

a Title: Examining the utility of the Connect with Pharmacy (CwP) intervention in reducing elderly readmission

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ABSTRACT – to be submitted in the field 'Abstracts Editor

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Topic

Substantial evidence demonstrates an increased risk of hospital admission when patients move between care providers. This is particularly pronounced in elderly patients who are more likely to have complex needs. We investigated whether sharing discharge information would impact on hospital readmission rates in this population.

Intervention

Leeds Teaching Hospitals Trust (LTHT) recently implemented a web-based intervention ("Connect with Pharmacy"; CwP) that allows hospital pharmacy staff to securely share pertinent discharge information with the patient's community pharmacy. To evaluate intervention efficacy, data collected as part of routine clinical management were retrospectively analysed. For primary analysis, patient admission rates were tracked 6 months prior (baseline) and 6 months' post-intervention. Secondary measures included change in total length of stay (LoS) if readmitted, emergency department (ED) attendance and duration and effect of polypharmacy.

Improvement

In the sample of patients (all aged 65 years and older) tracked in the first 6 months of the intervention (n = 627; Mean age = 81 years, 389 female), admission rates following referral (M=1.1, 95% CI [0.98, 1.22]) reduced by 16.16% relative to baseline (M=1.31, 95% CI [1.21, 1.42]) (v=38766; p<0.001). There was no reduction in total LoS (V = 63462, p = 0.12), but subsidiary analysis revealed a post-intervention reduction in number of days spent in hospital lasting more than 3 days ($\chi^2 = 13.37$, df=1, p <0 .001). There were no statistically reliable differences for number of ED visits and associated hours spent, nor was there an effect of polypharmacy (all p's > .05).

Discussion

The CwP intervention has been successfully implemented at LTHT and admissions

for patients referred were reduced by 16% during the intervention period. The result showing a reduction in LoS post-intervention for stays greater than 3 days indicating that there may also be further benefits for patient experience and hospital flow. Conducting economic cost-benefit analysis is the next step towards larger scale adoption.