



Audit of Surgical Antibiotic Prophylaxis in St James's Hospital



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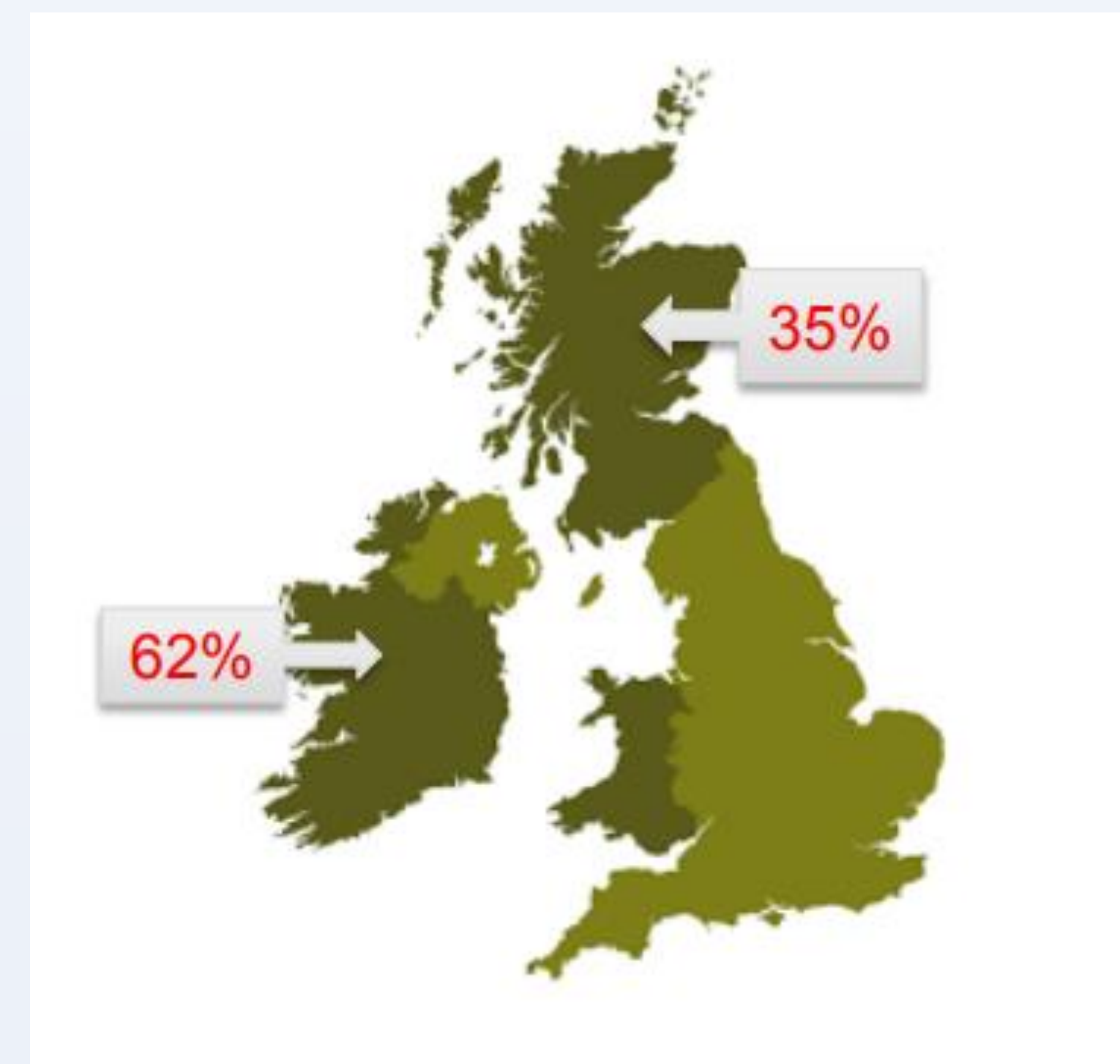
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Background

The HSE defines surgical antibiotic prophylaxis (SAP) as the "planned administration of antibiotics to a patient, who does not have confirmed or suspected infection, for the purpose of reducing the risk that the patient develops infection at the surgical site post-operatively".¹ It is imperative to select the correct agent and duration.

Most procedures require a single dose of an appropriate agent. Extending duration does not reduce the risk of surgical site infection (SSI) and may be associated with increased harm.

The 2020 National Antimicrobial Point Prevalence Study showed 62% of cases exceeded a single dose. A 2017 European Study showed Scotland only 35% of cases exceeded a single dose.



Aims

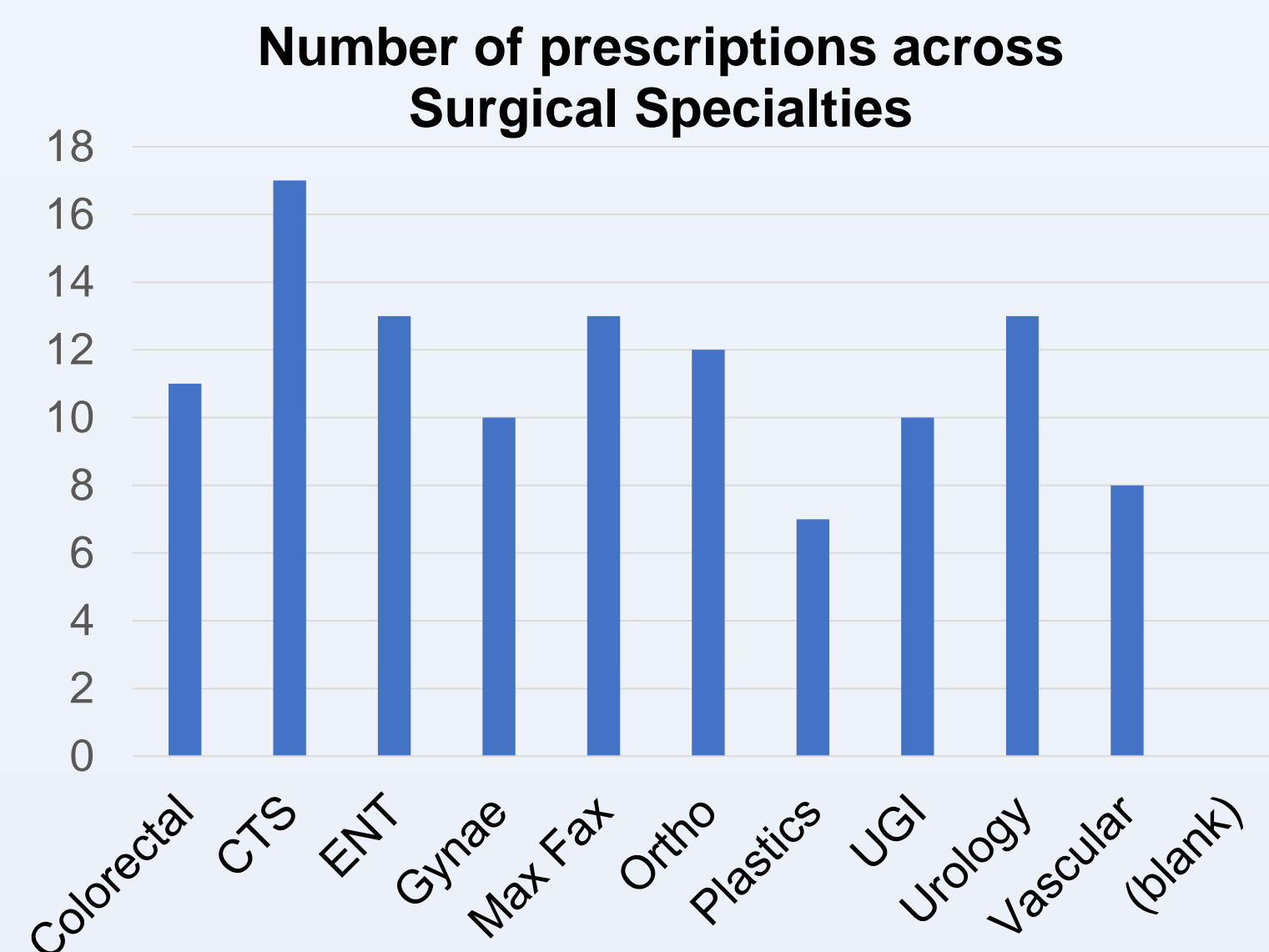
The objective of this audit is to examine adherence with existing guidelines for surgical antibiotic prophylaxis in St James's Hospital.

Methods

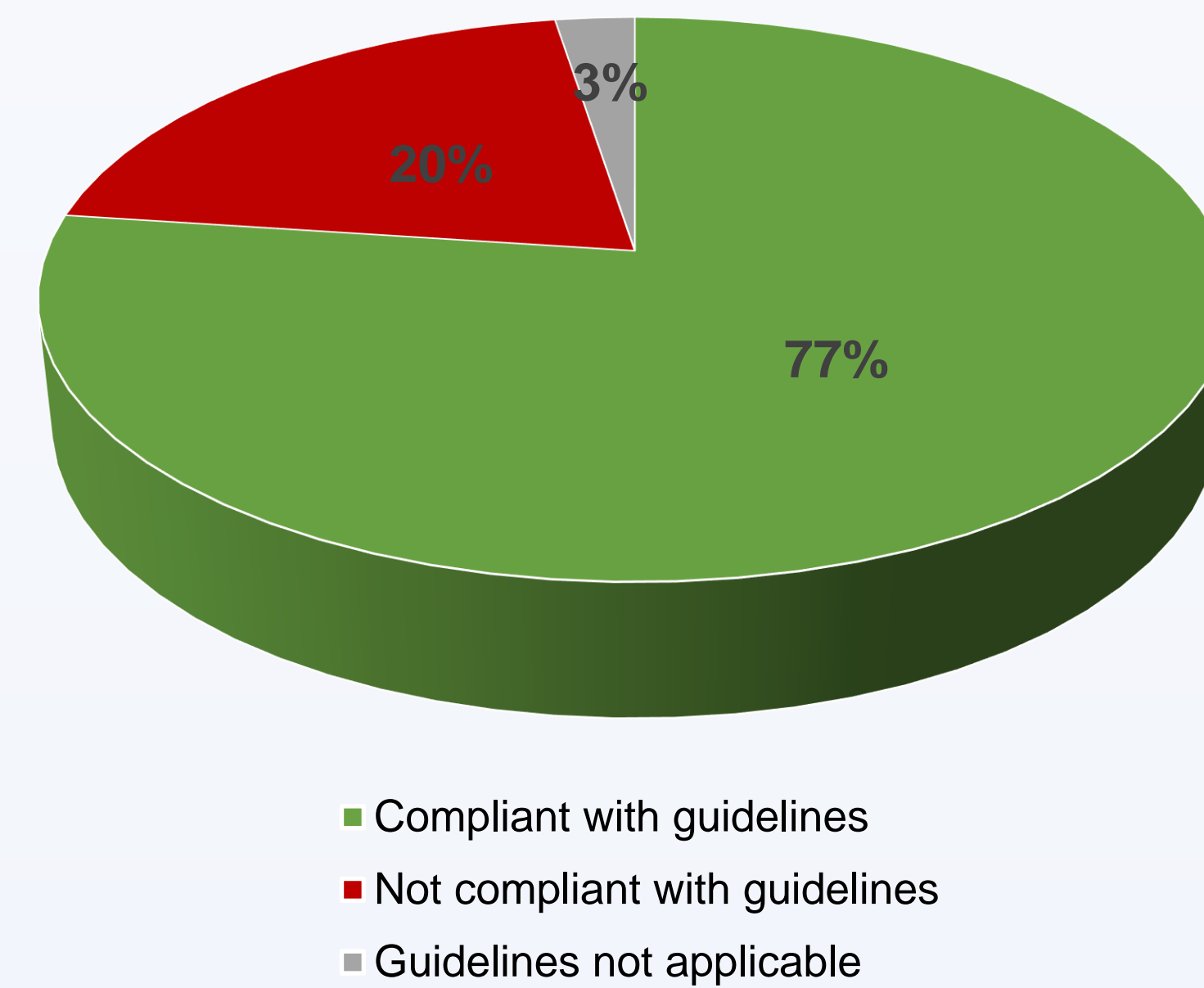
100 patients were identified for inclusion by Antimicrobial Stewardship Pharmacists, over 10 surgical specialities. A documentation audit tool was created based on the HSE Surgical Antibiotic Prophylaxis Audit Tool. Data collectors were made familiar with local guidelines, available on the St James's Medicines Guide. Each patient's Electronic Patient Record (EPR) was accessed to collect data retrospectively.

Results

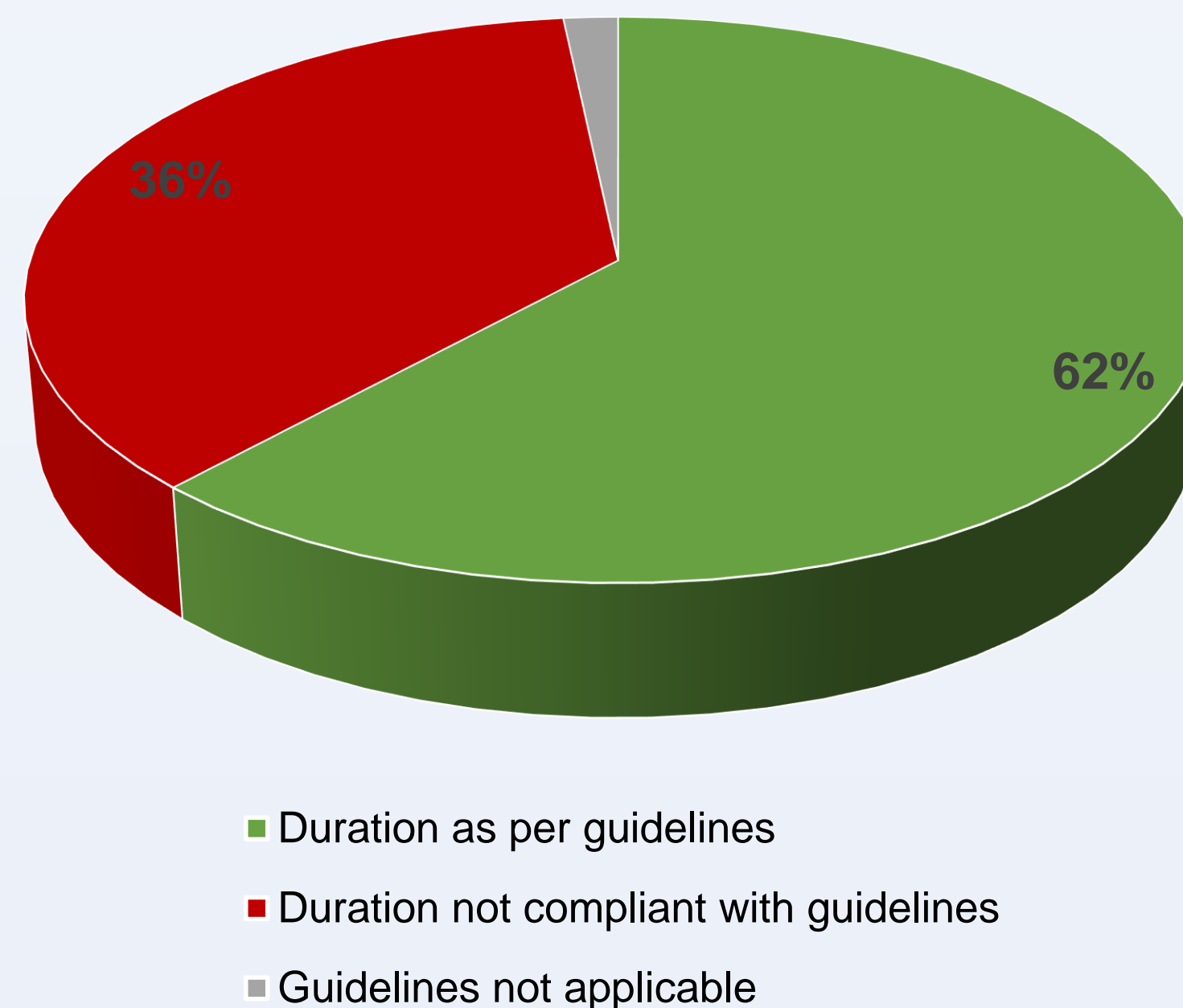
118 antibiotic prescriptions were recorded for the 100 patients across 10 surgical specialities.



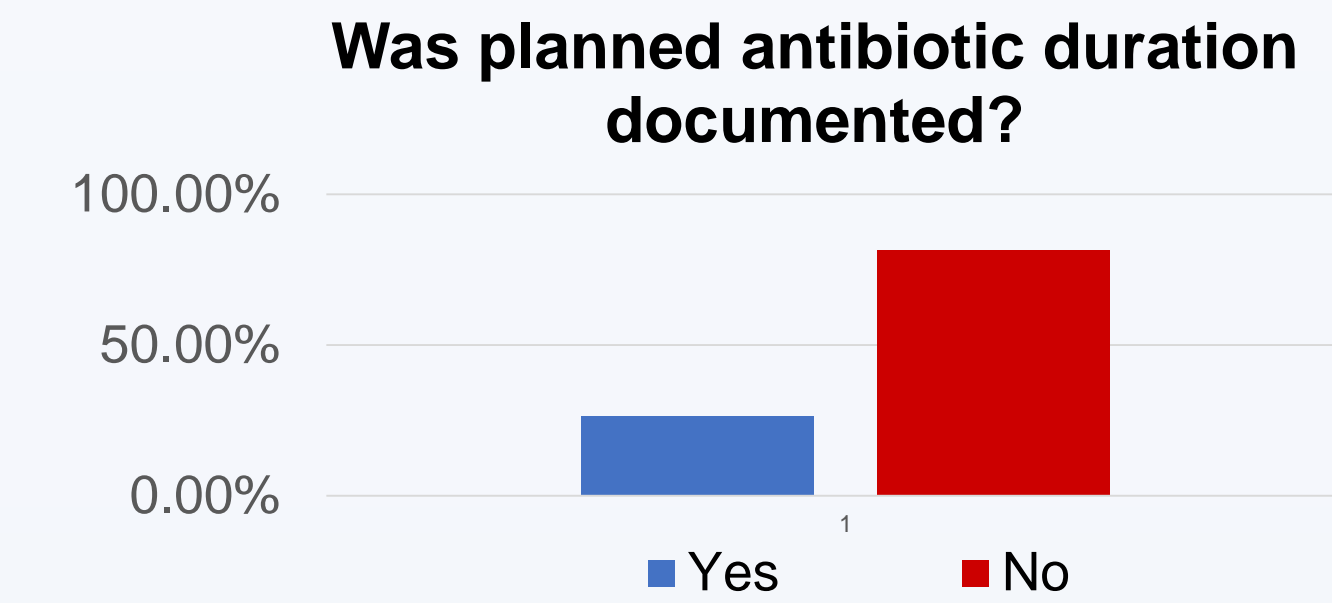
Were antibiotic prescriptions compliant with guidance?



Was the antibiotic prescribing following guidelines for duration?

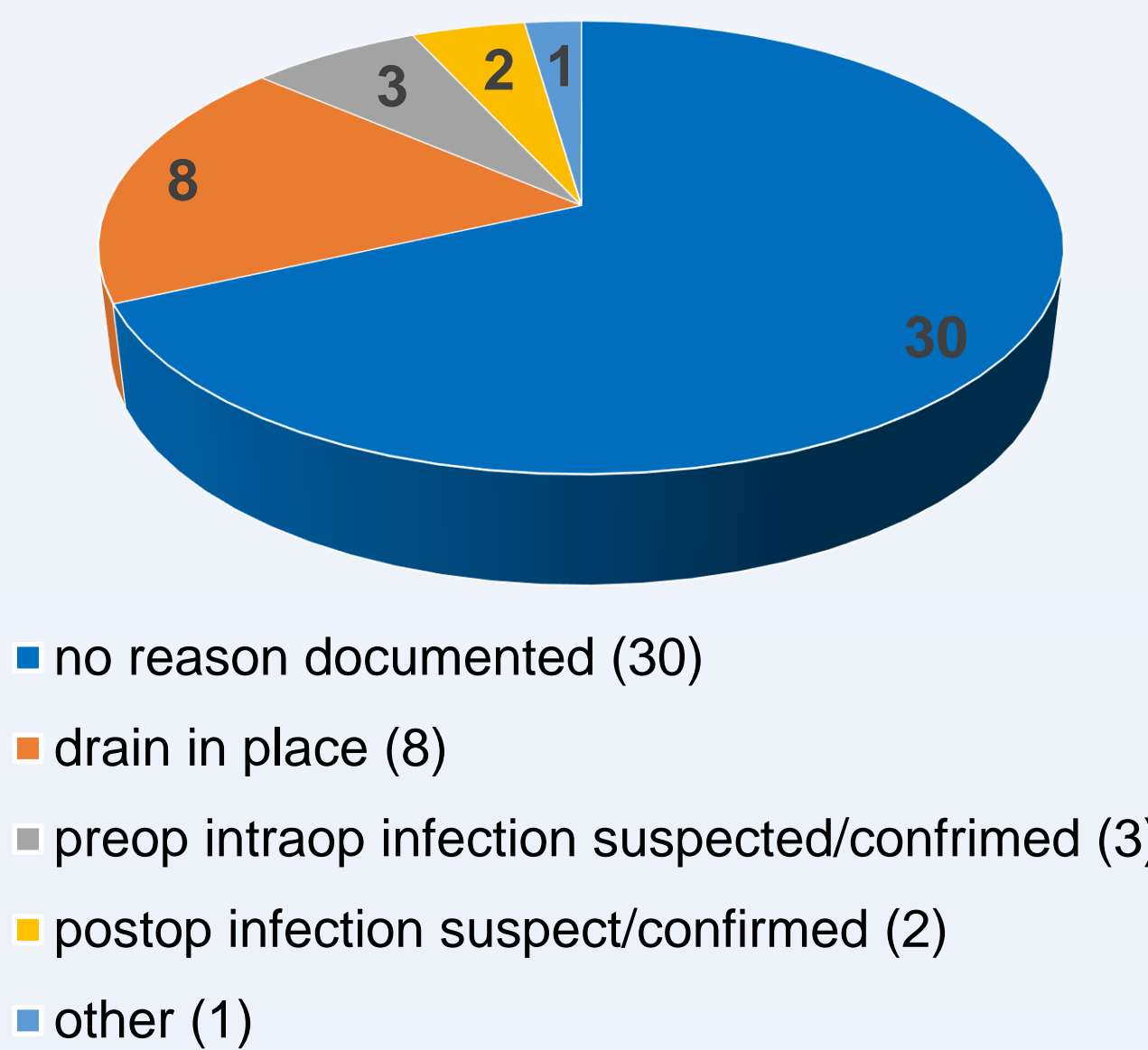


Planned duration was documented for 31 (26.3%) prescriptions, but no planned duration was documented for 88 (81.5%) prescriptions



A stop date was on the EPR prescription for 23 (21.3%), with none for 88 (81.5%). 7 prescriptions were given intraoperatively only and so no stop date was required.

What was the reason for the prolonged course of antibiotics?



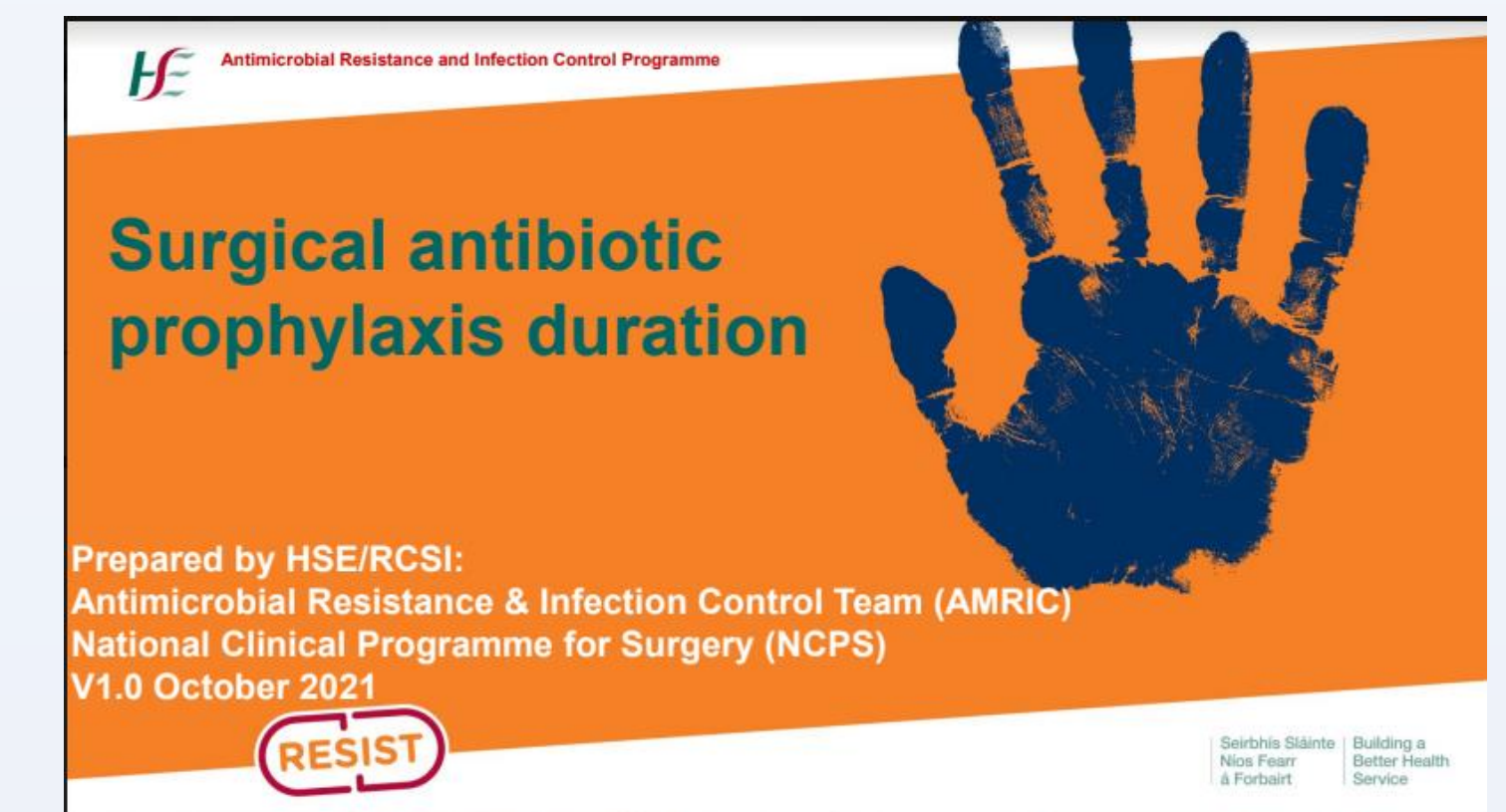
Of the 45 prescriptions that were prolonged, 30 (66.67%) had no identifiable reason for a prolonged course. 8 were prolonged due to a drain being in-situ.

Discussion

- Most prescriptions (77.12%) selected an appropriate antibiotic. However, this figure can be improved.
- Adherence to duration of recommended prophylaxis can also be targeted.
- The documentation of planned duration and the reason for extension of antibiotics was poor; A drain remaining post-operatively was the most common reason given. This is **not** sufficient reason to continue antibiotic therapy.

Conclusions

Based on the results of this audit, interventions will be planned to improve adherence to national and local guidance.



Reference

- Surgical Antimicrobial Prophylaxis Duration Position Statement, by HSE, NSPC, RCSI and AMRIC, October 2021

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