

OMISSION IMPOSSIBLE: Shedding light on clinical pharmacist interventions at Campbelltown and Camden Hospitals

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Background

Medications are the most common treatment used in health care. Medications can also be associated with harm and result in drug-related problems (DRPs). Clinical pharmacists conduct clinical reviews, identify DRPs and make recommendations in the form of interventions. The identification of DRPs often results in a change to patient's medication management. The objective is to reduce error rates allowing for better patient outcomes. A major Australian hospital-based study concluded that for every \$1 invested in clinical pharmacy, \$23 was saved on length of stay, readmission, medications and medical procedures.¹

A project was implemented at Campbelltown and Camden Hospitals with the following aims:

- To categorise clinical interventions performed
- To assess the severity of prescribing DRPs using a formal risk assessment tool
- To assess the effectiveness of communication methods

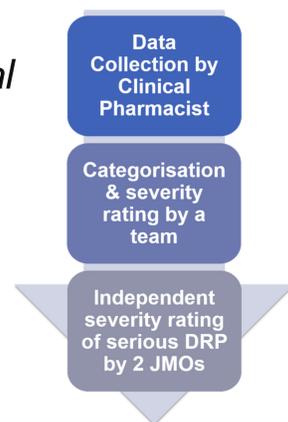
Method

Study design: *Descriptive observational*

Duration: *4 weeks*

Pharmacists recorded:

- *MRN, name, age, sex*
- *Medication involved*
- *Communication method*
- *Description of intervention*
- *Outcome*



Results

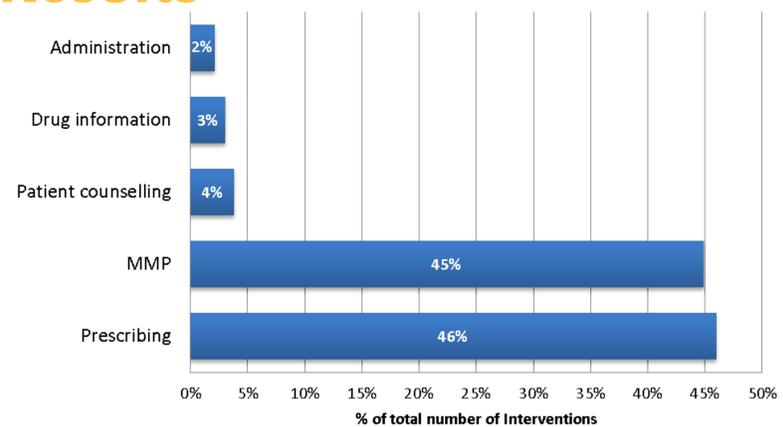


Figure 1: Prevalence of different categories of clinical interventions

Total number of interventions: 1,273

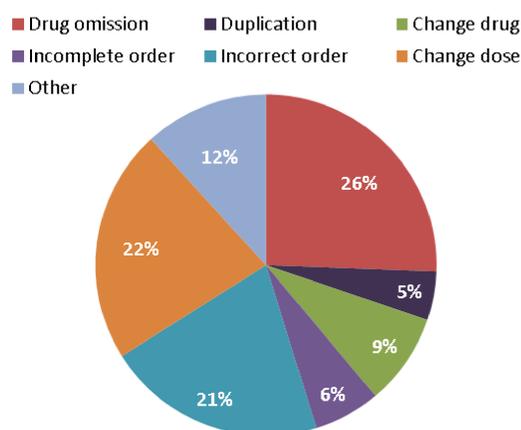


Figure 2: Prevalence of prescribing DRPs leading to pharmacist intervention

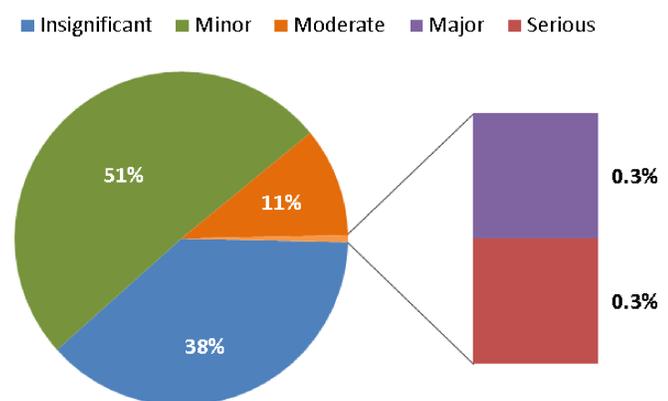


Figure 3: Prescribing DRPs stratified by severity scores

- Drug omissions were the most common prescribing DRP at 26%
- 66 of 586 prescribing DRPs were rated with a severity scoring of moderate and above
- An intervention was 30% more likely to be successful if directly communicated to prescriber (P <0.001)

Discussion

- 85% of interventions relating to omissions were "successful" which suggests those were unintentional in nature and highlights the importance of medication reconciliation on admission
- When assessing DRPs with a severity score of "moderate" or greater, prescribing interventions related to "change dose" and "incorrect order" were the most prevalent
- "High risk drugs" accounted for the majority of pharmacist interventions in this study

Conclusion

This study reinforces the value and the diversity of the clinical pharmacist interventions at Campbelltown and Camden Hospitals. Resolving prescribing DRPs was the most commonly recorded type of clinical intervention. Furthermore, direct communication with prescribers was found to be the most effective method of communication for addressing DRPs.

1- Dooley MJ, Allen KM, Doecke CJ, Galbraith KJ, Taylor GR, Bright J, Carey DL. A prospective multicentre study of pharmacist initiated changes to drug therapy and patient management in acute care government funded hospitals. Br J Clin Pharmacol 2004; 57: 513-21



Health
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26% of all prescribing related interventions were due to drug omissions