

# Doctor-pharmacist collaborative prescribing model provides better care than usual care in an anaesthetic-led pre-admission clinic (PAC)

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## Background

The impacts of pharmacist prescribing models of care have previously been evaluated in Australian tertiary hospital PAC settings. They demonstrated safety and accuracy.<sup>1,2</sup> To date studies have not been conducted in medium-sized Australian hospitals (where anaesthetic-led PAC is common), or evaluated as a superiority trial. Our study incorporates these new factors, thereby filling a gap in the literature.

## Aim/Objective

To assess the impact of a doctor-pharmacist collaborative prescribing model in a medium-sized hospital, in the perioperative setting.

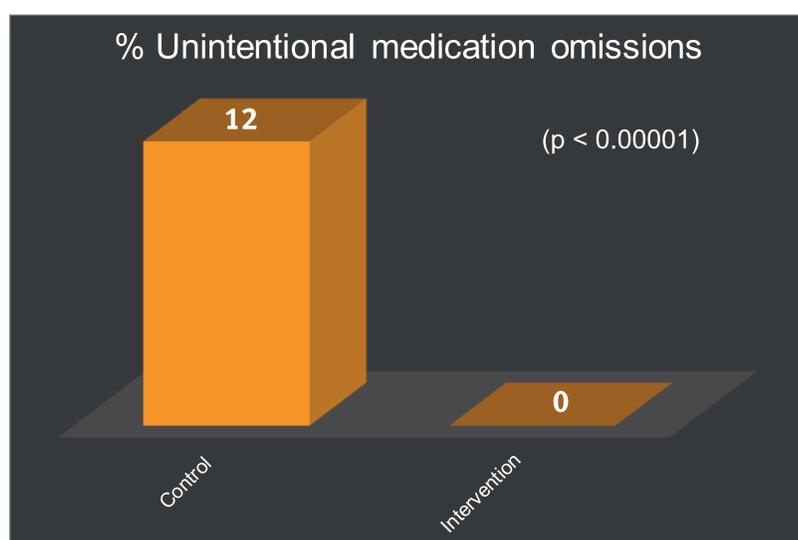
## Methods

A randomised control trial in a medium-size hospital evaluated 364 medication orders. Most patients attending PAC were eligible for inclusion (exclusion criteria minimised; demonstrating applicability in real environment). Number generating software randomised patients to control (medication orders prescribed by medical prescriber) or intervention (medication orders prescribed by credentialed prescribing pharmacist; clinical decision made collaboratively with medical prescriber) groups. Independent auditors analysed the data. A sample size of 612 orders was needed to show statistical significance, for 10% superiority (primary endpoints).

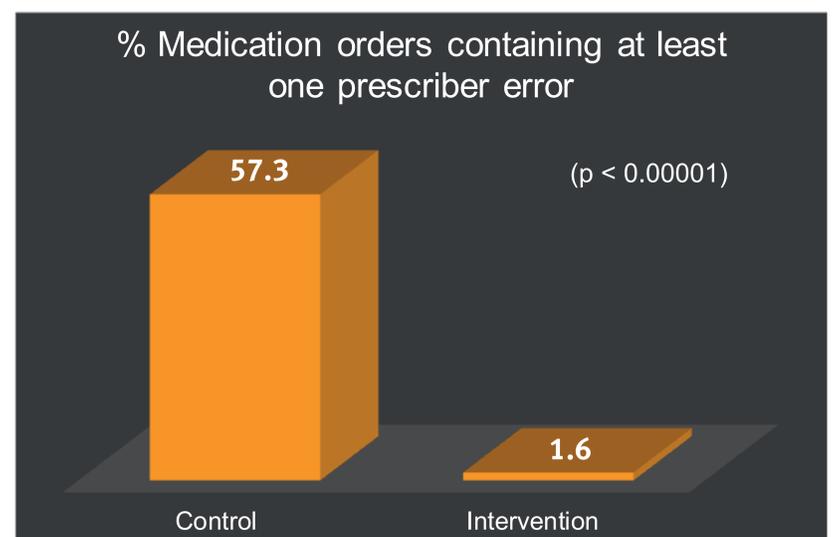
## Results

### Primary Endpoints

Unintentional medication omissions were reduced to zero in the intervention group compared to 12% in the control.

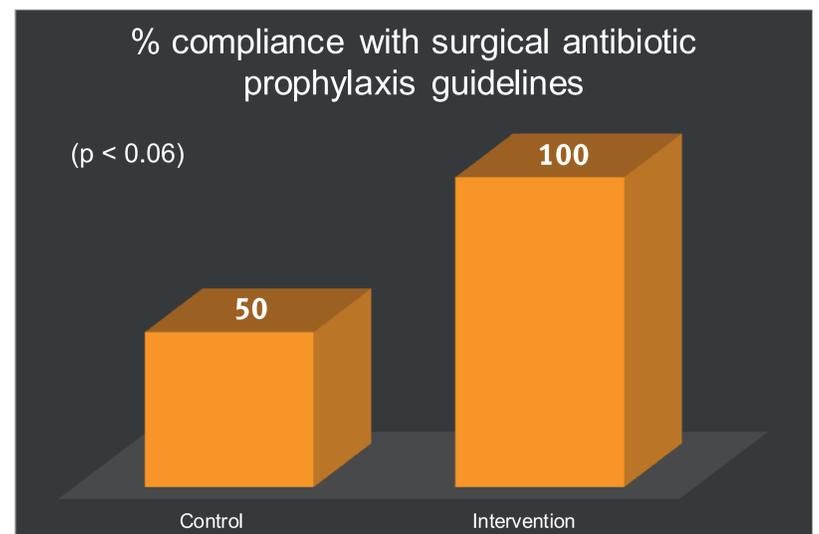


1.6% of orders in the intervention contained at least one prescribing error compared to 57.3% in the control.



### Secondary Endpoint

Intervention achieved 100% compliance with surgical antibiotic prophylaxis compared to 50% in the control.



## Conclusion

Despite small sample size (restricted due to staff limitations), the results are meaningful, particularly for unintentional omissions, given that omissions are the most common prescribing error in the perioperative setting.<sup>1,3-5</sup> Our study demonstrates that a doctor-pharmacist collaborative model can achieve better safety, accuracy and appropriateness of prescribing than usual care. Success of this model in medium-sized hospital settings is significant for demonstrating wide impact. This data adds to high quality Australian evidence, which ultimately seeks to facilitate legislative change allowing pharmacists to prescribe.

## References

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