Background Medication reconciliation has been carried out since 2015 in the internal medicine ward. However, prescription errors at admission still occur, mainly linked to the transcription in the CPOE system by the physician of the medication history (MH) collected by the pharmacy. In order to improve the quality of prescription at admission, we studied the implementation of a pharmacist pre-prescription (PpP) process.

Purpose To evaluate the impact of the PpP on the number of unintentional medication discrepancies (UMD) at admission.

Material and methods

- Interventional prospective study before/after in a 24-bed internal medicine unit.
- Eligibility criteria: age >65 years and/or >three chronic treatments at admission.
- Pre-intervention phase (2 months): MH provided by the pharmacist and used by the physician to write the admission prescription.
- Intervention phase (2 months): MH entered by the pharmacist in the CPOE system as a PpP and then used by the physician to electronically generate an admission prescription without any transcription.
- Data collected: age, sex, number of UMD on the admission prescription, potential of harm for the patient (minor, moderate or severe) evaluated by the prescriber and the pharmacist, prescriber satisfaction (survey).

Results Eighty patients (29 males, 51 females; age 68.4±18.6; medications at admission: 8.8±4.0) were included in the pre-intervention phase. 36.2% of patients had at least one UMD (0.53±0.80 UMD/patient). 40.4% of UMDs had a moderate or severe potential of harm for the patient. The main UMD were dosage errors (38.0%) and omissions (33.3%). In the intervention phase, 47 patients (28 males, 19 females; age 66.3±18.7; medications at admission: 8.0±4.5) were included and PpP was used for 83% of them. Patients with at least one UMD decreased to 8.5% (p=4.2 × 10^-5). Among the 39 patients for whom PpP was used, no UMDs were observed. The four physicians of the ward were satisfied with this new process as it allowed a reduction in medication errors and their time spent on admission prescription.

Conclusion This study shows that pre-prescription by pharmacists decreases the number of UMD at admission. The main challenge for the future will consist in integrating PpP as part of the clinical pharmacist’s routine.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No acknowledgements.
No conflict of interest.