Should we just let them walk out the door? Evaluation of pharmacist interventions at discharge

Western Health

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Introduction

Patients on the womens' ward are often prescribed multiple high-risk medications on discharge, such as anti-infectives, insulin, narcotics and heparins. More than 50% of medication errors occur during transition of care and can be a particularly perilous time for patients.[1] Medication related issues could potentially result in poor management of a patient's condition, readmission, delay in patient discharge and reduced level of patient satisfaction with the care provided.

Pharmacist is the final checkpoint before the patient leaves the hospital and is well-positioned to minimise any potential harm that could happen during the transition.

Aim

To examine the impact of clinical pharmacy services on medication safety through discharge prescriptions interventions in a tertiary womens' hospital and to assess the need for a weekend service.

Method

- A retrospective audit was conducted across 20 business days in June 2023 on the womens' wards.
- All discharge prescriptions that were clinically screened by pharmacists were included in this audit regardless of whether the prescription was filled by the hospital pharmacy.
- A survey was created using REDCap and data collected included: treating team, if the discharge prescription required pharmacist intervention, involvement of high-risk medications, intervention type and whether the intervention was accepted

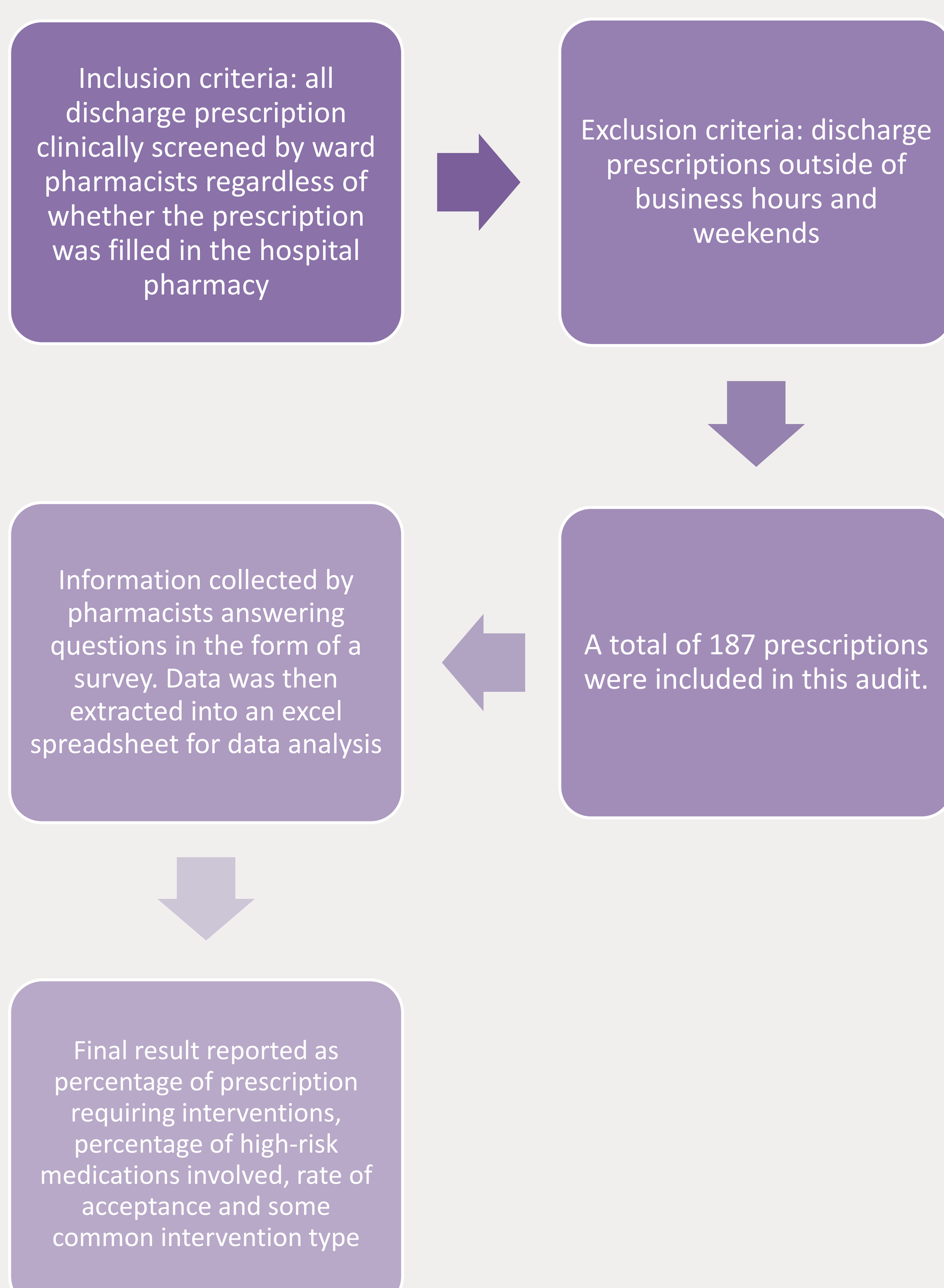
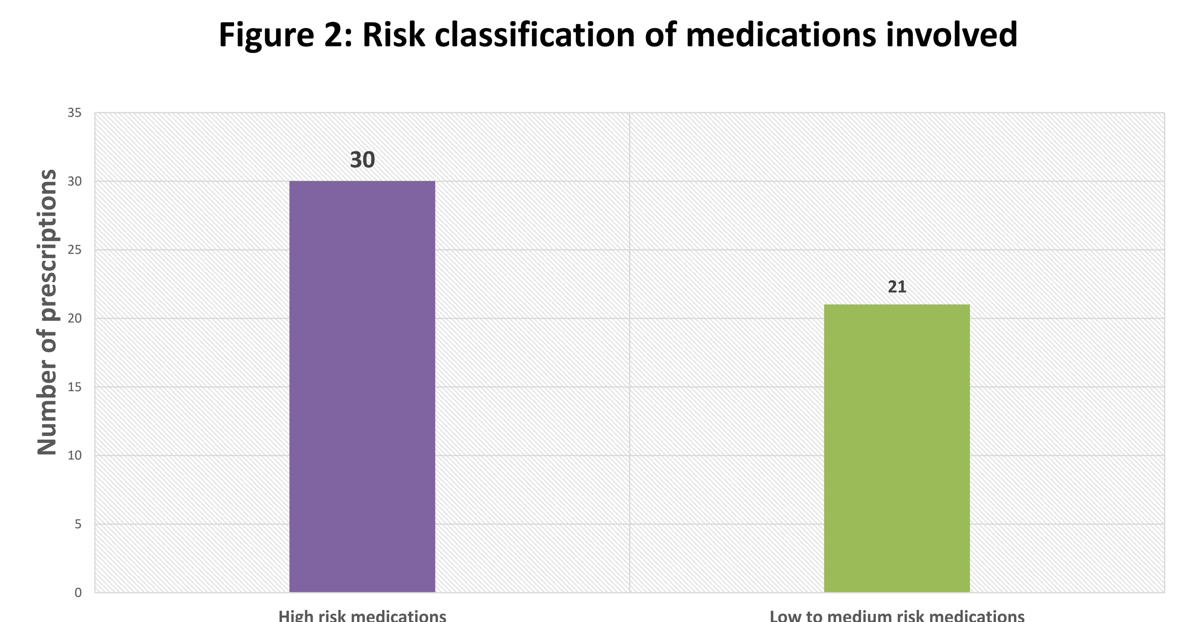


Figure 1. Method flow chart

Results

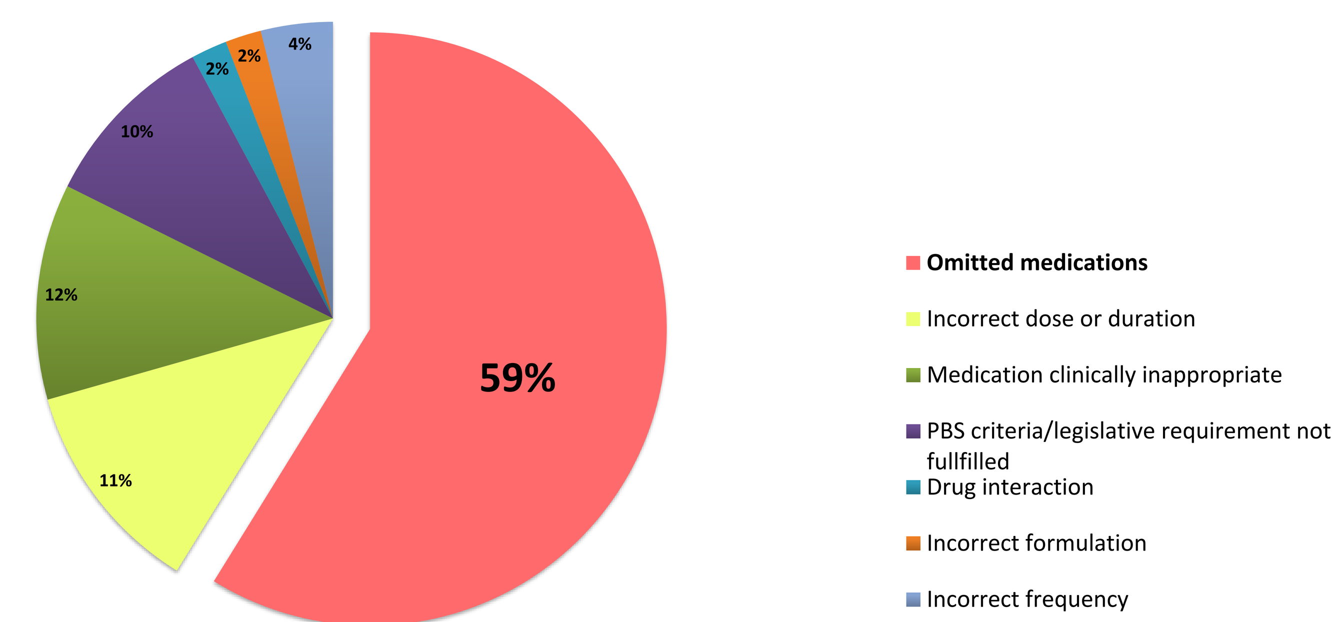
Across 187 prescriptions that were collected over 20 working days, approximately 1 in 5 prescriptions required a pharmacist intervention with a total of 51 interventions recorded. All 51 interventions were accepted by the prescriber and 30 out of 51 (58.8%) of the interventions involved high risk medications such as enoxaparin, oxycodone and antibiotics. Refer to figure 2.

Figure 2: Risk classification of medications involved



There were a variety of reasons pharmacists were required to make an intervention, the most frequent intervention recorded was due to omitted medications which made up 59% (n=30) . In that 59%, 46.6 % (n=14/30) involved high risk medications. The next most frequent intervention was due to incorrect dose or duration (n=6), medication was clinically inappropriate (n=6), pharmaceutical benefits scheme (PBS) criteria or legislative requirement were not fulfilled (n=5), incorrect formulation (n=1), incorrect frequency (n=2) and drug interactions (n=1). See figure 3.

Figure 3: Types of interventions identified on prescriptions



Discussion

This audit showed a 100 percent intervention acceptance rate which is comparable with a previous study conducted in a Brazil hospital with 98.8% acceptance rate[2]. There are some limitations to this audit which include:

Limitations	Implications
• Does not highlight interventions initiated by pharmacists which were resolved before the prescription was generated • Prescriptions not screened by a clinical pharmacist were not included in this study – this includes prescriptions done after hours or prescriptions given to patients, bypassing pharmacist review	• Implement pharmacy services to womens' wards on the weekend • Provide education to medical, nursing and midwifery staff to increase awareness of high risk medications • Further studies could be done to capture clinical interventions initiated by ward pharmacists during admission

Conclusion

This study highlights the positive impact of clinical pharmacy services in minimising medication misadventures especially during transition of care. A follow-up study of patient outcomes and patient-reported experience will furthermore support the demonstrated need for a weekend clinical pharmacy service to the womens' wards.

References

1. Australian commission of safety and quality in Health Care. Transitions of care. Available from: Transitions of Care | Australian Commission on Safety and Quality in Health Care
2. Silva N, Gnatta R, Visacri M, Ferracini A, Mazzola P, Parpinelli M et al. Pharmacist interventions in high-risk obstetric inpatient unit: a medication safety issue. International Journal for Quality in Health Care, 2018, 30(7), 530-536. doi: 10.1093/intqhc/mzy054