

# ASSESSMENT OF THE IMPACT OF PRE-PRESCRIPTION ON THE MEDICATION ERROR RATE DURING THE MEDICATION RECONCILIATION PROCESS



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## Background



Medication reconciliation is carried out since 2015 in the internal medicine ward.



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.

## Methods

1

Interventional prospective study before/after in a 24-bed internal medicine unit.

**Eligibility criteria** : Age  $\geq$  65y and/or 3 chronic treatments at admission.

2

**Pre-intervention phase** : MH provided by the pharmacist and used by the physician to write the admission prescription.

2 months

3

**Intervention phase** : 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.

2 months



Age, sex, number of UMD on the admission prescription, potential harm for the patient evaluated by the prescriber and the pharmacist, prescriber satisfaction (survey).

## Results

### Pré-intervention phase

80 patients, 29♀, 51♂

Age : 68,4 [49,8 ; 87,0]

Medications at admission : 8,8 [4,8 ; 12,8]

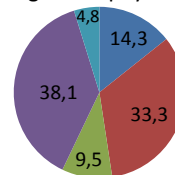
### 42 UMDs

29 patients with  $\geq$  1 UMD (36%)

9 patients with  $\geq$  2 UMDs (9%)

17 UMDs (40,2%) with a moderate or severe potential of harm for patients according to the physicians

### Main UMDs (%)



■ Dose errors  
■ Omissions  
■ Medicine errors  
■ Dosage errors  
■ others

### Intervention phase

47 patients, 19♀, 28♂

Age : 66,3 [47,6 ; 85,0]

Medications at admission : 8,0 [3,5 ; 12,5]

39 PpP used / 47 performed (83%)

**0 UMD**

## Conclusion

Amongst the 39 patients for whom PpP was used, **no UMDs were observed**. Pre-prescription by pharmacist decreases the number of UMD at admission. The 4 physicians of the ward were satisfied with this new process as it allowed to reduce medication errors and their time spent on admission prescription.