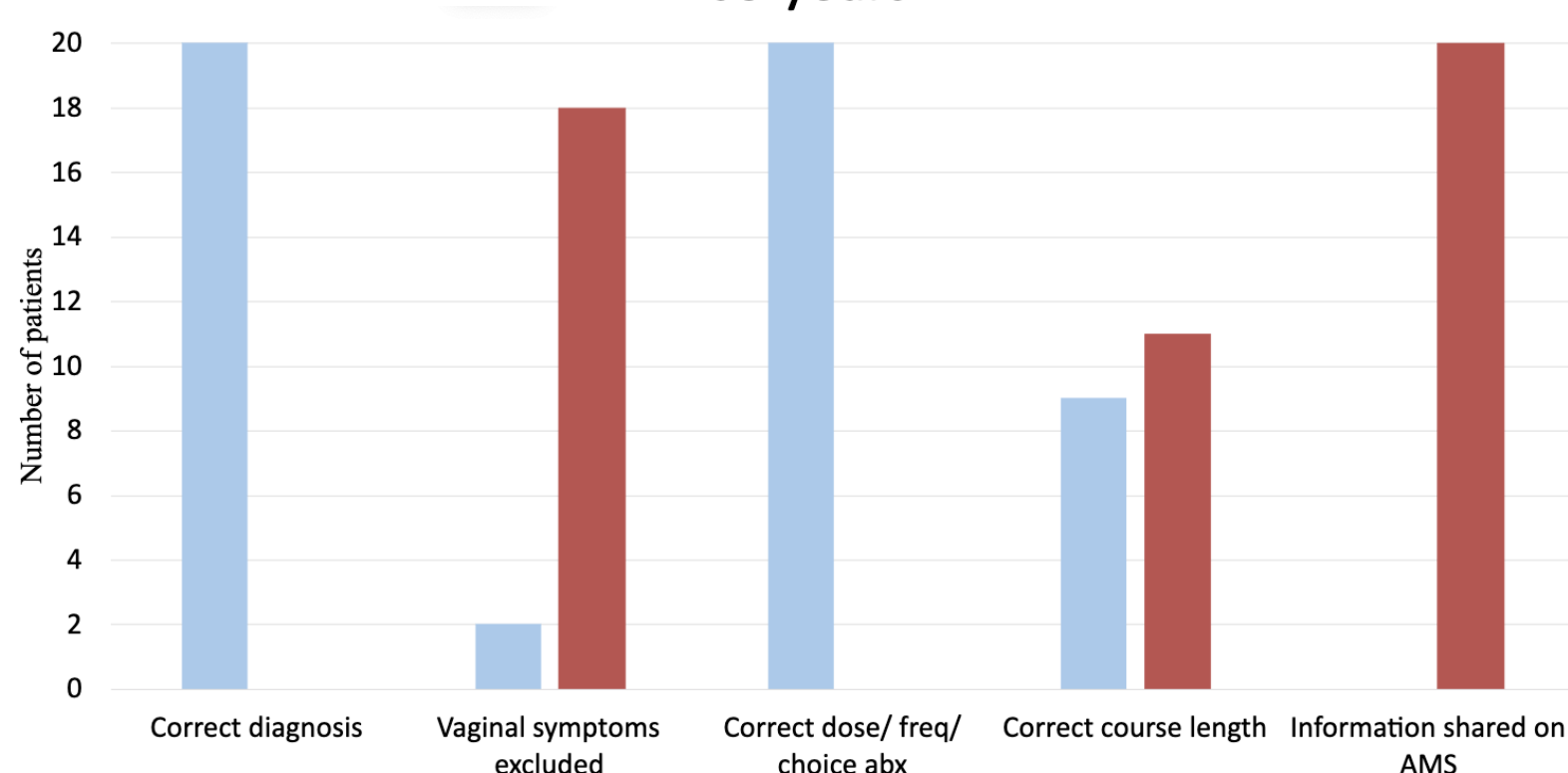


Figure 2 : Group B - displaying results of key measures from the RCGP Target guidelines [2]

CONCLUSIONS

The results identified several areas for improvement. Excluding vaginal symptoms is important as 75-80% of patients with vaginal symptoms will not have a UTI. Findings may indicate a high number of misdiagnosed UTIs and subsequently inappropriate antibiotic prescribing. Additionally, there were repeated instances of incorrect course lengths prescribed which can contribute to increased antimicrobial resistance. There were no recorded instances of patient information sharing around AMS, highlighting a lack of patient education about antibiotic use.

To improve AMS within the PCN, a text template was embedded with patient information on accurx to be sent to all patients diagnosed with a UTI. We also presented our findings to the practice, reviewing guidelines focussing on areas where we can all improve our clinical practice, and promote antimicrobial stewardship.

Thank you for your specimen which has confirmed a urinary tract infection. A prescription has been sent to your usual pharmacy Should your symptoms worsen whilst on the antibiotics please either get back in touch with us or 111. Please read this leaflet for more guidance and advice (LINK)

Figure 3: Example text sent to patients with a positive urine sample and UTI confirmed

