An Audit of Polypharmacy on a General Medical Ward

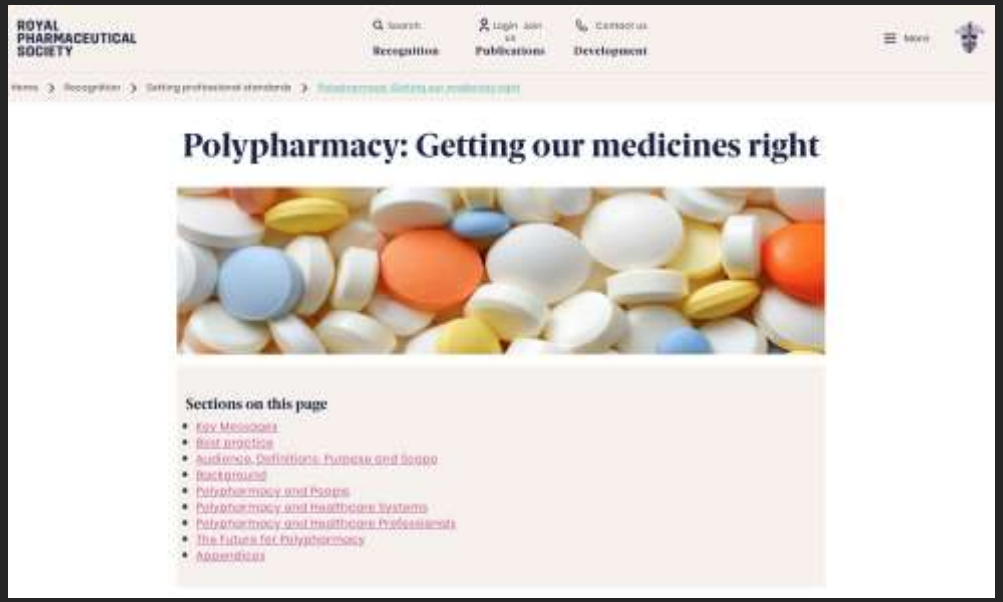
Newcastle Upon Tyne Teaching Hospitals

Authors:

- Savannah Haworth (Year 4 Medical Student)
- Claire Rivett (prescribing pharmacist)
- Dr Stephen Wiltshire (SpR)
- Dr Alexander Dyker (Consultant)
- Dr Simon Hill (Consultant)

With many thanks to the RVI pharmacy team and the Ward 30 staff

Introduction



The Audit Standard

"100% of patients who are over 65 and on 6 or more pre-admission medications (PAMs) should have a structured medication review, or the need for a review, documented in their hospital notes."

NICE Guidance 5: Medicines Optimisation section 1.4.1[3] and RPS Polypharmacy guidance [1]

What we wanted to know:

Is the standard met ?

Scale of polypharmacy

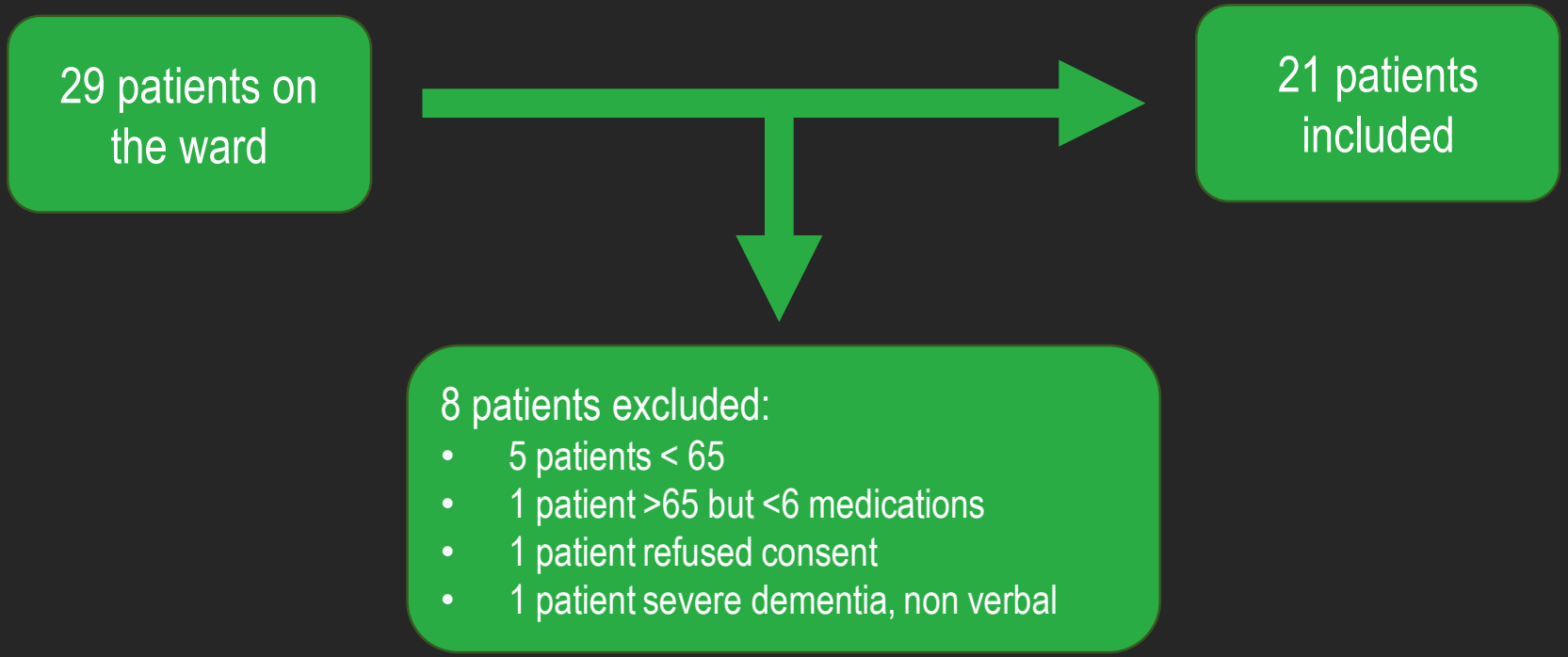
Level of knowledge

Potentially Inappropriate Prescriptions

Methods

- Mixed methods approach
- Cross sectional
- Inclusion criteria
- Data collection: patient notes, eRecord & a patient interview
- Potentially Inappropriate Prescriptions
  - STOPP/START criteria[4]
  - Review with a prescribing pharmacist and specialist registrar- delphi type process

Who was included



What we found

- Average older age: 81.1 years
- High levels of polypharmacy: 12.4 medications (range 6-24)
- Patients had very little knowledge about their medications
  - They knew on average 55% of their prescribed medications
- No patient had a structured medication review documented during their current admission which met the standards set out in NG5 1.4.1
- No patient had polypharmacy documented in their notes, or flagged as the indication for a review
- All patients had medicines reconciliation review upon admission

Potentially Inappropriate Prescriptions

- 57% of patients had one or more PIPs identified
- The most common potentially inappropriate prescription was Omeprazole with 4 incidences
  - Proton Pump Inhibitors were the 2nd most commonly prescribed medication (12 patients)

Patient Comments

- 48% of patients said that they feel, or have felt, like they are taking too many medications
- 24% of patients said that if they could, they would like to stop some of their medications
- 57% of patients said they would like to have a medication review whilst in hospital

Summary so far:

- Polypharmacy is not routinely addressed in medical inpatients.
- Patients are not receiving, or being flagged as needing, medication reviews for polypharmacy.
- Many patients had potentially inappropriate prescriptions.

So what ?

- Length of stay & 30 day readmission rates
  - Small sample size, underpowered to detect effects
- Larger studies have shown that there is an association between polypharmacy and negative real world outcomes
  - Increased adverse drug reactions[5]
  - Increased readmission rates[6]
  - Increased risk of mortality[7]
- Potentially Inappropriate Prescriptions
  - Hospital admissions[8]
  - A&E visits, Adverse reactions, Reduced QOL[9]

Recommendations

- Consider polypharmacy as an issue in secondary care
- Education to all staff groups
- Flag on IT system: link in to primary care
- Address barriers
- Data collection

References

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Questions?