Evaluation of opioid use in geriatric patients at a sub-acute private rehabilitation hospital

Yuki Yamaguchi-Heming and Marguerite Bell

Clinical Pharmacists, Allied Health, Lady Davidson Private Hospital

Background

It is a well-known fact that opioid usage should be carefully managed.

The risk to our geriatric group is higher; they are often more vulnerable to the adverse effects of opioids and other medications due to alterations in metabolism associated with aging, central nervous system effects, increased sensitivity to pain, as well as cardiovascular and endocrine system effects.

The 'Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard – Fact sheet for clinicians' (OCCS) was released in April 2022.

Aim

To evaluate if our sub-acute rehabilitation hospital (speciality in orthopaedic, neurology, pain, reconditioning, oncology, and cardiology) with unique patient group (LDPH) is generally following the OCCS, and whether we can improve our practice.

Methods

Clinical pharmacists retrospectively collected data for February 2023, during medication reconciliation prior to LDPH discharge, using acute hospital (AH) discharge summaries (DCS), My Health Record, and NSW SafeScript sources.

Data included:

- Patient demographics
- Length of stay (LOS)
- Opioid-naïvety on AH admission (>30 days from last dose)
- Medication changes from LDPH admission to discharge
- Presence of pain management plan (PMP) documented in DCS

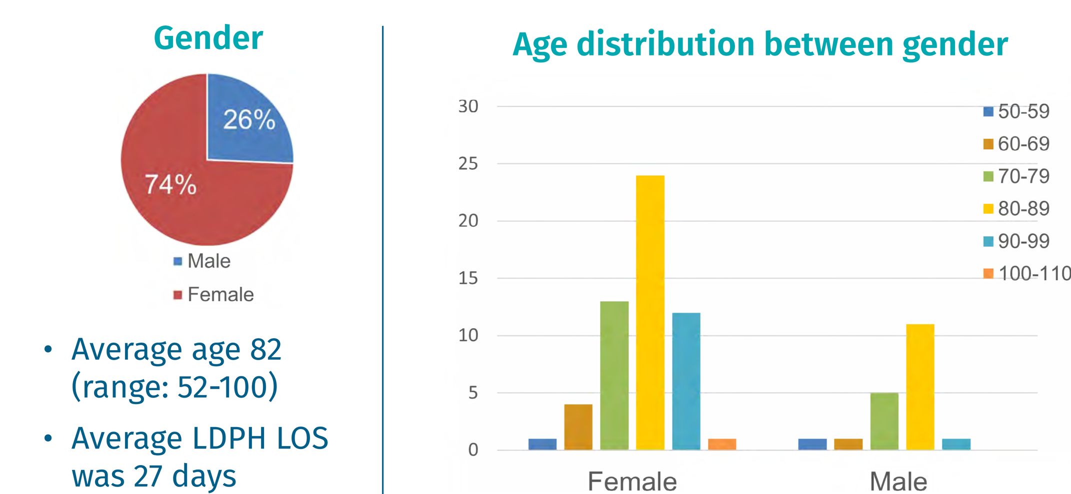
IR tablet and SR tablet were differentiated (example: a change from Tapentadol 50mg SR tablet to Tapentadol 50mg IR tablet was considered dose reduction)

Opioid equianalgesic calculator by the Faculty of Pain Medicine, Australian and New Zealand College of Anaesthetists (FPM ANZCA) was utilised.

Comparison was made with OCCS.

Results

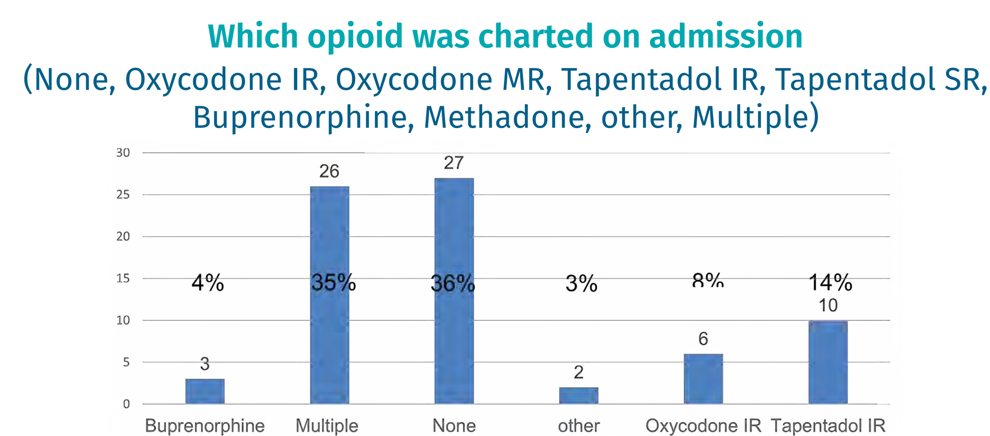
75 patients discharged from LDPH in Feb 2023.
74 were reviewed.



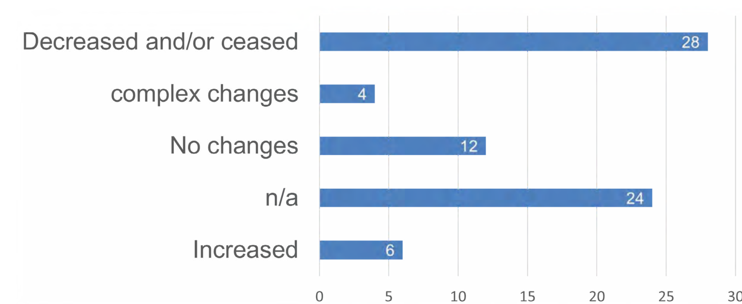
- Average age 82 (range: 52-100)
- Average LDPH LOS was 27 days

77% were opioid naïve prior to AH admission.

64% (n=47) were prescribed at least one opioid and more than half (55%, n=26/47) were on multiple opioids on AH discharge.



On LDPH discharge, 74% (n=35/47) remained on opioids (60% opioid naïve (n=21/35)) although 60% (n=28/47) successfully ceased/reduced dose during admission.



6 'dose increased' patients

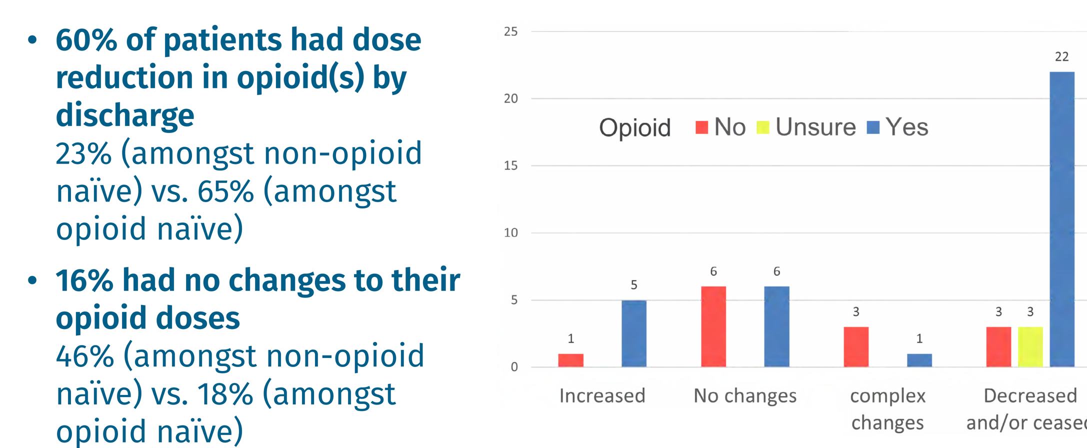
- 1 patient – admission unrelated pain exacerbation (LoS 59), opioid naïve – no weaning plan mentioned
- Other 5 patients stayed a short time – Average 12.2 days (min 7 days, max 15 days)
- Out of these 5, 1 patient (opioid naïve) had no weaning/ceasing plan mentioned in the letter
- 2 patients were started on opioids at LDPH (1 patient LoS 59, 1 patient LoS 7)

Complex changes

- 4 patients – there were significant changes to the patient's medications overall over time during their admissions with at least one referral to another specialist to manage the pain.

How did the dosing change? In a little more detail...

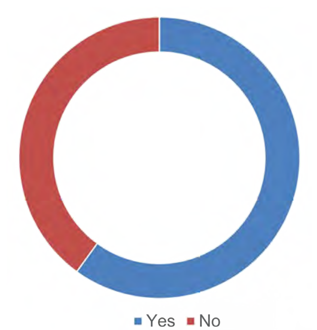
- **60% of patients had dose reduction in opioid(s) by discharge**
  23% (amongst non-opioid naïve) vs. 65% (amongst opioid naïve)
- **16% had no changes to their opioid doses**
  46% (amongst non-opioid naïve) vs. 18% (amongst opioid naïve)



40% (n=14/35) of DCS had no PMP documented.

Weaning/ceasing plan mentioned on the discharge summary

40% of discharge letters had no plan documented
ie No mention of weaning/ceasing, No mention of GP to review 'pain management' etc

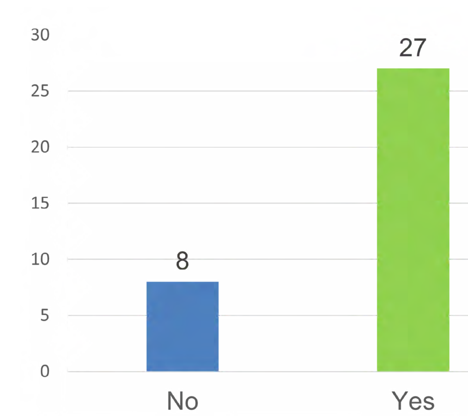


All medication lists provided by clinical pharmacists documented the need for post discharge review.

77% (n=27/35) received limited supplies on discharge. The OCCS was followed in general but could be improved.

Did we review the quantity of opioid on discharge?

- 77% of patients had limited supplies of opioids to continue, which would encourage GP visit and a review
- 3 out of 8 'no' patients were not given any opioids on discharge due to them transferring to another hospital



Discussion

Despite over three quarters of patients being opioid-naïve, 2 in 3 were admitted to LDPH on opioids with 55% on multiple, and half overall remained on opioids at discharge.

Almost half had no PMP in the DCS, which heightens the risk for this geriatric cohort.

Education targeting DCS pain management has commenced with repeat audit in early 2024.

This pharmacist-led quality project has highlighted areas for improvement in patient care and safety.

References