

The Type and Nature of Pharmacist Recommendations in a Healthy Ageing and Geriatric Clinic

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Background

There have been demonstrated benefits worldwide of the role of a clinical pharmacist working in an outpatient setting, including a hospital-based geriatric outpatient clinic¹.

A pharmacy service was introduced to the Healthy Ageing and Geriatric Outpatient clinic at Logan Hospital in October 2017. Common presentations to the clinic include high risk geriatric syndromes such as dementia, cognitive impairment, Parkinson's disease, recurrent falls and polypharmacy.

Aim

The purpose of this project was to evaluate the impact of introducing a clinical pharmacy service to a geriatric outpatient clinic and review the recommendations made by the pharmacist.

Method

A retrospective analysis was conducted on patients presenting to a Healthy Ageing and Geriatrics Outpatient Clinic between November 2017 and June 2018. Information collected included:

- % of patients seen by the pharmacist
- Number and type of recommendations made
- Measure of clinical severity of recommendations

Doctors and patients were surveyed to gain feedback on the service.

Results

- Pharmacist reviewed: 99/105 patients (94%)
- Total number of recommendations: 189 (average of 2 per review)
- Average number of medications per patient: 9
- Patients using administration aids: 42%
- Many patients received assistance from carers to manage their medicines

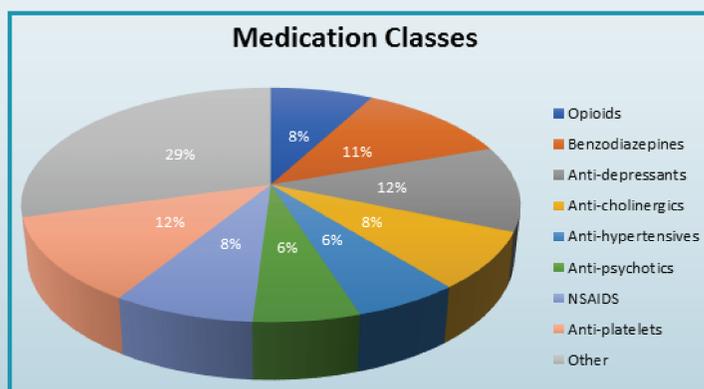
Type of Recommendations

The most common type of recommendations made were de-prescribing medications and patient education (adherence, tailored counselling, liaising with community providers), both accounting for 26% (n = 49/189).



De-prescribing

A large proportion of de-prescribing recommendations were in relation to classes of medicines that can have an increased risk of adverse effects in the elderly.



Case 1

Presentation

- 90 y.o. male, NESB
- Multifactorial falls, background of stroke

Background

- Taking **double dose of clopidogrel** due to different pharmacy's dispensing **different brands**
- Atorvastatin ceased despite previous stroke

Recommendations

- Education regarding different brands
- Commence Webster pack
- Re-commence atorvastatin

Measure of Clinical Severity

The potential outcome if a recommendation was not implemented was assessed using pharmacist's clinical judgement (see figure 1).

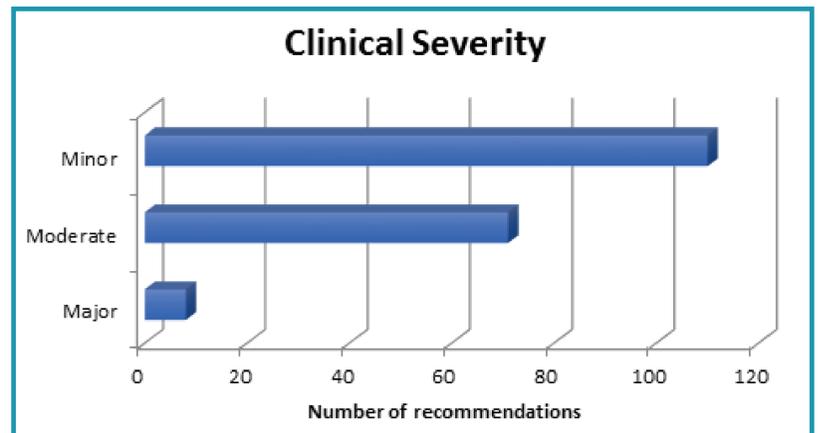


Figure 1²

Clinical Importance	Explanation	Example
Insignificant	No harm or injury, low financial cost	Omission of non-critical or interruptible therapy
Minor	Minor injury, minor treatment	Omission of regular important therapy – not contributing to acute medical issues
Moderate	Moderate injury, loss	Omission of regular important therapy – contributing to acute medical issues
Major	Major temporary injury, increased LOS	Under or overdose of critical drug
Catastrophic	Death, large financial cost	Gross overdose

Challenges

- **Time constraints:** ensuring patients see the Geriatrician in a timely manner while still undertaking a comprehensive pharmaceutical review
- **Documentation:** difficulty when converting to digital iEMR due to requirement to document in multiple programs

Feedback

- Patient feedback was limited due to a high proportion of cognitive impairment and time constraints of the clinic
- Of the 6 patient surveys completed, all feedback was positive
- 100% (n = 2) of doctors fed back that pharmacist input was beneficial for patient care in the clinic

Conclusion

The pharmacist primarily made recommendations to de-prescribe high-risk medications and provide patient education. Many of the recommendations could have a positive impact on patient care. Future research should focus on gaining further patient feedback and evaluating the proportion of recommendations implemented.

References

1. Lim WS, Low HN, Chan SP, Chen HN, Ding YY, Tan TL. Impact of a pharmacist consult clinic on a hospital-based geriatric outpatient clinic in Singapore. *Ann Acad Med Singapore* 2004; 33: 220-7.
2. ieMR Medication Related Interventions PowerForm Risk Scale

Case 2

Presentation

- 74 y.o. male
- Mixed vascular Alzheimer's dementia

Background

- Major concerns regarding **medication management** and non-compliance

Recommendations

- Gliclazide MR 60mg BD → 120mg MR daily
- Metformin/Vildagliptin 1000mg/50mg BD → metformin XR 1000mg daily. Dose reduced due to renal function. Vildagliptin ceased
- Add galantamine to Webster pack
- Cease regular paracetamol
- **Medication monitoring**
- Liaise with community pharmacy, care provider and family