

## Pharmacist-led Partnered Prescribing: Improving the Accuracy of Discharge Medication Documentation for patients with kidney disease

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### BACKGROUND

Inaccurate medication documentation in prescriptions and discharge summaries produce poorer patient outcomes<sup>1</sup>, are costly to healthcare system<sup>2</sup> and are more likely to result in a readmission to hospital<sup>3</sup>. Errors in medication documentation are common in Australian hospitals.

### AIM

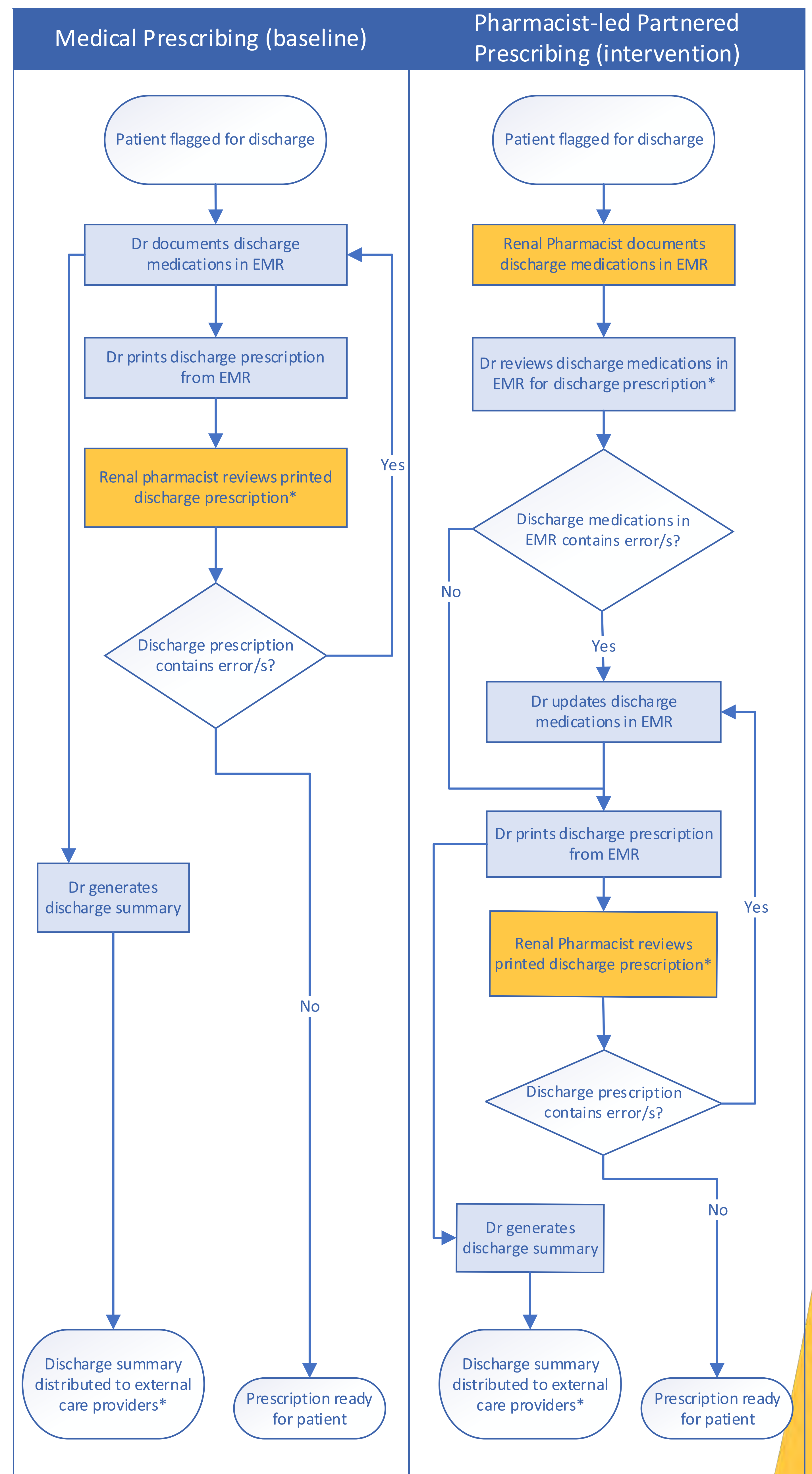
To determine if pharmacist-led partnered prescribing (PPP) on discharge for patients with kidney disease could reduce errors in documentation of medications in discharge prescriptions and discharge summaries, compared to medical prescribing (MP).

### METHOD

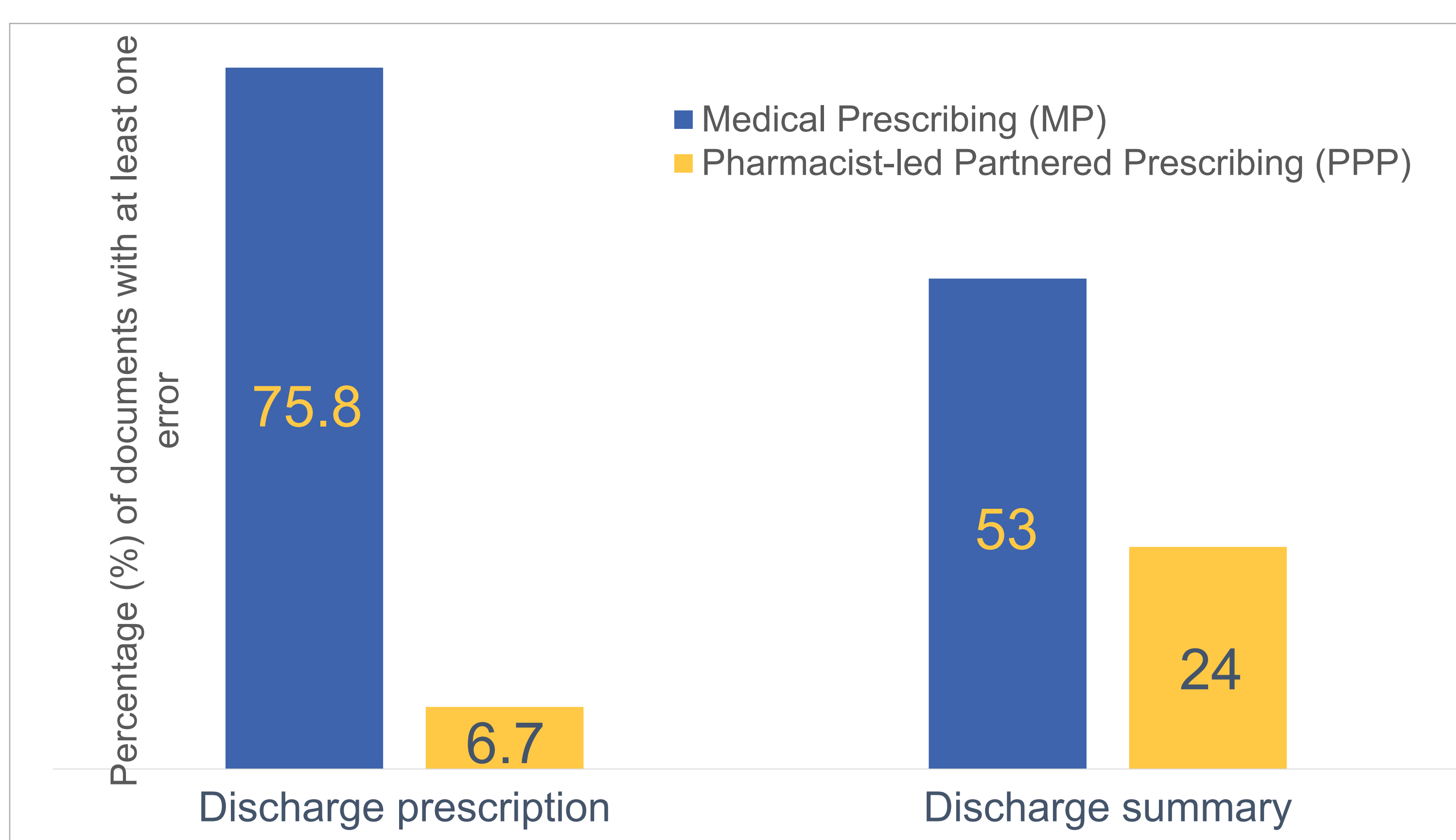
- Interventional 2-phase study compared medication errors in current workflow (MP) with the subsequent implementation of the interventional workflow (PPP). (see Figure 2)
- An error in documentation was defined as documentation (or no documentation) of a medication not in agreement with the documented treatment plan (for the discharge prescription) or the final, pharmacist reviewed discharge prescription (for the discharge summary).
- **Inclusion criteria:** hospital inpatients discharged from the renal unit within pharmacy working hours and had a discharge prescription and discharge summary.
- The **primary outcome** was the percentage of discharge prescriptions with at least one error. The **secondary outcome** was the percentage of discharge summaries with at least one error.

### RESULTS

- Data was collected from 185 discharged patients (95 in MP phase then 90 in PPP phase).
- Discharge prescriptions with at least one error reduced from 75.8% in the MP phase to 6.7% in PPP phase ( $P < 0.001$ ).
- Discharge summaries with at least one error reduced from 53% in MP phase to 24% in PPP phase ( $P < 0.001$ )
  - Improvements in electronic medical record (EMR) workflow has the potential to further reduce these errors to 48% and 3% respectively.
- Most common error type in both phases of the discharge prescription and discharge summary was omitted medication
- Most erroneous medications were paracetamol, vitamin D medications and erythropoiesis stimulating agents.



**Figure 2.** Medical Prescribing (MP) and Pharmacist-led Partnered Prescribing (PPP) workflows



**Figure 1.** Percentage of discharge prescriptions and discharge summaries with at least one error in Medical Prescribing (MP) and Pharmacist-led Partnered Prescribing phases

### References:

1. Tesfaye WH, Castelino RL, Wimmer BC, Zaldi STR. Inappropriate prescribing in chronic kidney disease: a systematic review of prevalence, associated clinical outcomes and impact of interventions. *Int J Clin Pract.* 2017;71(7):e12960.
2. Pharmaceutical Society of Australia. Medicine Safety: Take Care Canberra: PSA; 2019 [Available from: <https://www.psa.org.au/wp-content/uploads/2019/01/PSA-Medicine-Safety-Report.pdf>]
3. Australian Commission on Safety and Quality in Health Care. Medication Reconciliation 2019 [Available from: <https://www.safetyandquality.gov.au/our-work/medication-safety/medication-reconciliation>]
4. Fussell SE, Butler E, Curtin CM, Bove SJ, Roberts MA, Lawlor LN. Improving the accuracy of discharge medication documentation in people with kidney disease through pharmacist-led partnered prescribing. *Internal Medicine Journal.* 2022 Nov 27.



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### DISCUSSION

The implementation of PPP on discharge for people with kidney disease significantly reduced the medication documentation errors in discharge prescriptions and discharge summaries. This is vitally important in this high-risk renal population to promote more accurate communication of often complex and polypharmacy renal medication regimes to both the patient and their post-hospitalisation healthcare providers. EMR workflow improvements are required to maximise the benefit of the PPP workflow. Further evaluation into the efficiency of the pharmacist-led prescribing workflow is recommended to show the true effect of the workflow beyond that of reducing the number of error corrections needed.

### CONCLUSION

Pharmacist-led partnered prescribing improves the accuracy of the documentation of medications in both the discharge prescription and the discharge summary of people with kidney disease.