

# Automatic Dispensing cabinets REDUCE medication omissions & IMPROVE patient safety

## Does point of care medication automation improve patient safety?

*Penelope Lupoi, Alice Wisdom, Melissa Teo*

*SA Pharmacy, Northern Adelaide Local Health Network, Modbury Hospital*

### Introduction

Automatic Dispensing Cabinets (ADCs) are becoming increasingly popular for point of care medication administration within the hospital setting. ADCs improve service delivery by:

- ↴ **Reducing** medication omissions
- ↴ **Reducing** delayed doses
- ↴ **Improving** medication safety

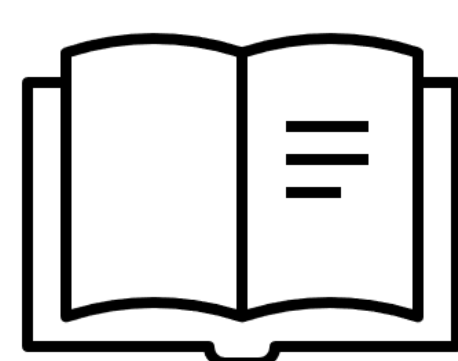
### Aims

To assess the impact of ADC implementation on medication omission rates.

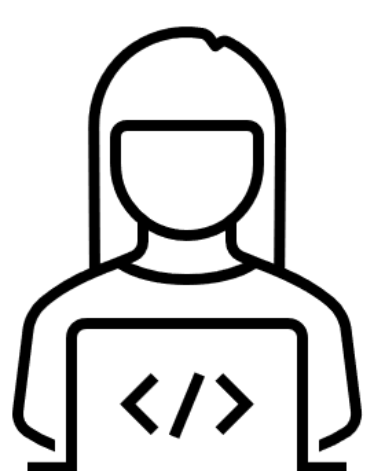
### Method



Delayed and omitted doses pre-defined per local policies.



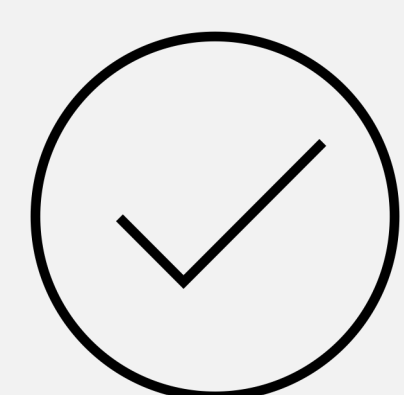
Charts collected Pre (Mar '21) and Post (Aug '22) ADC implementation.



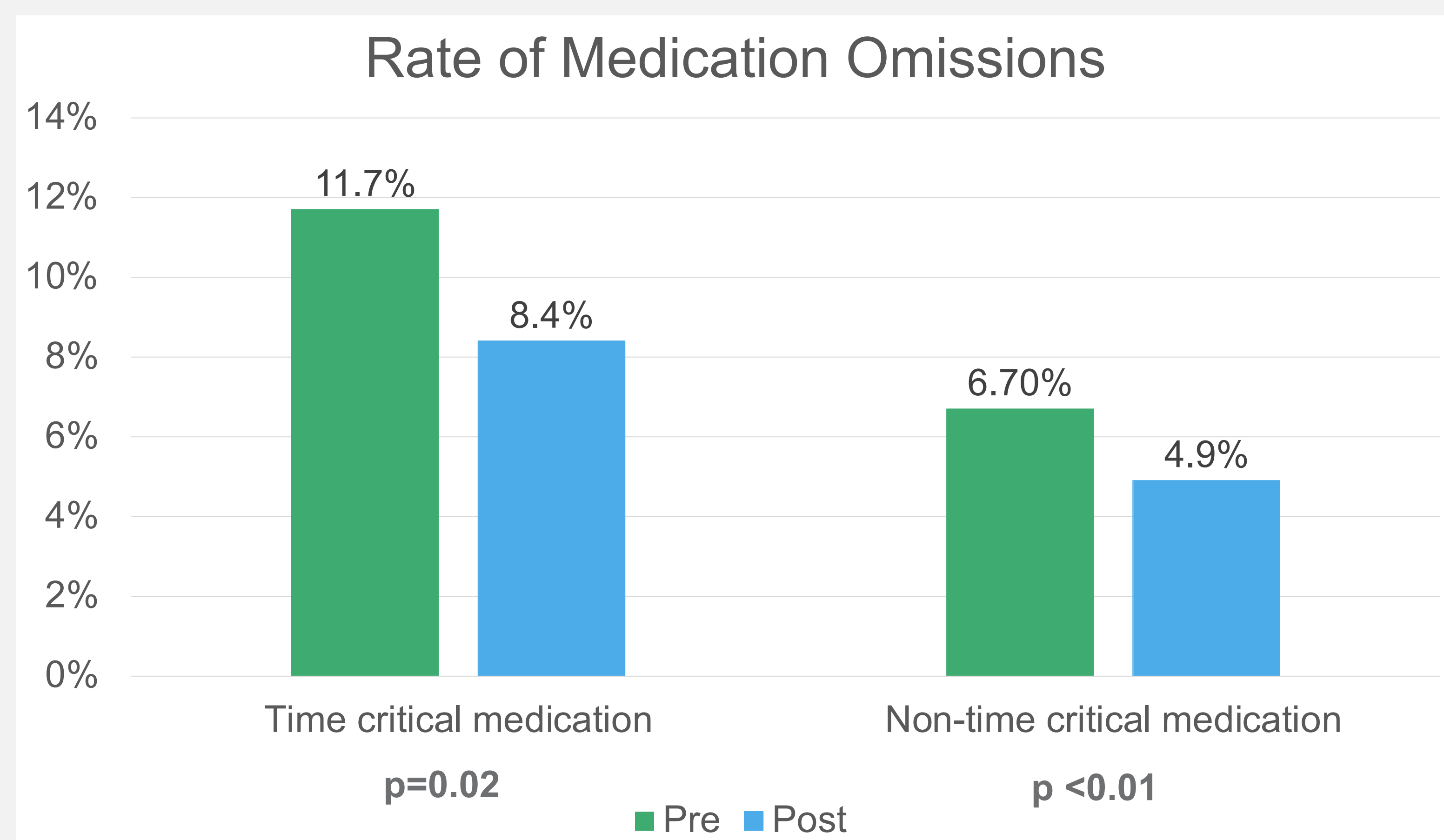
Data (medication doses) collected and analysed.

### Results

A total of 98 patients were reviewed pre-ADC implementation and 70 patients post, with 6383 doses (207 charts) and 4475 doses (151 charts) viewed respectively in a Short Stay Unit.



- 28% reduction** in medication omissions for time critical medication
- 27% reduction** in medication omissions for non-time critical medication



**Figure 1:** The rate of medication omissions for time critical and non-time critical medications, pre and post ADC implementation.

### Conclusion

Implementing ADCs within a high turnover unit has **reduced** the rate of medication omissions for both time critical and non-time critical medication and improved patient safety.

For more information

**Penelope Lupoi**  
Pharmacist  
penelope.lupoi@sa.gov.au



**Government of South Australia**  
SA Health  
SA Pharmacy