

Mandatory indication documentation when prescribing restricted antimicrobials improved indication accuracy to greater than 90%

Implementing Compulsory Indication Documentation in Antimicrobial Prescribing

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Background

- Documentation of antimicrobial indication has been demonstrated to improve antimicrobial appropriateness (Saini S, 2022), and is a national Antimicrobial Stewardship (AMS) Clinical Care Standard indicator.
- Despite regular audit and feedback to prescribers, and inclusion of pre-approved indications in our electronic medication management system (EMMS), MedChart®; accuracy of indication documented was suboptimal.
- To improve antimicrobial indication documentation, we investigated the feasibility of implementing a mandatory indication field when prescribing restricted antimicrobials in our EMMS.

Objective

- To improve indication documentation in the EMMS when prescribing restricted antimicrobials in a 300 bed tertiary referral hospital.

Action

- The EMMS team tested and presented workflow changes to the multidisciplinary local AMS committee.
- Opportunities and potential pitfalls were discussed including prescriber satisfaction, workflow changes and risks associated with free text indications.
- Substantial changes were made to the order sets, order sentences and alerts in the EMMS.
- Prescriber education was provided and information to clinicians was disseminated.
- Mandatory indication for restricted antimicrobials was implemented on 20th June 2022.

Evaluation

- All documented indications of restricted antimicrobial prescriptions for the first week of each month were assessed for accuracy by the AMS pharmacist for 12 months pre and post implementation.
- From June 2021 to June 2022, the median percentage of prescriptions with accurate indication documented was 76% (IQR 74-78). From July 2022 to July 2023, the median percentage was 94% (IQR 92-95), which was a statistically significant improvement ($p = 0.003$).

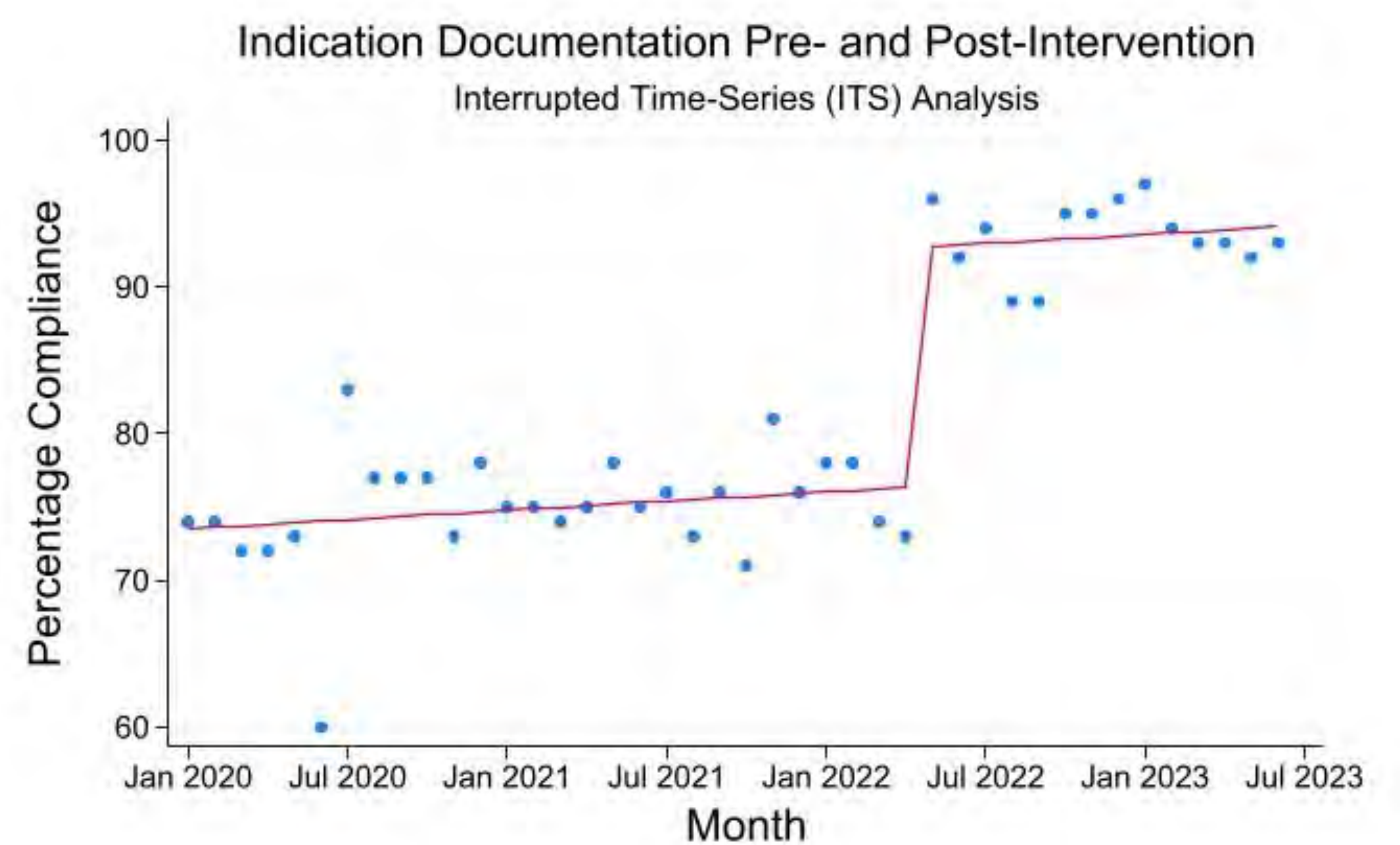


Figure 1: Impact of implementing mandatory indication documentation on indication accuracy when prescribing restricted antimicrobials

Discussion

- Collaboration between AMS and EMMS teams was pivotal to the success of the initiative, as well as clear communication to all stakeholders involved.
- Limitations to mandatory indication prescribing include prescriber workarounds such as 'full-stop' indications and inaccurate order sentence selection. This has been minimised by continuing to audit and feedback to prescribers.
- Our results demonstrate that there is potential for this intervention to be expanded into unrestricted antimicrobials or other clinical areas with a stewardship program.

**“Roses are red, ceftriaxone is orange,
Diverticulitis is painful, like getting caught in a door-hinge”.**
- Actual indication recorded.

References: Saini S, Leung V, Si E, et al. Documenting the indication for antimicrobial prescribing: a scoping review. *BMJ Quality & Safety* 2022;31:787-799

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