

# RISK FACTORS ASSOCIATED WITH DISCHARGE SUMMARY MEDICATION ERRORS: A RETROSPECTIVE AUDIT

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## BACKGROUND

It is a requirement in Australia that a current list of medications is provided to receiving clinicians upon hospital discharge.<sup>1</sup> This list is commonly incorporated into the Discharge Summary (DS). Medication errors in DSs are common.<sup>2-5</sup>

While polypharmacy has been established as a risk factor for DS medication errors, there is currently limited understanding of other potential risk factors.<sup>4,5</sup>

## AIM

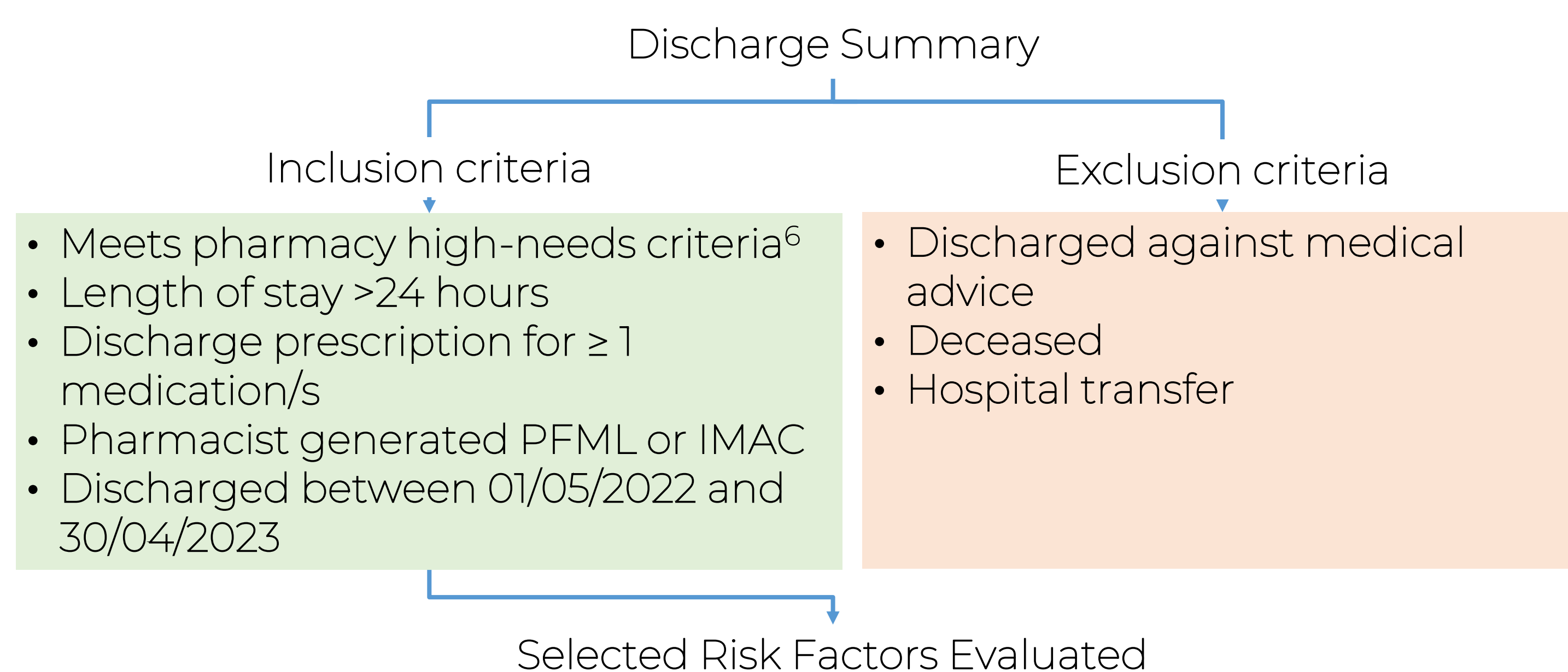
To determine risk factors for hospital DS medication documentation errors.

## METHOD

This retrospective audit examined 600 randomly selected DSs meeting inclusion/exclusion criteria (**Figure 1**).

Medication errors were identified by comparing DS medication lists with the pharmacy-generated Patient-Friendly Medication List (PFML) or Interim Medication Administration Chart (IMAC). Any discrepancies were considered DS medication errors.

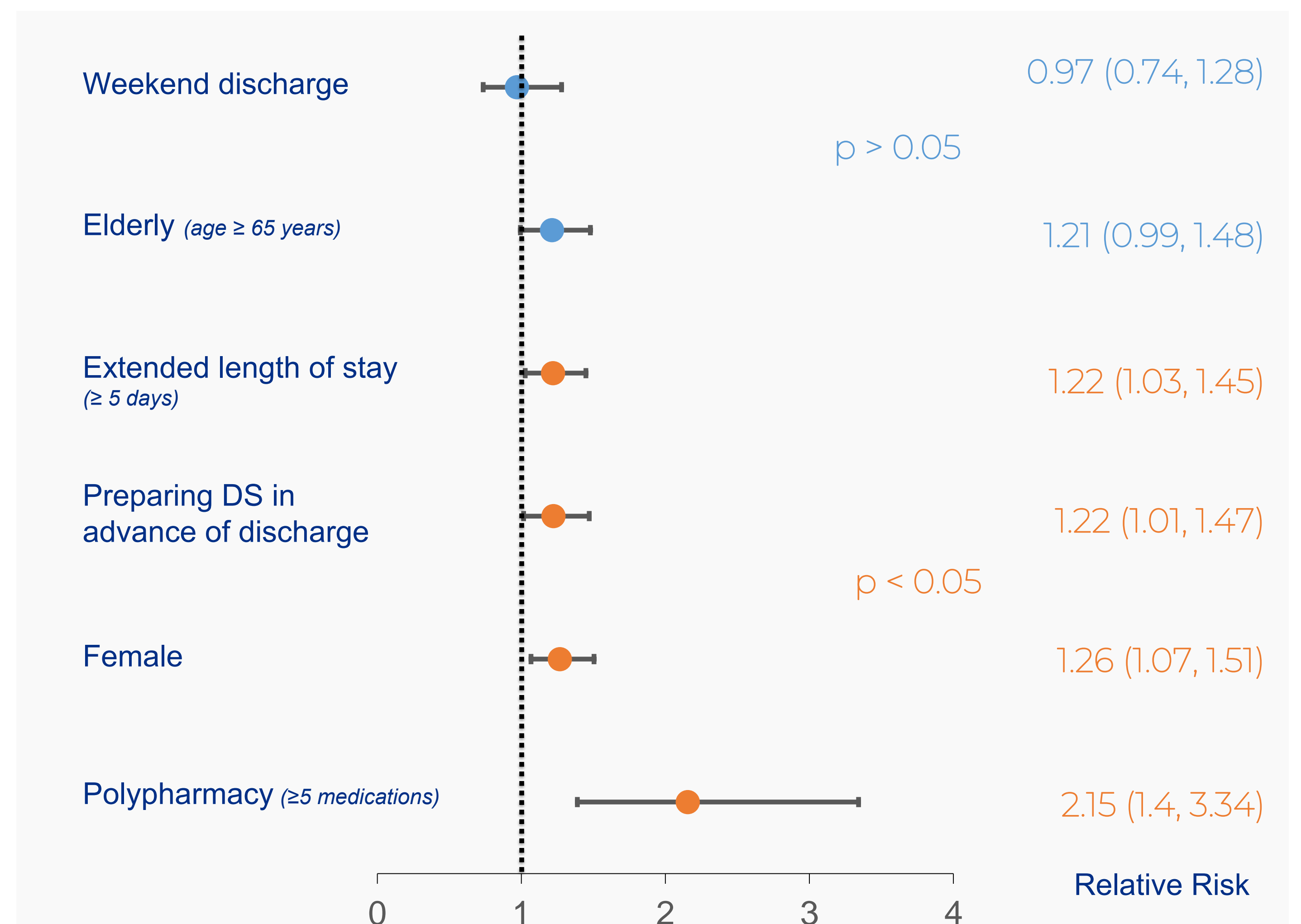
Potential risk factors were evaluated by determining the Relative Risk (RR) of a DS having  $\geq 1$  errors. All RR were reported with 95% confidence intervals.



**Figure 1:** Inclusion and exclusion criteria

## REFERENCES

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**Figure 2:** Potential risk factors for DS medication error/s. Relative risk with 95% confidence intervals

## RESULTS

A total of 1,325 DS medication errors from 600 DSs were identified (mean: 2.21 errors per DS).

Risk factors for DSs having one or more medication errors included polypharmacy ( $\geq 5$  medications), longer length of stay ( $\geq 5$  days), female sex, and preparing the DS in advance of discharge (**Figure 2**).

Weekend discharges and elderly age ( $> 65$  years), were not identified as risk factors for DS medication errors in this study (**Figure 2**).

## DISCUSSION

This study confirmed findings from previous research that polypharmacy is a significant risk factor for DS medication errors.<sup>4,5</sup> We have also identified, for the first time, that female sex, extended hospital length of stay and preparing DS in advance of discharge are also risk factors. The findings of this study will assist with prioritising future improvement projects aimed at minimising DS medication errors.

Interventions integrating pharmacists into DS creation can reduce DS medication errors however resourcing may prohibit providing this to all patients.<sup>2,4,6</sup> The risk factors identified in this study can be used to identify patients who should be prioritised for these interventions.

## CONCLUSION

Polypharmacy, female sex, preparing a DS in advance of discharge and extended length of stay are risk factors for DS medication errors.