

# Evaluation of a targeted medication reconciliation in patients at the highest risk admitted through the emergency unit

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## BACKGROUND

Medication reconciliation (MR) makes it possible to identify medication errors. Because it is labour intensive, it is often limited to certain specific hospital units (HU).

## AIM

Evaluate a MR activity targeting patients at the highest risk admitted through the emergency unit

## METHODS

- A single center prospective study was performed for 6 months in patients hospitalized through the emergency unit.

Emergency unit physicians or nurses could fill in a prioritization grid of MR including 10 clinical and therapeutic factors.

A pharmacist collected the grids daily and calculated the risk score of each patient

In case of a score  $\geq 10$ , a pharmacist performed a MR of the patient in the unit where s/he was hospitalized

CRITERIAS	✓	DON'T KNOW	SCORE
<b>AGE</b>			
0-74	<input type="checkbox"/>	<input type="checkbox"/>	0
$\geq 75$	<input type="checkbox"/>		1
<b>NUMBER OF KNOWN DRUGS AT HOME</b>			
0-3	<input type="checkbox"/>	<input type="checkbox"/>	0
4-6	<input type="checkbox"/>		2
$\geq 7$	<input type="checkbox"/>		4
<b>DRUGS AND/OR HISTORIES</b>			
Anticoagulant drug	<input type="checkbox"/>	<input type="checkbox"/>	3
$\geq 3$ cardiovascular drugs and/or histories of hypertension, heart failure	<input type="checkbox"/>	<input type="checkbox"/>	5
Antidiabète drug and/or history of diabetes	<input type="checkbox"/>	<input type="checkbox"/>	2
Anticancer drug and/or history of cancer	<input type="checkbox"/>	<input type="checkbox"/>	3
Anticonvulsivants drug and/or history of epilepsy	<input type="checkbox"/>	<input type="checkbox"/>	2
Eye drops	<input type="checkbox"/>	<input type="checkbox"/>	1
<b>OTHER CRITERIAS</b>			
Tobacco consmption	<input type="checkbox"/>	<input type="checkbox"/>	1
Memory desordres	<input type="checkbox"/>	<input type="checkbox"/>	1

This grid, which was based on a bibliographic study and a prior internal study, included a box « don't know » (DK) for every factor.

## RESULTS

A prioritization grid was filled out for 583 patients.

10% and 36% of the grids included at least one DK box checked by the physicians and the nurses respectively



24% of the patients were eligible for MR according to the physicians,  
11% according to the nurses,  
for a total of 130 patients.



The number of unintended medication discrepancies (UMD) was 1.2/patient



56 MR were performed in 15 different HU, which represented 43% of the identified patients with an average of 1 hour per MR of the pharmacist's time.

## CONCLUSION

- This grid seems to be adapted to the prioritization of MR because 24 and 11% of the patients had a score  $\geq 10$ .
- It identified the need for MR in large number of HU, which is the originality of our MR activity.
- All the priority MR could not be performed because of early release/death of patients or lack of time.
- The low rate of patients at risk and the high rate of DK checked by nurses suggests that nurses under evaluate this risk. Physicians seem to have a better understanding of the patients and treatment.
- The MR of patients at risk made it possible to identify a number of UMD similar to that found in other French studies.
- In the future, it will be a great interest to use a prioritization grid powered by the electronic medical record.