



# Collaborative Pharmacist-Doctor Prescribing in the Emergency Department and Admissions Unit

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**HRT 1713 'B14 - Medication Improvement'**

**21 & 22 June 2017**

**Brisbane**



# Key Problem

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- Admission to hospital is a time of high risk for medication error
- Medication errors most commonly occur at the time of prescribing and frequently occur on the day of hospital admission<sup>1,2</sup>
- Between 38 and 54% of patients have at least one unintended medication discrepancy between the patient's regular medication and the admission orders<sup>3-5</sup>
- Clinical pharmacists in the ED can assist in identifying and preventing medication errors early in the hospital presentation<sup>6-8</sup>
- An established clinical pharmacy team exists within the ED and admissions unit who assist with admission medication reconciliation through documentation of best possible medication histories for patients planned for admission to hospital

# Aim of this innovation

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- To implement a collaborative doctor-pharmacist prescribing model in the emergency department and admissions unit with the aim of enhanced medication prescribing accuracy and patient safety

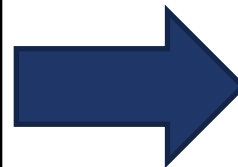
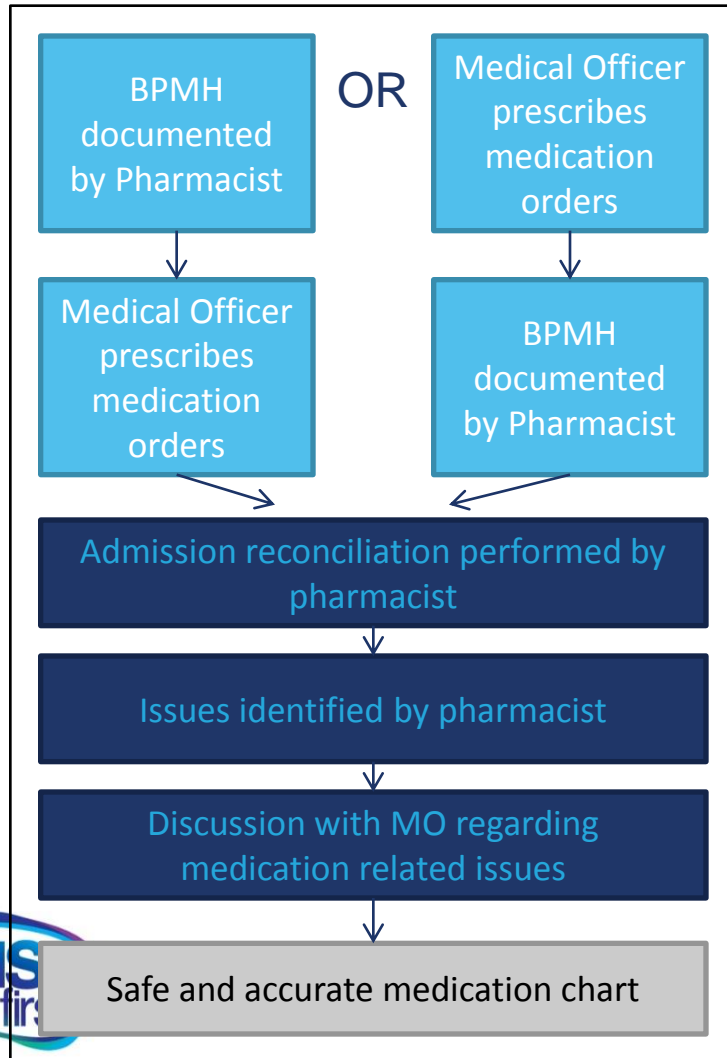
# Baseline Data

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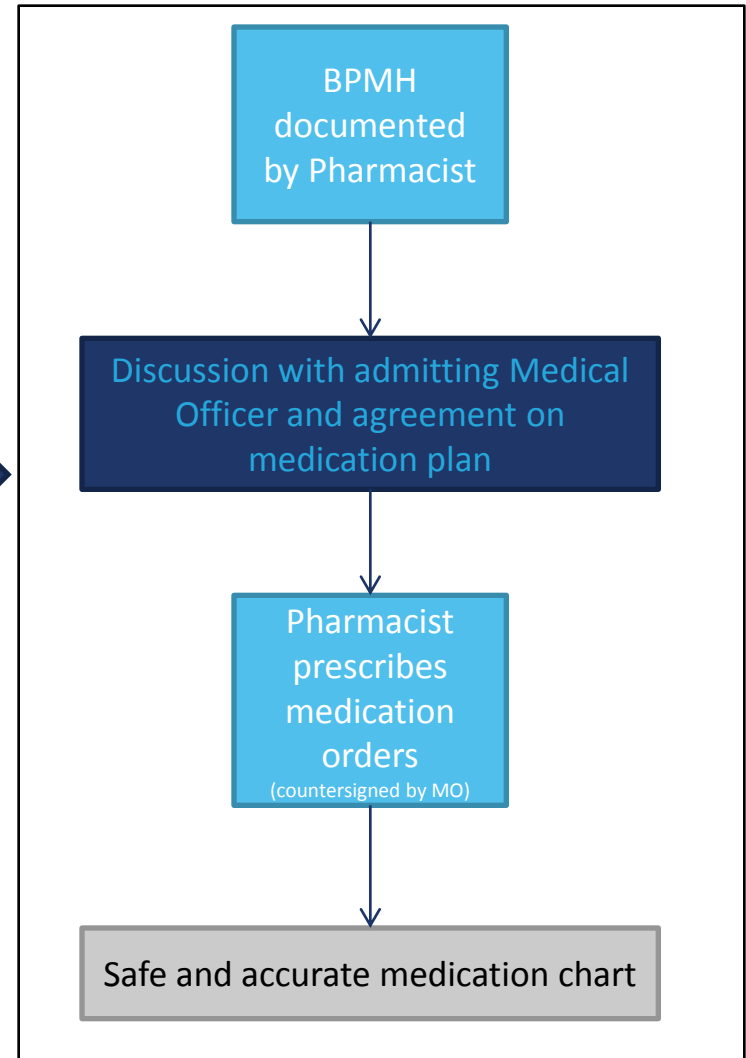
- An audit in 2015 outlined less medication issues documented on the Medication Action Plan form when BPMH were documented by pharmacists prior to the medication charts being written by medical officers within the ED and admissions unit

# Key Changes Implemented

## BEFORE



## AFTER



# Outcomes so far

	Before (17 charts, 146 orders)	After (17 charts, 145 orders)
Average number of errors per patient	1.35	0.17
Average number of errors per medication order	0.16	0.02
% of medication order errors deemed medium, high or very high risk of patient harm*	10%	<1%
Error free medication orders	26%	90%

\* Assessment of risk included evaluation by a physician

Number needed to treat to prevent 1 medium, high or very high risk error = **1.2**



# Lessons Learnt

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- Pharmacist-doctor collaborative prescribing model is more accurate and safer than conventional model
  - Longstanding integration of clinical pharmacy team and development of relationships within emergency department and admissions unit was a key to support changed model of care
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# References



1. Bates DW, Cullen DJ, Laird N et al. Incidence of adverse drug events and potential adverse drug events: implications for prevention. *Journal of the American Medical Association* 1995; 274:29-34
2. Cornish PL, Knowles SR, Marchesano R, et al. Unintended medication discrepancies at the time of hospital admission. *Archives of Internal Medicine* 2005; 165:424-429
3. Kwan Y, Fernandes O, Nagge J et al. Pharmacist Medication Assessments in a Surgical Preadmission Clinic. *Archives of Internal Medicine* 2007 ;167:1034-1040
4. Gleason KM, Groszek JM, Sullivan C, Rooney D, Barnard C, Noskin GA. Reconciliation of discrepancies in medication histories and admission orders of newly hospitalized patients. *American Journal of Health-System Pharmacy* 2004; 61:1689-1695
5. Vira T, Colquhoun M, Etchells E. Reconcilable differences: correcting medication errors at hospital admission and discharge. *Quality and Safety in Health Care* 2006; 15:122-126
6. Cohen V, Jellinek S, Hatch A, Motov S. Effect of clinical pharmacists on care in the emergency department: A systematic review. *American Journal of Health-System Pharmacy* 2009; 66:1353-1361
7. Rudis M, Attwood R. Emergency medicine pharmacy practice. *Journal of Pharmacy Practice* 2011; 24: 135
8. Welch S, Graundins L. Scope of pharmacy services to the emergency department. *Journal of Pharmacy Practice and Research* 2007; 37(1):27-29





