

CONFERENCE ABSTRACT

Inappropriate prescribing among older people in intermediate care: prevalence, pharmacist intervention and predictors of improved prescribing

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Introduction

Intermediate care (IC) is an important destination for older people transitioning from secondary care to home. Inappropriate prescribing is highly prevalent among older people; however, less is known regarding its prevalence within IC. Furthermore, whilst a novel pharmacist case management model has shown improved prescribing appropriateness among older people in IC [1], less is known about predictors of the change observed.

Methods

Data from older people (≥ 65 years, $N = 532$) admitted into IC in two Northern Irish healthcare trusts was examined using SPSS version 25. Prevalence of inappropriate prescribing on admission was determined using the Medication Appropriateness Index [2] (MAI) score, assessed by the case management pharmacists. The change in MAI total score from admission to discharge was examined using the Wilcoxon signed-rank test. Multivariate linear regression, robust to data non-normality, was conducted using Mplus 8.1, with MAI score change the outcome variable. Clinical characteristics, pharmacist intervention types and patient demographics were entered as independent variables.

Results

The majority of participants (89.5%) showed some degree of inappropriate prescribing on admission into IC, indicated by a total MAI score >0 . A total of 2377 clinical interventions were recorded for the cohort ($M = 4.48$, $SD = 2.56$, range 0-12). A total of 948 medicines were discontinued during IC admission. Total MAI scores reduced significantly from admission ($Mdn = 14$) to discharge ($Mdn = 0$) ($Z = -18.28$, $p < .001$), with most participants (83.6%) reporting a change. A linear regression model explained 44.2% of the variance in MAI score change, with the change in the number of prescribed medications from admission to discharge the strongest predictor ($\beta = .584$, $p < .001$). Receiving at least one medication dosage change also positively predicted the magnitude of MAI score change ($\beta = .206$, $p < .01$).

Discussion

Inappropriate prescribing is highly prevalent among older people in IC, highlighting the need for medicines optimisation within this care context. The significant reduction in MAI score achieved via pharmacist case management was largely driven by medication discontinuation, however, dosage adjustments also contributed to improved appropriateness.

Conclusions

It cannot be assumed that all medicines have been optimised for the older person prior to transition into intermediate care. Medicines can be successfully optimised by pharmacists within IC via a case management approach.

Lessons learned

Pharmacist involvement within IC is warranted given the high levels of inappropriate prescribing identified and the significant improvements achieved.

Limitations

No comparison with usual care was made as the service was available to all IC patients.

Suggestions for future research

The healthcare outcomes of participants following case management need to be explored.

References

1. Miller R. Developments in Practice. Medicines optimisation in older people (MOOP); the journey from pilot to permanent service. *Journal of Medicines Optimisation*. 2018 Sep;4(2):27.
2. Hanlon JT, Schmader KE, Samsa GP, Weinberger M, Uttech KM, Lewis IK, et al. A method for assessing drug therapy appropriateness. *Journal of Clinical Epidemiology*. 1992 Oct 1;45(10):1045-51.