



Safer Prescribing with Partnered Pharmacist Charting in the Acute Medical Setting

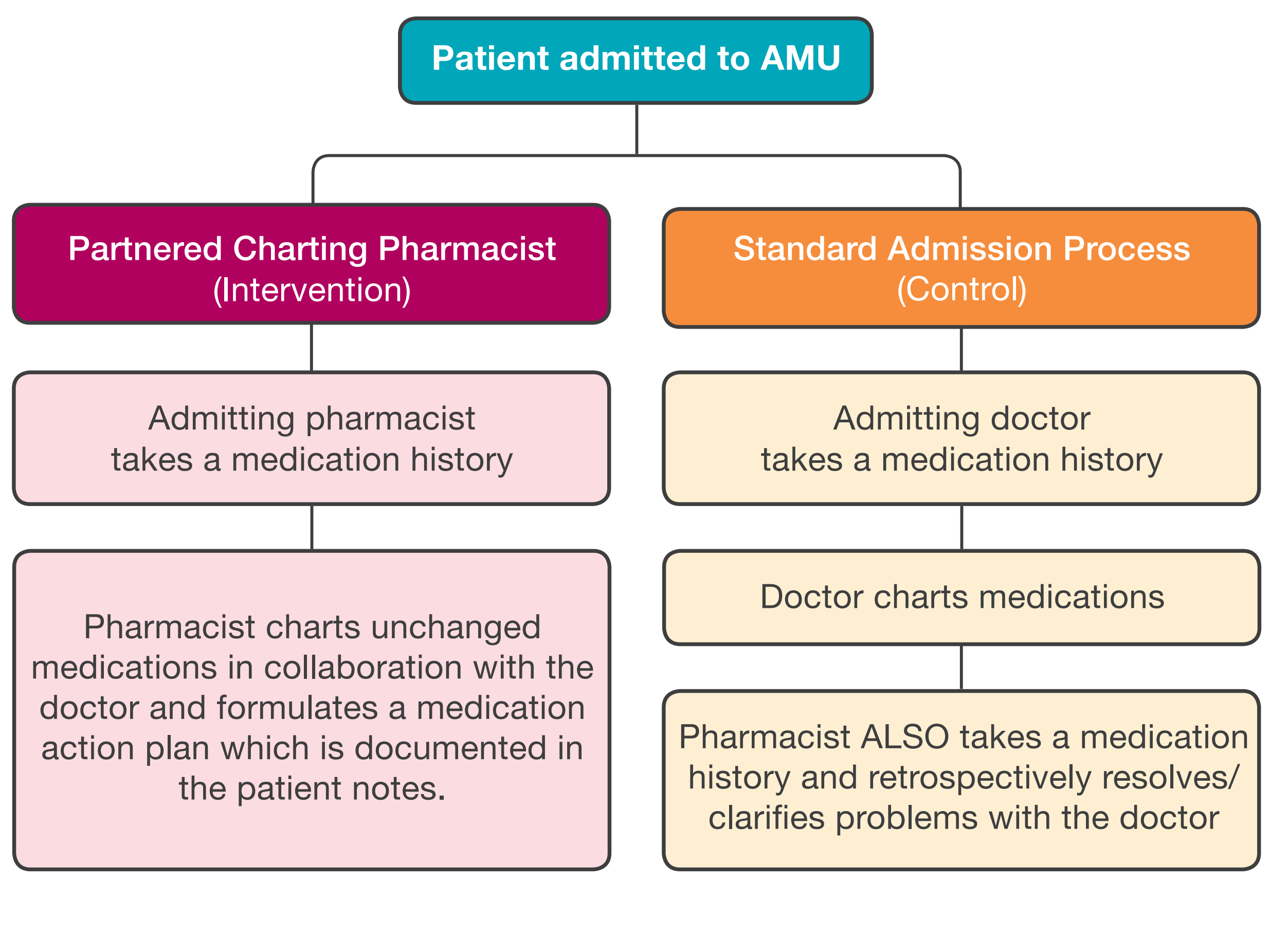
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Background

- Medication errors are commonly reported in hospitals, and lead to significant morbidity and mortality.¹
- The Acute Medical Unit (AMU) at Fiona Stanley Hospital (FSH) is a 50 bed ward with a high turnover of complex medical patients.
- Australian data suggests partnered pharmacist charting (Figure 1) reduces prescribing error rates. Significant errors were prevented for 1 in every 3 patients, making this an efficient intervention.²
- A partnered charting pharmacist (PCP) role was implemented in July 2017 on the FSH AMU.

Figure 1: Comparison of Partnered Charting Pharmacist Model and Standard Admission Process



Aims

- Investigate whether integrating the partnered charting pharmacist reduces prescribing error rates.
- Define the nature of prescribing errors occurring in AMU.
- Quantify the number of errors involving high risk medications.

Methodology

- 580 patients were prospectively assessed by AMU pharmacists over a 2 month period (May-June 2018) for prescribing errors.
- The partnered charting arm (n=91) were reviewed by a PCP and doctor within 4 hours of admission to AMU. The remaining patients (n=489) were admitted via the standard process (Figure 1).
- Prescribing errors in the partnered charting arm were subsequently assessed by an independent clinical pharmacist, whereas prescribing errors in the control arm were identified and rectified by the usual clinical pharmacist on the ward.



Results

- Prescribing error rates per patient admission reduced from 50.6% (248/489) to 8.8% (8/91) ($p < 0.001$, NNT 2.4) when patients were admitted via partnered pharmacist charting process versus the standard process.
- 131 (20.2%) errors in the control arm involved high risk medications, compared with only 1 error (9.09%) in the partnered charting arm.
- The most common error (8/10) in the partnered charting arm was incomplete prescription (missing a Dr signature). The most common error in the control arm was omission of patient regular medications (336/649).

Figure 2: Results

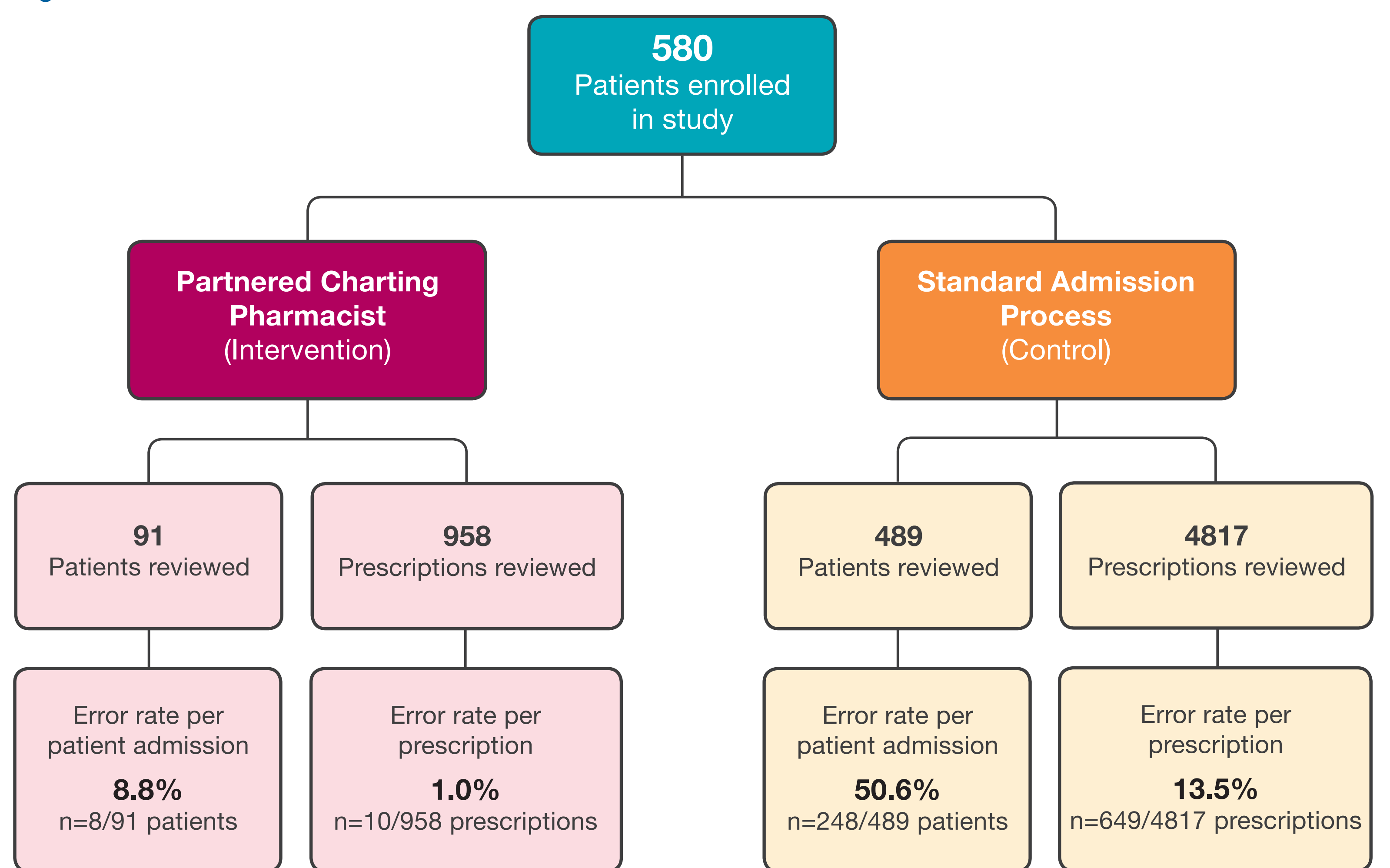


Figure 3: Top 5 Prescription Errors

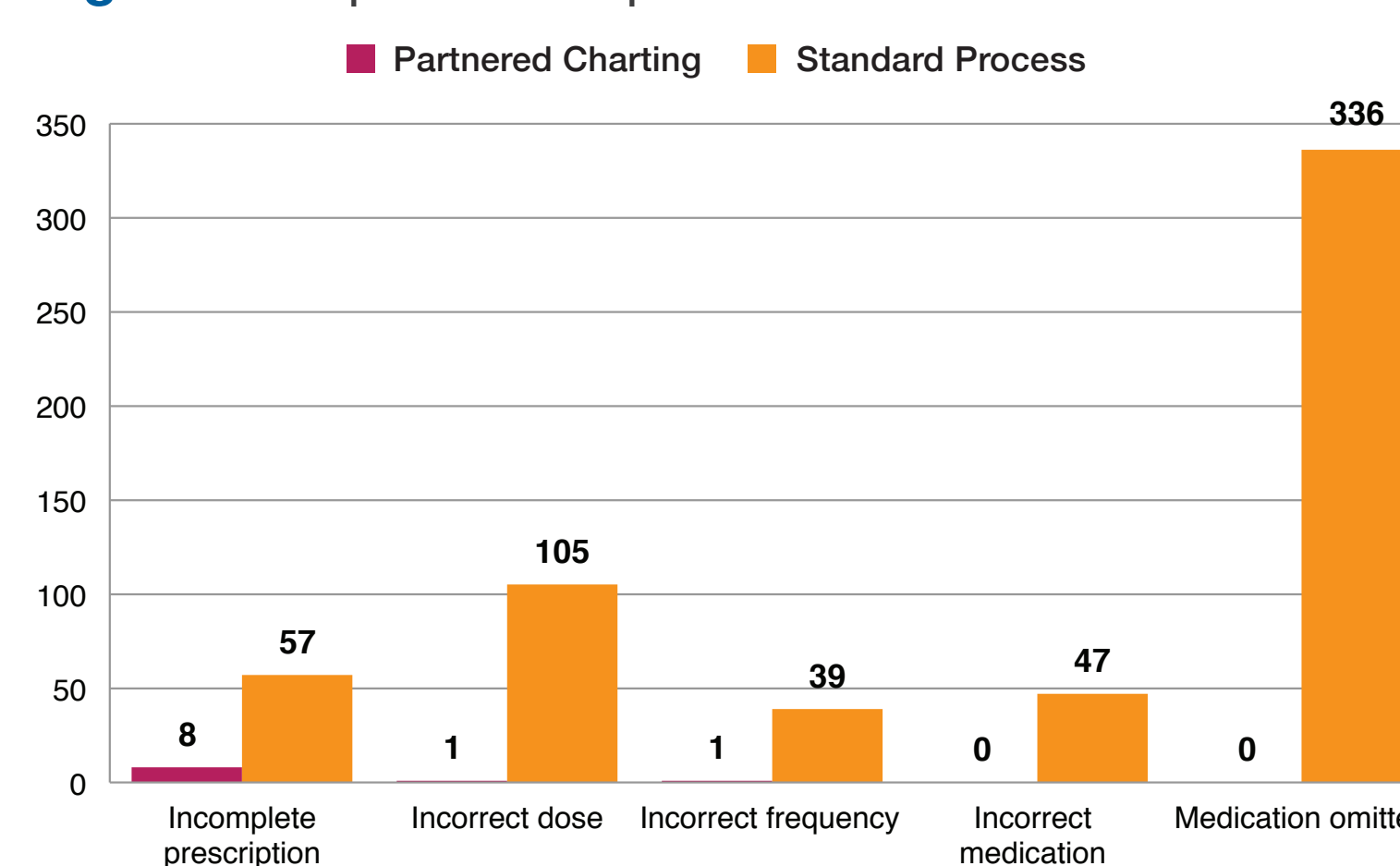
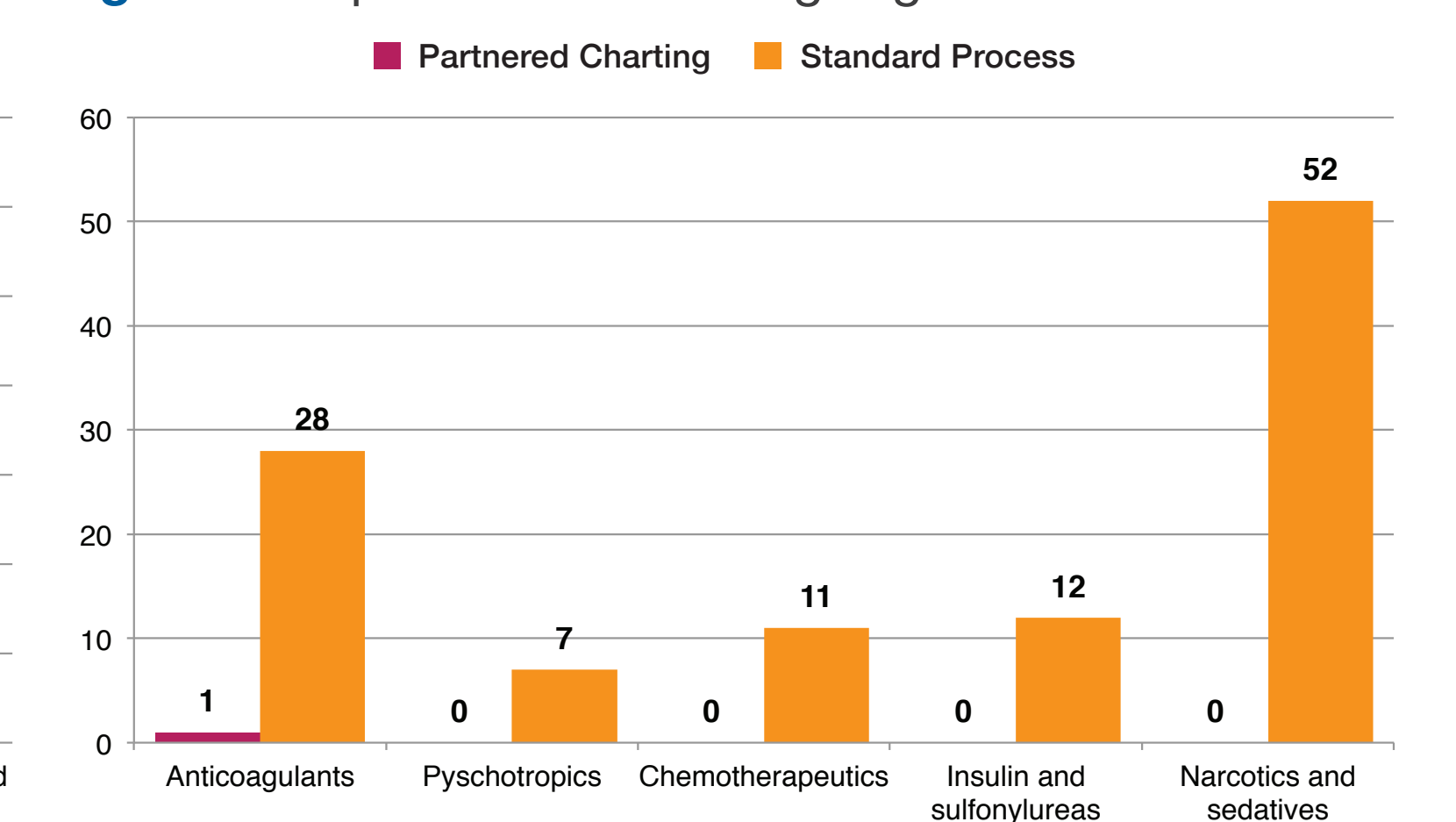


Figure 4: Top 5 Errors Involving High Risk Medications



Conclusion

Partnered pharmacist charting reduced prescription error rates per patient by 41.8% compared to standard admission process (RRR 0.83).

Future Directions

- The prescribing errors will be reviewed by an expert panel to assess for severity and risk of patient harm.
- Errors involving high risk medications and assessed as high severity will be further assessed for evidence of patient harm.

References

- Australian Commission on Safety and Quality in Health Care (2013), Literature Review: Medication Safety in Australia. ACSQHC, Sydney.
- Tong EY, Roman C, Mitra B, Yip G, Newnham H, Smit DP, et al. Partnered pharmacist charting on admission in the General Medical and Emergency Short-stay Unit- a cluster-randomised controlled trial in patients with complex medication regimens. J Clin Pharm Ther. 2016 Aug; 41(4):414-8.

This project was approved as a QI project (GEKO #26656) and was considered exempt from requiring HREC approval.



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