

Prospective Study of Collaborative Pharmacist-led Intervention to Prevent Hospital Readmissions in the Emergency Department



Health
South Eastern Sydney
Local Health District

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Background

Unplanned hospital readmissions (UHR) is a safety and quality healthcare measure, conferring significant costs to the healthcare system^{1,2}.

Elderly individuals are at high risk of Emergency Department (ED) readmissions, with medication management as a significant risk factor³. Pharmacists can address medication-related issues which may reduce UHR.

Objective

1. Determine if integrating an emergency medicine pharmacist, into current ED care models, reduces UHR.
2. To determine the types interventions undertaken by the ED pharmacist in preventing unplanned readmissions.

Method

Study design, setting and study period:

A prospective, single centre cohort study conducted in ED between November 2022 to February 2023.

Inclusion criteria:

- Eligible for referral to the Aged Care Service Emergency Team (ASET) and/ or Quick Response Program (QRP)*¹
- Patients aged ≥ 65
- Taking ≥ 3 medications
- Presenting with falls, cognition changes, or reduced mobility and must be for planned discharged from ED to home.

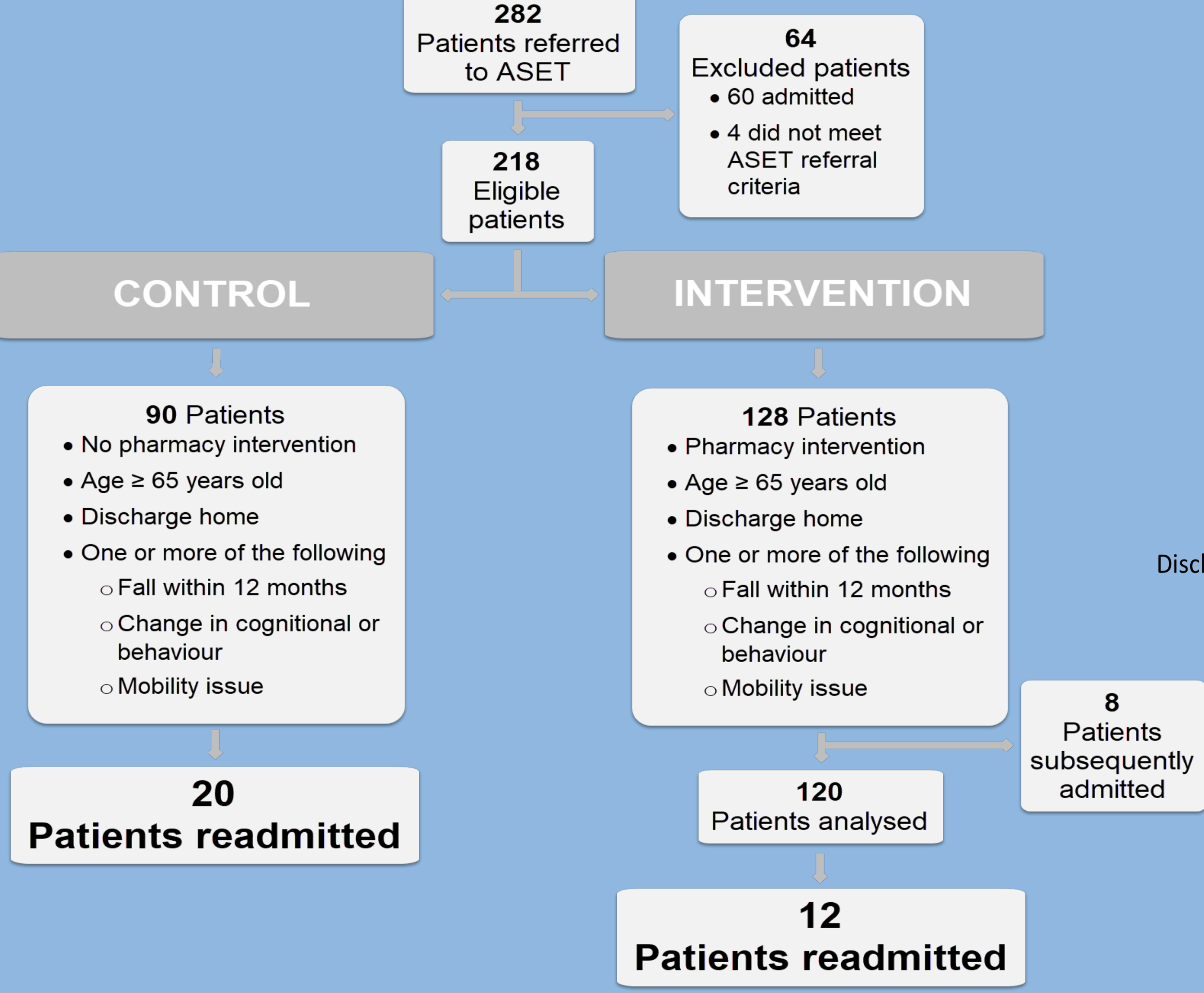
The emergency medicine pharmacist would perform interventions including comprehensive medication management consultations, discharge services, medication clinical interventions, patient counselling and create care plans in collaboration with ASET and the medical officer. These interventions were coordinated with the QRP team to ensure adherence and treatment continuity for successful implementation to participants when available*².

Eligible patients who did not receive an intervention acted as controls. The primary outcome was preventing UHR within 28 days.

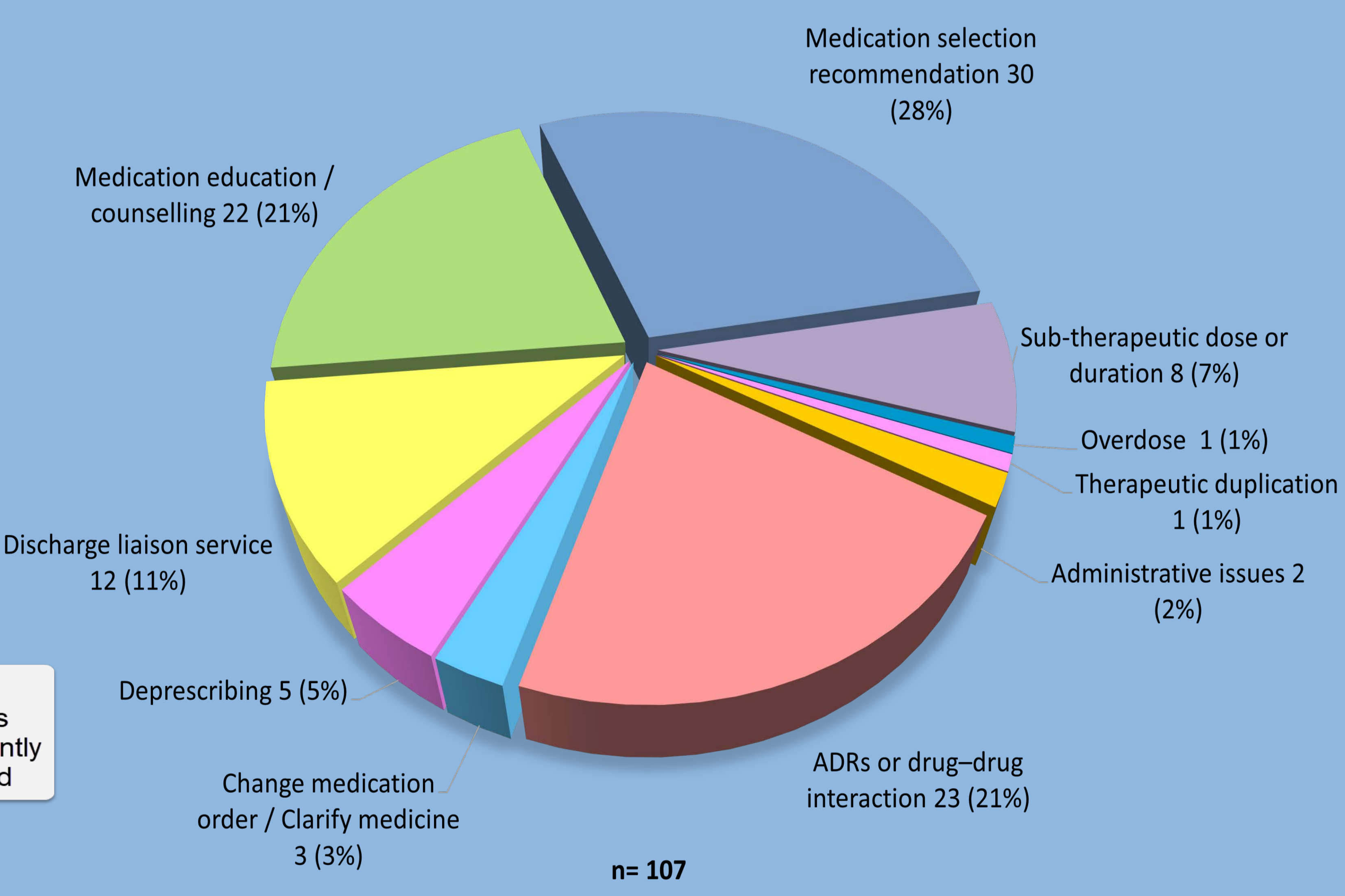
*¹ASET & QRP allied health & nursing service supports older patients in the ED and their transition to home following discharge.

*²Service available 3 days per week (business hours)

Results



Types of Pharmacy Interventions Total



Within 28 days post-ED discharge, unplanned readmissions occurred in 10.0% of patients in the intervention group and 22.2% in the control group (p-value of 0.01).

Conclusion

Integrating an emergency medicine pharmacist to the ED Aged Care Service Team reduced UHR within 28 days post discharge from ED for older non-admitted patients. In addition, the types of medication related interventions made by the emergency medicine pharmacist found to have a clinical impact and potentially mitigating factors that could have otherwise led to readmission.

References

1. Australian Institute of Health and Welfare (AIHW) Australia's Hospitals 2016–17 at A Glance. Australian Institute of Health and Welfare; Canberra, Australia: 2017.
2. Sahli D. A new focus is needed on preventing unplanned hospital readmissions. Linked in; 2015. Available at: https://www.linkedin.com/pulse/new-focus-needed-preventing-unplanned-hospital-darryl-sahli?trk=hb_ntf_MEGAPHONE_ARTICLE_POST [verified 6th April 2023].
3. Koehler BE, Richter KM, Youngblood L, Cohen BA, Prengler ID, Cheng D, Masica AL. Reduction of 30-day postdischarge hospital readmission or emergency department (ED) visit rates in high-risk elderly medical patients through delivery of a targeted care bundle. J Hosp Med. 2009 Apr;4(4):211-8.

Clinical Impact and Future Direction

These findings highlight the positive impact of collaborative healthcare models on patient-centered care and unplanned hospital readmissions, warranting a larger multicenter study for validation and generalisation.

