

GEM at Home: Role of a Clinical Pharmacist in a Multidisciplinary Bed-Substitution Program

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Background

Australia's population is ageing with over 1 in 7 people (~15%) being aged 65 years and older and the proportion is expected to continue growing with estimations that older people will make up ~22% of the Australian population by 2057. (1)

The prevalence of chronic diseases is also anticipated to increase concurrently with age resulting in an increased demand on already congested public health care services.

In 2016–17, Australians aged 65 and over accounted for 2.8 million same-day hospitalisations (42% of the total 6.6 million) and 1.8 million overnight hospitalisations (41% of the total 4.4 million). (2) Therefore, innovative service delivery models that can alleviate these pressures on public hospitals are required.

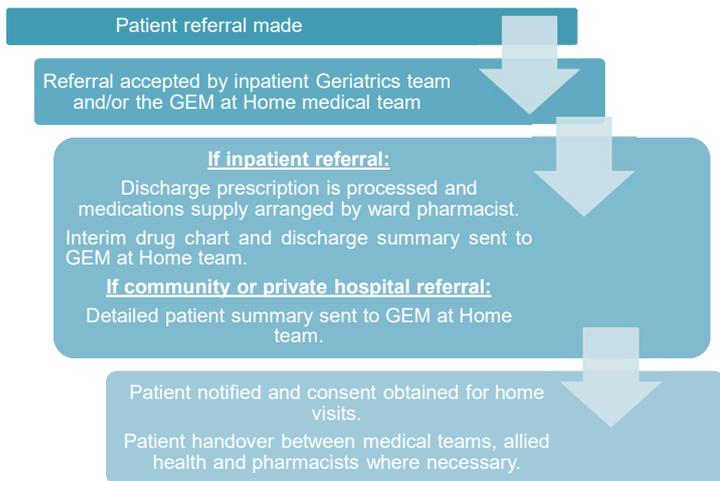
As most older people are discharged to their usual place of residence on leaving hospital, it is also essential to consider the support required during their transition of care to prevent further re-hospitalisation. (2)

Description

Geriatric Evaluation and Management at Home (GEM at Home) is a bed substitution model that assesses, treats and supports older people with multiple and complex needs at home where inpatient management would otherwise have been required. The service provides an integrated multidisciplinary management model to improve functional capacity and address multidimensional needs. A clinical pharmacist forms an integral part of this service in promoting medication safety and reducing medication related problems (MRPs).

Referral Process

The program screens referrals sent by clinicians and allied health staff from acute, subacute and community settings to identify suitable patients.



Patients are seen on a daily basis by a member of the multidisciplinary team which consists of:

- Geriatrician and Registrar
- Pharmacist
- Nursing staff
- Physiotherapists
- Occupational Therapist
- Dietician
- Allied Health Assistants
- Social worker (by request only)

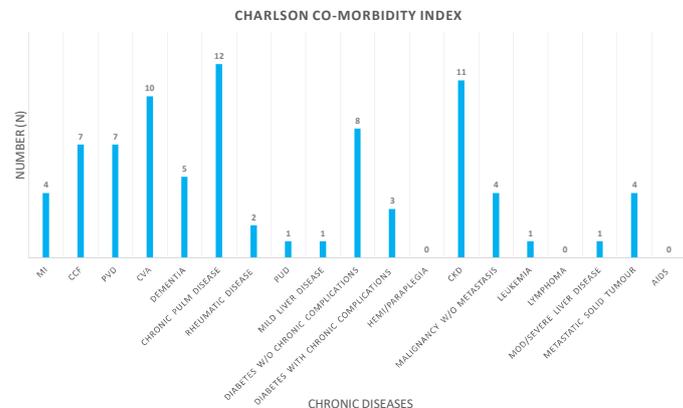
The clinical pharmacist was integrated into the service as a result of a successful business case. The role included undertaking a home medication assessment within 72 hours of admission to the GEM at home program, developing medication management plans, providing medications, resolving MRPs and liaising with other community services. Additional pharmacist roles included providing medicines information and developing medication safety guidelines.

Evaluation

The clinical pharmacy service was evaluated on number of patient reviews, MRPs identified and resolved, and medicines information enquiries answered.

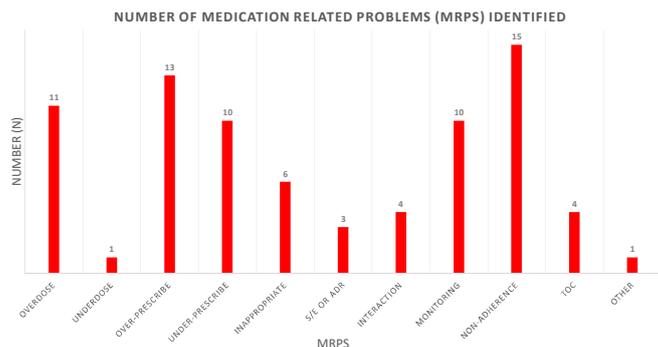
Over 3-months, from 25th February 2019, 42 patients were admitted and discharged from the program. The mean age was 77 ± 8 years (range of 60 to 97 years) and 57% of patients were female.

Application of the Charlson Co-morbidity Index (CCI) showed that the most common chronic condition was chronic pulmonary diseases (14.8%, n=12) followed closely by chronic kidney disease (13.6%, n=11) and cerebrovascular accident or transient ischaemic attacks (12.3%, n=10). The mean CCI score was 6.6 ± 2.4.

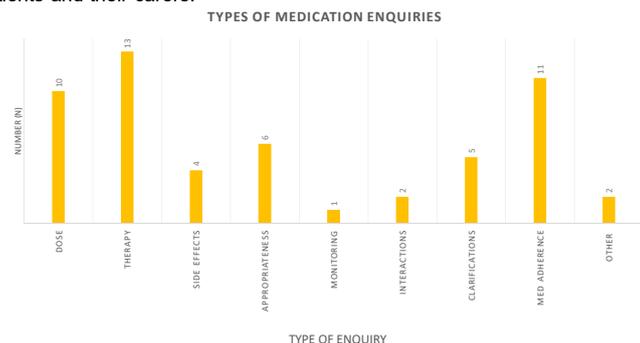


Patients had a mean of 11.2 ± 5.1 medications prescribed on admission, more than half did not use any type of dose administration aid (54.8%, n=23), and the patient usually managed their own medications (66.7%, n=28).

Seventy-eight MRPs were identified with medication non-adherence being the most prevalent (19.2%, n=15).



A total of 54 medication enquiries were made with 46% (25) of enquiries from prescribers, followed by 26% (14) from nurses, then 20% (11) from patients and their carers.



Actions included educating staff and patients on medications as well as providing recommendations on prescribing and administration.

Implications

A clinical pharmacist role has been established as an essential part of the GEM at Home team with the level pharmacist interventions supporting on-going practice with potential for increased involvement.

Conclusion

The GEM at Home program successfully provides multidisciplinary support for older and more complex patients at home. The integrated clinical pharmacy service has an essential role in identifying and reducing medication-related problems, and providing necessary medication information.

Further studies analysing the efficacy of pharmacist-led interventions on medication-related problems in a multidisciplinary bed-substitution program are required.

References:
1. Older Australia at a glance. Australia's changing age & gender profile. Australian Institute of Health and Welfare [Internet]. Australian Institute of Health and Welfare; 2019 [cited 23 October 2019]. Available from: <https://www.aihw.gov.au/reports/older-australia-at-a-glance>
2. Older Australia at a glance. Health care—hospital. Australian Institute of Health and Welfare [Internet]. Australian Institute of Health and Welfare; 2019 [cited 23 October 2019]. Available from: <https://www.aihw.gov.au/reports/older-australia-at-a-glance/health-care/hospital>

