

Assessing the impact of specialist pharmacist review on the safety of medications in patients recently discharged from Intensive Care

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Background and Importance

- Medication review, with input from pharmacy, is a national standard for post intensive care (ICU) follow up¹.
- Just 21%² of UK ICU pharmacy teams provide input after transfer of care to the ward.

Aims and objectives

- This study aimed to assess the impact of specialist pharmacist review on medication safety for the post-ICU patient group
- To explore the number, and quality of interventions made by specialist ICU pharmacists following targeted review post ICU discharge.

Methods

Design:

- Prospective, multi-centre, cross-sectional, point-prevalence study.

Inclusion criteria:

- Patients across South-West England, discharged from an ICU to a ward over a period of 5 days in June 2023.

Data collection:

- Anonymised electronic form detailing type, frequency and potential harm prevented from each intervention.
- Reviews allowed to be conducted remotely (using electronic prescribing system) or in person.
- Data reassessed by independent pharmacist at base site using Harm Associated with Medication Error Classification (HAMEC) tool to stratify level of potential harm prevented.

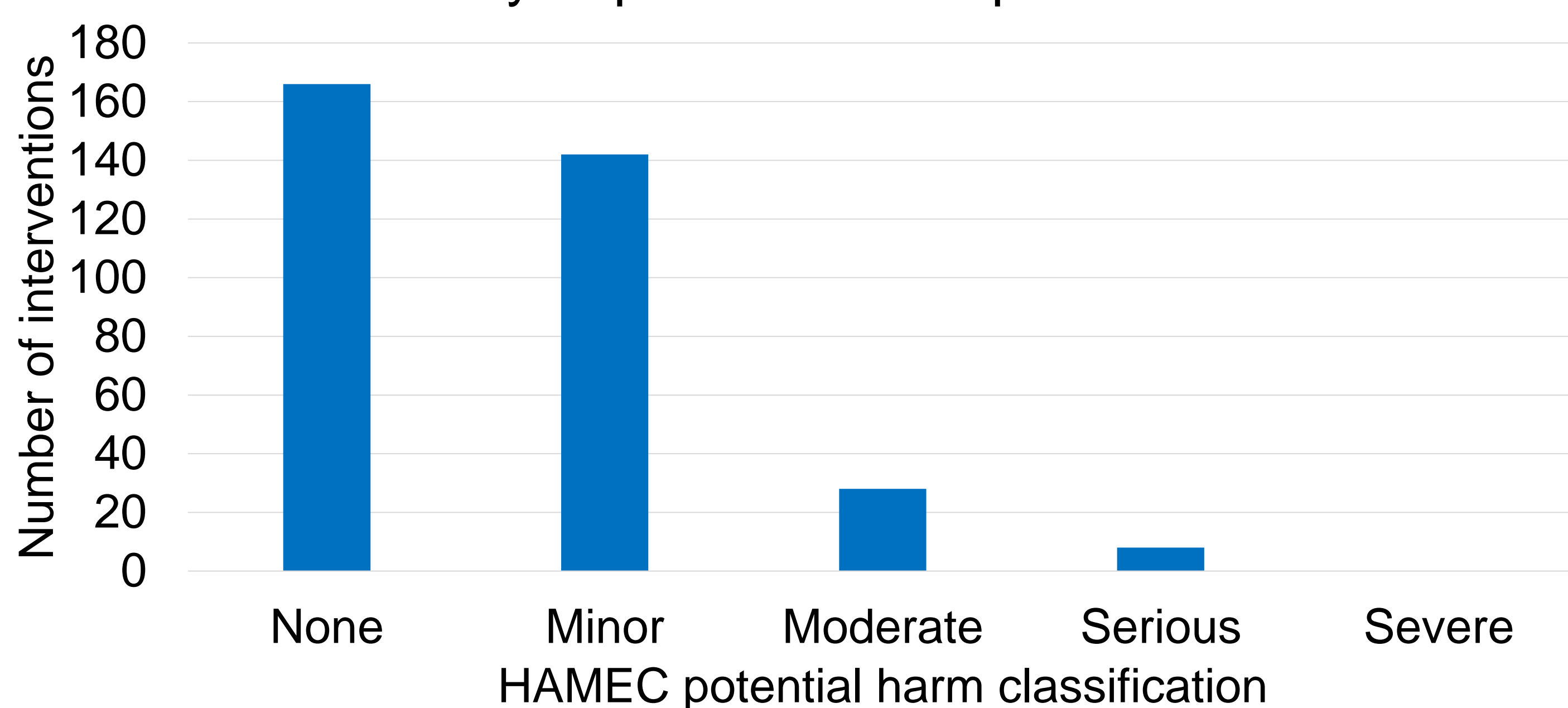
Analysis:

- Completed using descriptive statistics in Excel.

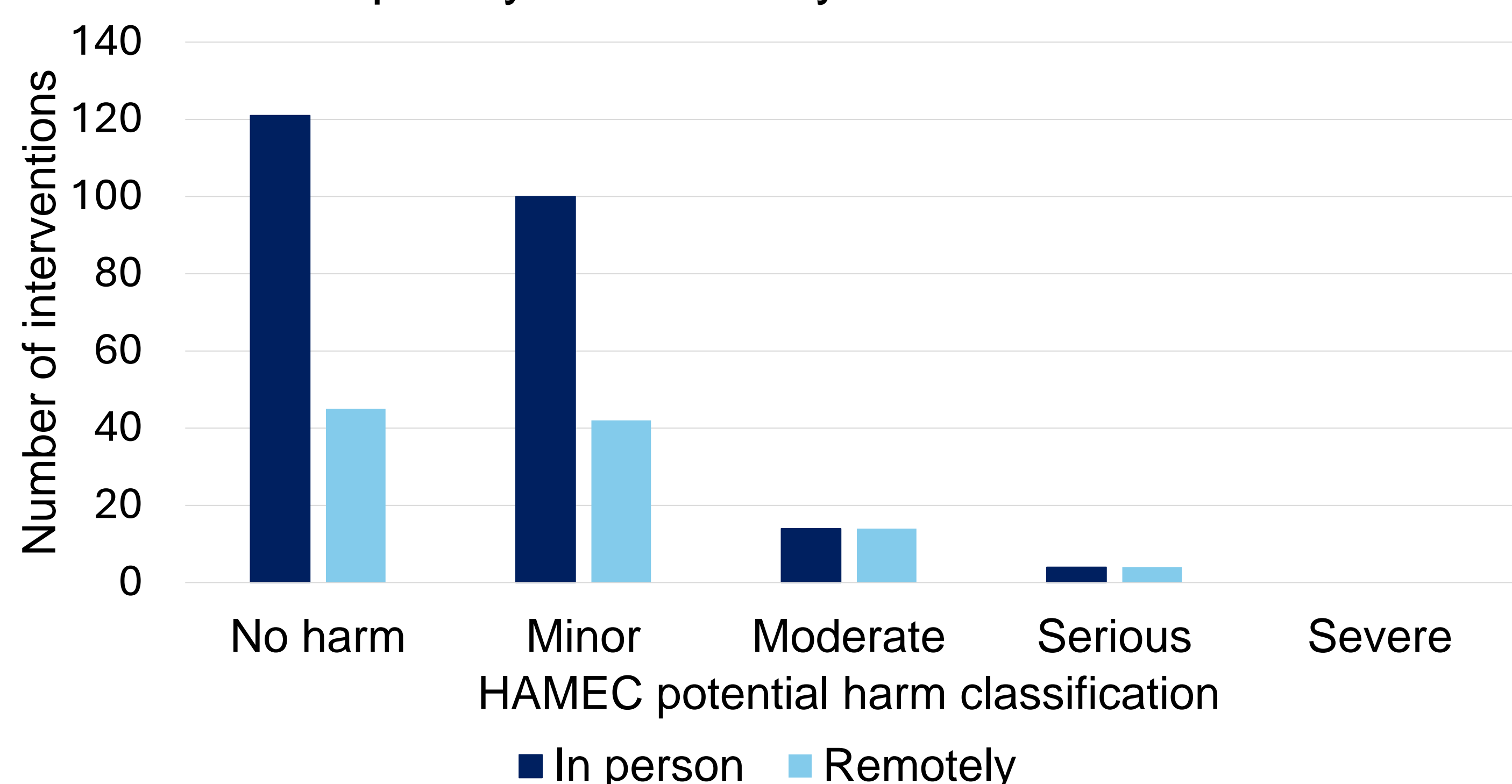
Results

Number of patients reviewed	134 <i>75 in person, 59 remotely</i>
Number of interventions	344
Mean interventions per patient	2.6 <i>3.2 in person, 1.8 remotely</i>

Frequency of interventions compared to the severity of potential harm prevented



How does nature of pharmacist review affect frequency and severity of intervention?



Moderate and Serious Harm Interventions Prevented by Class of Medication

Class of medication	Frequency
Antiarrhythmic	3
Antibiotic	9
Anticoagulant	9
Antiepileptic	1
Antihypertensive	2
Insulin	2
Opioid analgesia	1
Other	9

Conclusions

- Medication errors at transfer from ICU to the ward were substantial, and more prevalent than in a large non-UK study³.
- Specialist pharmacist review in any form has the potential to reduce harm from medications in patients discharged from ICU.
- In person review yields more interventions per patient compared to when completed remotely.
- This is the first UK study evaluating the impact of pharmacist intervention in this population.
- Further work should focus on the feasibility and cost-effectiveness of implementing this service.

Contact details

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