

Are patients being discharged with the right amount of antibiotics?

K. Atack¹ (k.atack@nhs.net), S. Hackney¹, L. Nguyen¹, Z. Tariq, S. Nazir¹, E. O’Cofaigh²

1. Pharmacy Infection Team, Leeds Teaching Hospitals NHS Trust, UK, 2. Infection & Travel Medicine, Leeds Teaching Hospitals NHS Trust, UK

Background

Prescribing systems in Leeds Teaching Hospitals Trust (LTHT) vary between the Emergency Department (ED) and inpatients, with ED prescribing on paper for some patients and inpatients using the electronic prescribing system (eMeds). When antibiotics are prescribed, initial doses can be on paper in ED, and there are also multiple places to prescribe them within eMeds. Consequently, there is a risk that patients do not receive the correct antibiotic course length on discharge.

Methods

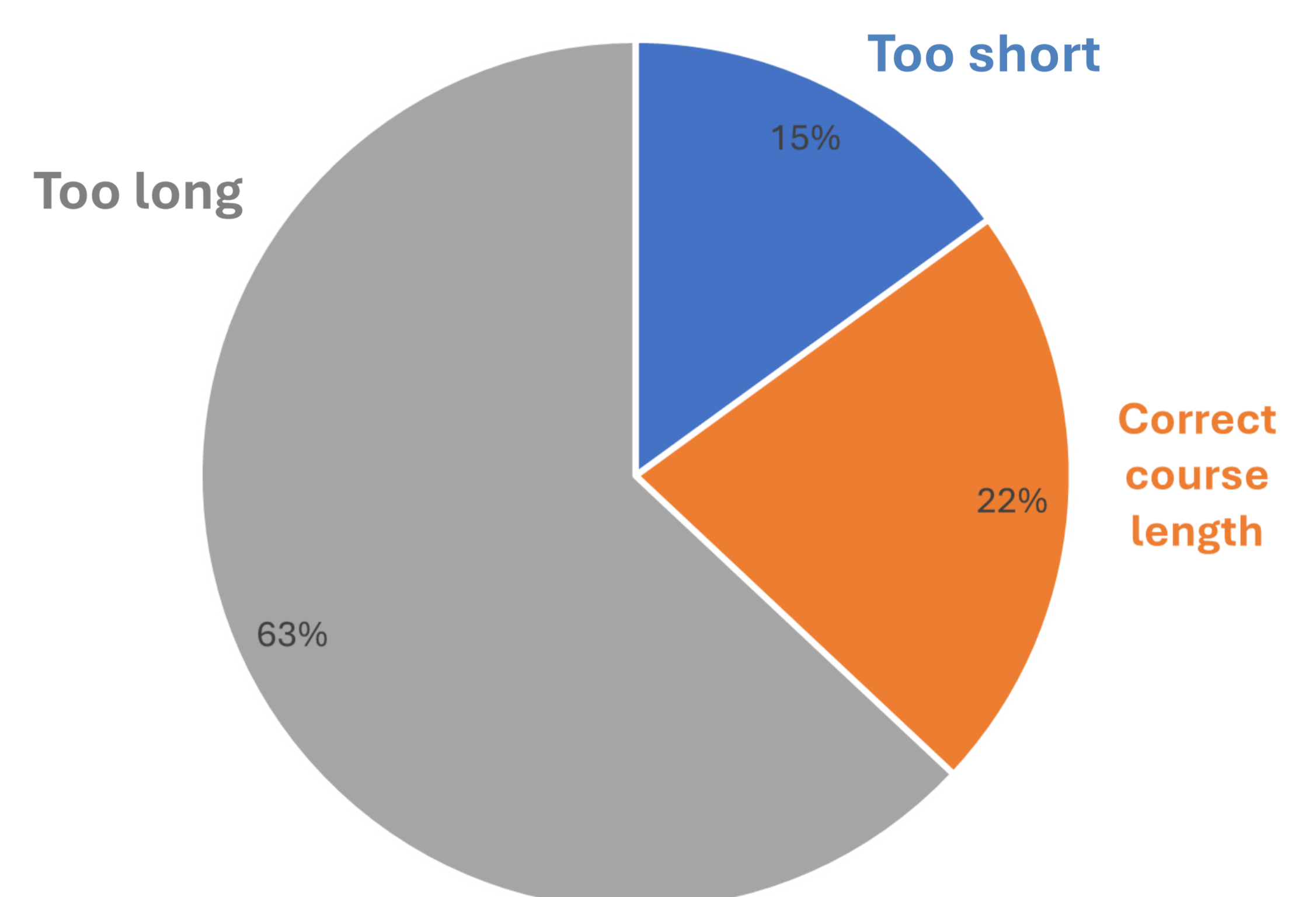
All guidelines were sent to Infection Specialists and reviewed. Once decisions had been made whether to keep fluoroquinolones in the guidelines, or use an alternative, the guidelines were sent out for peer review for approval from the Improving Antimicrobial Prescribing Group (IAPG). Once approved, the guidelines were updated with any changes and the review was briefed across the organisation.

Additionally, when the alert was first published, communications were sent across the organisation immediately to highlight the content of the alert.

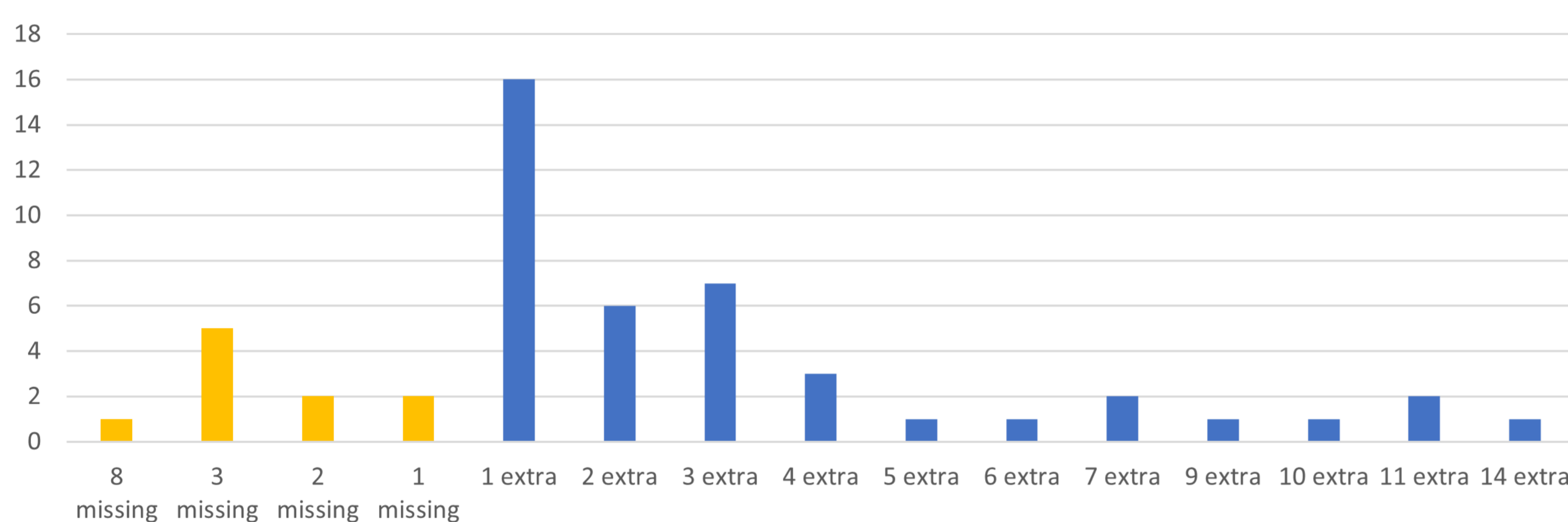
Objectives

- To identify whether the correct antibiotic course lengths are prescribed on discharge.
- To identify the different prescription areas that antibiotics are prescribed.
- To identify which World Health Organisation (WHO) Aware/Watch/Reserve categories (1) the antibiotics prescribe fall in.
- To identify the cost of any unnecessary, additional doses prescribed.

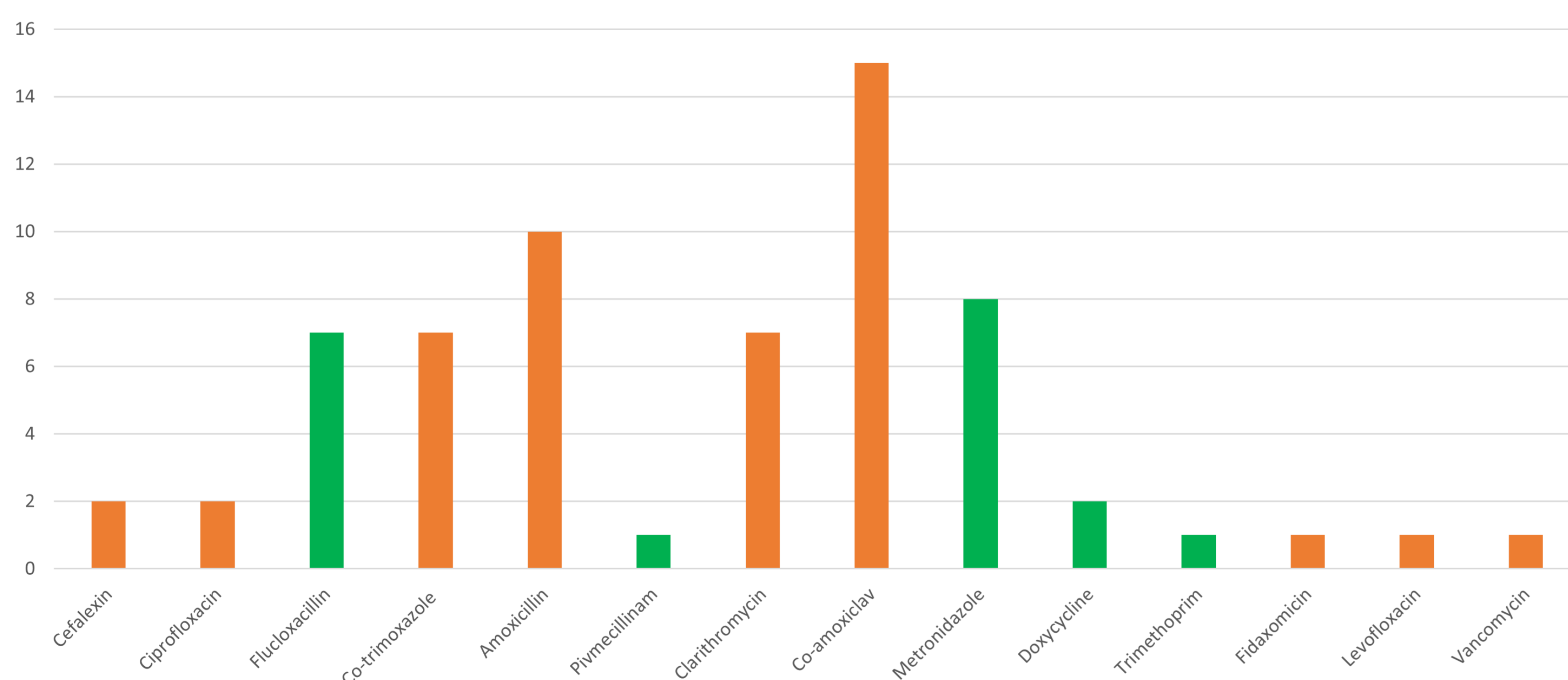
Course length accuracy



Missing/Extra doses



Antibiotics prescribed on discharge



Results

- 63% of course lengths were too long
- 22% of course lengths were correct
- 15% of course lengths were too short
- An additional 112 doses prescribed from 65 courses of antibiotics on discharge, costing £12.64, extrapolated to £1263 for the month.
- Most additional antibiotics prescribed were in the ‘Watch’ category

The orange bars represent the Watch category - these are broad spectrum antibiotics that we want to reduce the use of.

The green bars represent the Access category - usually narrower spectrum antibiotics we prefer to use.

Conclusion

Patients are generally not receiving the correct course length of antibiotics on discharge, likely due to the multiple places they can be prescribed. It is also likely that in some cases, the number of intravenous doses is not being taken into account when patients are switched from IV to oral antibiotics. More work needs to be done to raise awareness of ensuring correct course lengths on discharge.

Next steps

- Briefings to prescribers and pharmacists
- Review digital systems
- Promote use of eMeds protocols

Reference

1. World Health Organisation. 2023. AWaRe classification of antibiotics for evaluation and monitoring of use.