Implementing pharmacist-led deprescribing in haemodialysis: quality use of medicine activity in the Queensland hospital Setting

Carla Scuderi [1,2], Michelle Rice [1] , Anna Hendy [1], Nicolas Anning [1], Stephen Perks [3], Melissa Antonel [3], Leanne Brown [3], Cassandra Rawlings [3], Sharad Ratanjee [1]

1 Metro North Hospital and Health Service, Kidney Health Service, Royal Brisbane and Women's Hospital, Herston, Australia 2 University of Queensland, Pharmacy PACE, Woolloongabba, Australia
3 Townsville University Hospital, Douglas, Australia E: carla.scuderi@health.qld.gov.au

Background

- Polypharmacy in haemodialysis patients can not only manifest as the continued prescribing of unnecessary medications but also has the potential to increase medication-related hospital admissions, morbidity, and mortality.
- A validated deprescribing algorithm has recently been developed, specifically targeted at dialysis patients. We audited the experience of implementing this algorithm in Australian dialysis settings.

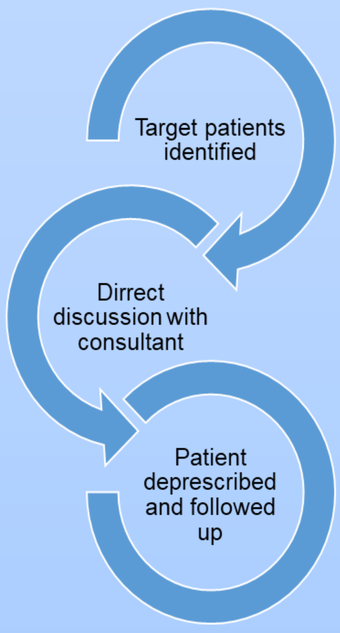
Aim

- The aim of this paper was to evaluate the usefulness and applicability of the pharmacist-led Toronto deprescribing tool in Australian in inpatient and outpatient haemodialysis settings.

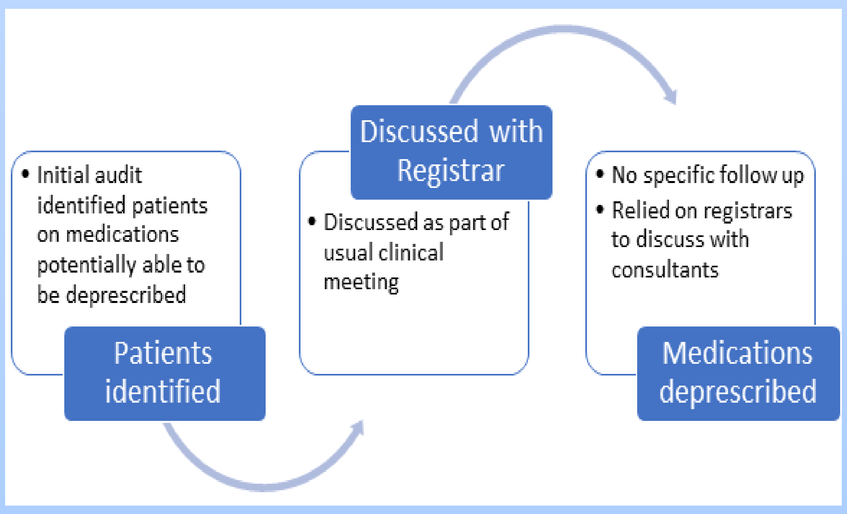
Methodology

- Pharmacist-led deprescribing algorithm was implemented across two metropolitan sites and one rural site.
- The audit focused on five medications that could potentially be deprescribed in the target patient group (diuretics, alpha blockers, statins, proton pump inhibitors [PPIs], and quinine).
- Between 1 and 12 months later, a reaudit was conducted, with patients followed up to confirm if medications remained deprescribed

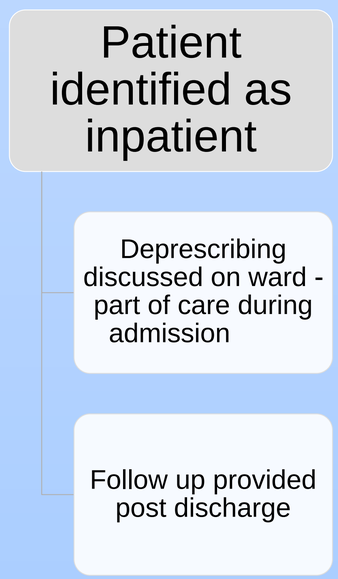
Site 1: Out patient identification then review of deprescribed medications after 6 months)



Site 2: Outpatient identification then review of deprescribed medications after 12 months



Site 3: Inpatient identification then review of deprescribed medications after 1 month



Results

- Two hundred and eleven patients across three sites were reviewed.
- 168 medications, 56 (33%) were initially deprescribed, with 50 medications (30%) remaining deprescribed on reaudit.
- Deprescribing rates varied between the three different services, initial deprescribing rates ranging from 18% to 61%.
- After follow-up, deprescribing changes across target medications were fairly static, with only a small number of patients restarting either their diuretic or PPI.

Conclusions

- The pharmacist-led deprescribing algorithm resulted in substantial deprescribing across the three sites.
- Deprescribing rates varied between the sites due to differences in the team model that the pharmacist worked within and the method of the rollout.
- This audit demonstrates that a pharmacist-led predefined deprescribing algorithm can be implemented and result in a meaningful reduction of medications for haemodialysis patients in multiple different settings.

1. Article Reference
McIntyre C, McQuillan R, Bell C, Battistella M. Targeted Deprescribing in an Outpatient Haemodialysis Unit: A Quality Improvement Study to Decrease Polypharmacy. AJKD. 2017 Nov;70(5):611-618.

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

World Patient Safety Day 17 September

NSQHS STANDARDS