



# The effect of a prescriber training intervention on the prevalence of prescribing errors found in an electronic prescribing system

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#### WHAT WAS DONE?



Pre-intervention audit of prescribing errors

Clinician questionnaire and observations

Analysis of findings

Targeted classroom-based training intervention

Postintervention
audit of
prescribing
errors

Analysis and comparison of findings

### WHY WAS IT DONE?



- The literature stresses the importance of training for users of electronic prescribing systems (ePSs).
- There is a lack of evidence in the literature to demonstrate the effect or impact of ongoing training.
- Aims:
  - a) Determine the effect of a training intervention on the prevalence of prescribing errors in an ePS.
  - b) Inform the case for staff training resources for ePSs.

#### **HOW WAS IT DONE?**

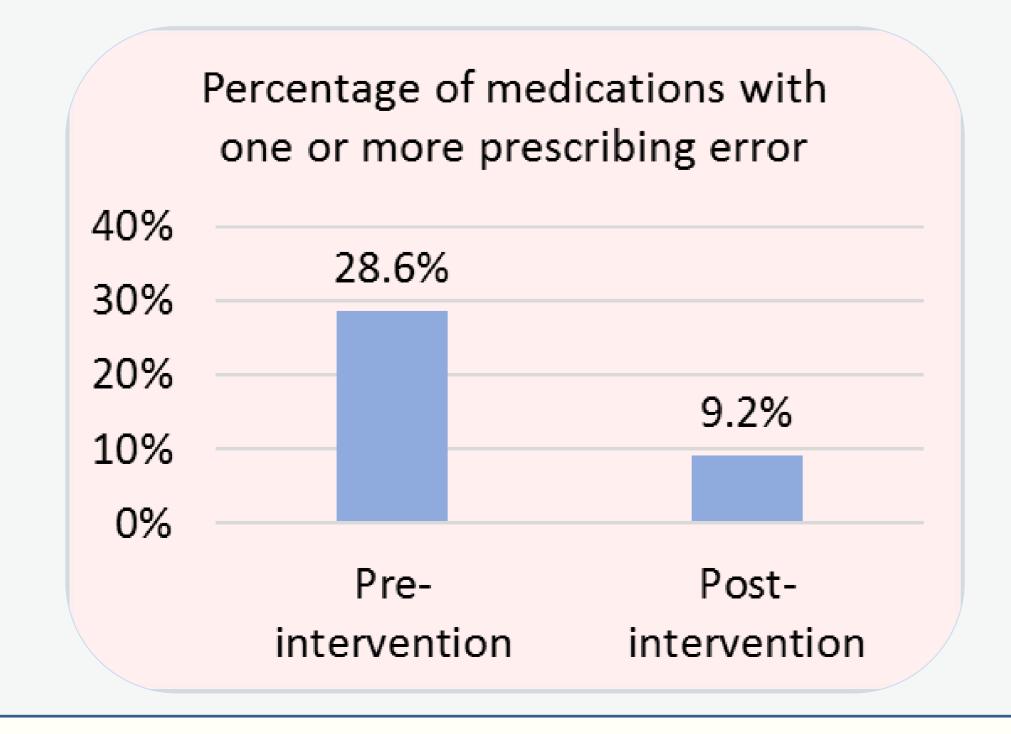


- Audit and feedback methods used.
- Key stakeholders recruited and assisted in the planning and delivery of the study methods.
- Key stakeholders used to gain participant buy-in.
- Audit tools and questionnaire were piloted to test their design and allow adjustments based on feedback.
- Training intervention informed by audit results, questionnaire, and observations.

#### WHAT HAS BEEN ACHIEVED?



- Significantly more medications prescribed pre-intervention contained one or more errors when compared with postintervention (see chart below).
- Most errors found were deemed to be system-related errors.
- The study demonstrates the positive impact ongoing training can have on users' interactions with an ePS.
- The study supports the need to provide adequate training resources for users of ePSs.



## **WHAT NEXT?**



- Use the results to:
  - a) Highlight that, despite initial training, errors can still occur in ePSs and must be addressed.
  - b) Make a case for training resources for ePSs.
  - c) Inform system design for ePSs.
- Use the methods to:
  - a) Deliver future training interventions



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#### References:

- 1. Velo G.P. & Minuz P. (2009) Medication errors: prescribing faults and prescription errors. British Journal of Clinical Pharmacology, 67, 624-628.
- 2. Westbrook J.I., Reckmann M., Li L., Runciman W.B., Burke R., Lo C., Baysari M.T., Braithwaite J. & Day R.O. (2012) Effects of two commercial electronic prescribing systems on prescribing error rates in hospital in-patients: a before and after study. PLoS Med, 9, e1001164.