prescriptions. MR consists in obtaining the complete and accurate list of medications taken by the patient at home, the best possible medication history (BPMH), then using BPMH to ensure the medication order. Two approaches are possible: retroactive when BPMH is produced and considered after the prescription is written; and proactive when BPMH is produced before and is considered in the initial prescription. Proactive MR is promoted as a safer approach, but the lack of human resources is often presented as a major limiting factor to set it in practice.

**Purpose** Thus, the aim of our study was to determine which approach was the most time-effective.

**Material and methods** We conducted a single-centre prospective study between June and October 2018. Patients over 65 years old, hospitalised in a neurology unit in a university hospital were included, and randomly assigned to either the proactive or retroactive group (ratio 1:1).

We measured:

- The delay between patient’s entry and the completion of MR.
- Time spent to perform each step of the process (working time).
- The delay between patient’s entry and first prescription.

In all cases, we compared BPMH to the first hospital prescription, and recorded unintentional medication discrepancies (UMD).

**Results** Sixty patients were enrolled in the study. The two groups were comparable in terms of demographics and number of medications in BPMH. In the proactive group, we measured:

- A significant decrease in the delay between patient’s entry and the completion of MR (3.0±1.8 h vs 13.7±14h, P<0.0001).
- No difference in working time (26.6±9.3 min vs 30.1±10.3 min, P=0.17).
- No difference in the delay between patient’s entry and first prescription (2.4±1.1 h vs 2.4±2.0h, P=0.96).
- A significant decrease in the number of patients with at least one UMD (13.3% vs 73.5%, P<0.0001) and the average number of UMD per patient (0.3±0.7 vs 1.8±1.7, P<0.001).

**Conclusion** We demonstrated that proactive MR improved the delay of MR, without increasing the working time nor delaying the time of first prescription. We confirmed that proactive is safer than retroactive in a neurology unit.

**REFERENCES AND/OR ACKNOWLEDGEMENTS**

None.

No conflict of interest.
European Medicines Agency. PS were reported on a visual analogue scale for each drug. The quantity tested by each clinician-accepted medication and the hospital database, were registered in an Excel database including: patient demographics, number of prescriptions and DRPs at admission and at discharge, number of PIs and clinician acceptance rate in the POST-group and rehospitalisation rate 3 months after discharge in both groups. Statistical analysis was performed using STATA 15. Students t-test for independent data was used to compare quantitative variables between the two groups, while the Chi-square test was used for qualitative variables.

Results

Results A total of 84 patients were included: 34 in the PRE-group (35.3% male, mean age 84.5±6.7, mean number of prescriptions per patient on admission 7.4±2.7, at discharge 8.0±2.6) and 50 in the POST-group (45.1% male, mean age 83.2±17.5, mean number of prescriptions per patient on admission 8.4±3.2, at discharge 7.7±3.0). DRPs at discharge were substantially reduced after the implementation of MR conducted by a pharmacist (p<0.001): in the PRE-group, mean 2.90±2.83 DRPs per patient were identified on admission and 3.79±2.99 at discharge, while in the POST-group 4.80±2.97 DRPs per patient on admission and 2.64±1.75 at discharge leading to a significant difference in terms of reduction of DRPs at discharge between the two groups (p<0.05). In total, 288 PIs were performed with a 74% clinician-accepted rate. The rehospitalisation rate reduced significantly in the POST-group (35% vs 10%, p<0.05).

Conclusion

Conclusion Results showed pharmacist-led MR to be an effective procedure in the local setting, reducing DRPs and rehospitalisations in elderly patients. Therefore, MR programmes should be introduced into Italian standard practice to reduce healthcare costs.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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