

# Deprescribing following medication review in acute care: the ReMAC project

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# **Aim and objectives**

**To increase the consistency and quality of medication reviews in acute care**

Objectives:

1. Develop criteria for identifying patients at risk of medication-related harm
2. Define 'Interim Medication Review', 'Comprehensive Review' and 'Holding medication'
3. Develop and test a structured approach to the medication review process that includes the patient/carer
4. Analyse the cost of 'deprescribed' medicines.

# **Medication review in UK Acute Hospitals**

- In UK acute care setting medicines are typically reconciled and reviewed at admission and throughout each patient's stay (NICE 2015)
- Medicines may be held, or following a comprehensive medication review they may be permanently changed or appropriately 'deprescribed' (NICE 2015)

# Definitions

Following a literature search we set standards for.

- Interim Medication Review (IMR)
- Comprehensive Medication Review (CMR)

# Interim Medication Review definition

- *Medicines are reviewed when a patient presents acutely unwell at hospital or when their condition deteriorates or improves*
- *The timing and level of review is adjusted according to patient need with their immediate safety and wellbeing central to the decision but not necessarily with their full knowledge or participation in the decision*
- *Medicines may be changed or withheld (pending a later CMR) because they are considered 'non-essential' or currently 'unnecessary' or contributing to morbidity*
- *This can be doctor or pharmacist-led review*
- *Patients should also be 'reviewed' by a clinical pharmacist according to the Royal Pharmaceutical Society (Picton 2014) standards as part of the medicines reconciliation processes, to ensure that their medicines are clinically appropriate*

# Comprehensive Medication Review

*Full review using a structured critical examination of all current medication with the objective of reaching an agreement with the patient about treatment. The reviewer systematically considers the merits and risks of different medications, stops inappropriate medicines and starts others optimising their impact, minimising the number of medication related problems and reducing waste.*

# Definitions

## **Holding medication**

*Temporary cessation of medication with a view to further monitoring and review.*

## **Deprescribing**

*The process of permanently and safely stopping inappropriate or unnecessary medicines.*

*Deprescribing is a part of the CMR and must take into account the patient's physical functioning, co-morbidities, other medicines, preferences and lifestyles (Hilmer 2012).*

# Criteria for identifying patients at risk of medication-related harm

1. Patients prescribed medicines 'unscreened' by pharmacist or not reconciled with drug history [especially  $\geq 24$ h after admission]
2. Patients with frailty [especially when dehydrated, malnourished]
3. Patients with a long term condition (LTC) [if changes are made to regular prescription]
4. Patients with polypharmacy [especially on  $\geq 10$  medicines]
5. Patients presenting with a medicines related problem (MRP) [particularly where MRP was the reason for the admission]
6. Patients with a Potentially Inappropriate Prescription (PIP) [especially the very elderly]
7. Patients on a high risk medicines or high risk combinations [especially those who have a trigger of harm]

(Marvin 2016)

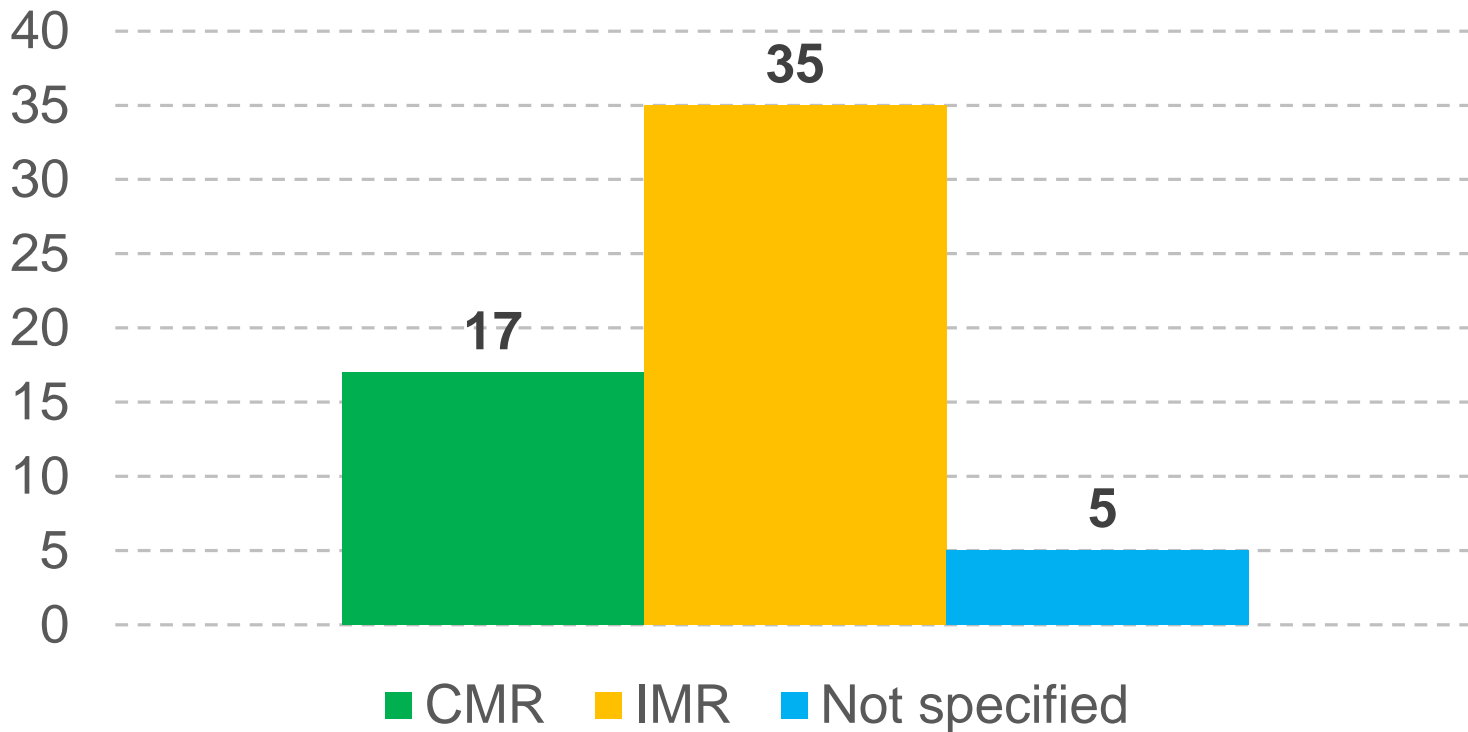


# Methods

- **Population:** 200 discharged inpatients aged  $\geq 70$  years
- **Selection:** Random sample from patients discharged from Chelsea and Westminster Hospital
- **Observation period:** August - October 2015
- **Type of analysis:** Retrospective analysis of:
  - admission prescriptions,
  - discharge summaries,
  - documented medication changes.
- **Multidisciplinary team conducting medication review including:**
  - Consultant,
  - Junior doctors,
  - Pharmacist,
  - Patient or their carer,
  - Therapist.

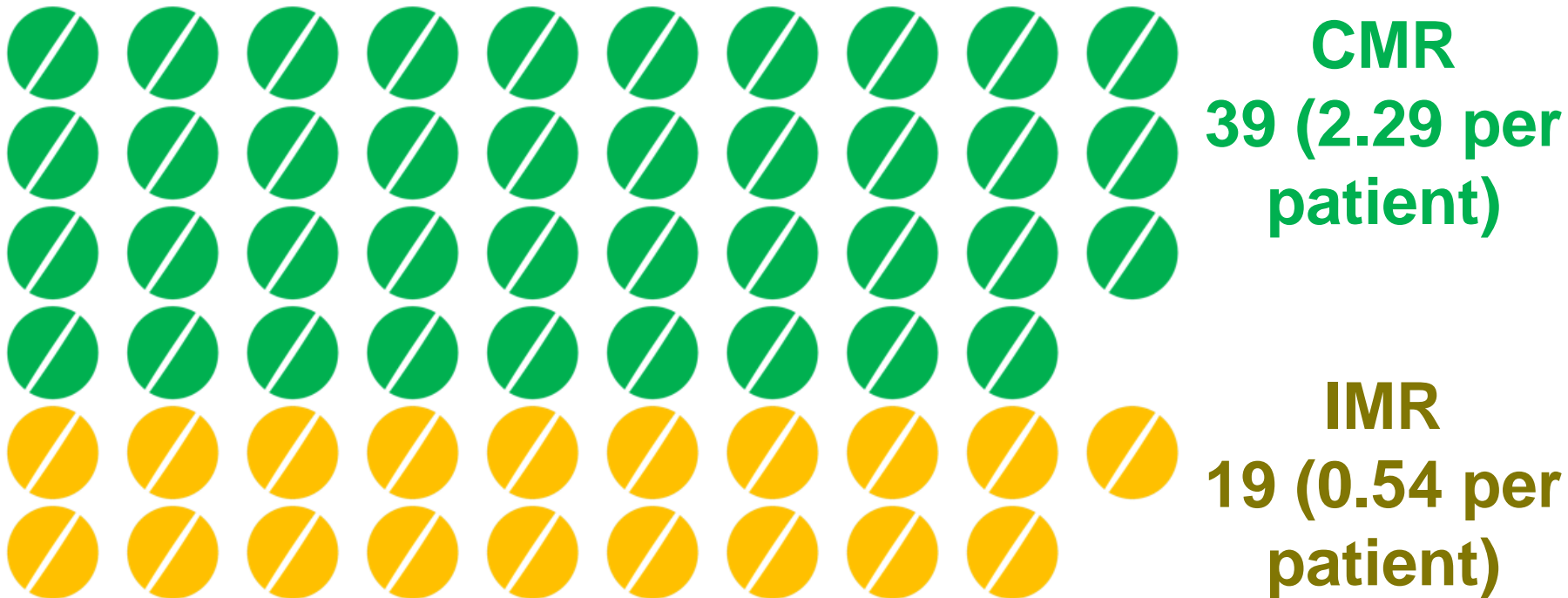
# Number of medication reviews

Of our cohort of 200 patients, 57 (28.5%) had documented medication reviews.



# Number of medicines 'deprescribed'

62 medicines were deprescribed in 27 of the 57 (47%) reviewed patients.



# Number of medicines 'held'



**CMR**  
**3 (0.17 per patient)**



**IMR**  
**16 (0.45 per patient)**

# Costs and resources

- The average annual cost per patient of deprescribed medicines was £50-86 (€64-111)
- The average time needed to complete a review was additional 7 minutes on top of usual care

# Conclusion

- Results indicate that:
  - 28.5% of elderly inpatients had medication reviews
  - 47% had one or more medicines ‘deprescribed’
- Defining medication review as ‘interim’ and ‘comprehensive’ was helpful.
- ‘Holding’ medications during the acute stay prior to full review and involvement of the patient in decisions is important.

# References

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