

M. ABBES<sup>1</sup>, J. NAKHAB<sup>1</sup>, S. BERDAH<sup>2</sup>, F. BERNARD<sup>3</sup>, P. ROSSI<sup>3</sup>, N. COLOMBINI<sup>1</sup>, M. BUES-CHARBIT<sup>1</sup>

Departments of: <sup>1</sup>Pharmacy, <sup>2</sup>Digestive surgery, <sup>3</sup>Geriatrics and Internal medicine

Centre Hospitalier Universitaire (CHU), Hôpital Nord

Chemin des Bourrely, 13015 Marseille, France

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## OBJECTIVES

According to the article 3 of 6 April 2011 order "the computerization of the processes on the medicinal treatment is a key condition for its securing". Consequently the computerized prescriptions (CP) have found their place in the medication circuit which should strengthen the link, via the Exit Prescriptions (EP), between hospital and community pharmacies.

Pharma<sup>®</sup> is a prescription assistance software all the hospital sites of Marseille (AP-HM) are equipped with. It allows the management, the validation and the follow-up of the medication administration which includes all the steps of the medicinal validation. It allows to create exit prescriptions (EP) saved and available for consultation at any time.

In spite of the indisputable advantages of the computerized provider order-entry system (CPOE), potentially serious errors are reported if fields are incorrectly filled (wrong prescription unit) or if data is missing about the patient (allergies and weight despite the regulatory obligation). The doctors also have the obligation to show, on the Electronic Medical Records (EMR) patients' ongoing treatment (when admitted at hospital and when leaving) with the software Axigate<sup>®</sup>.

## METHODS

We performed a retrospective study related to computerized orders carried out by the software Pharma<sup>®</sup> (Computer Engineering, France) in three hospital departments: digestive surgery, geriatrics and internal medicine between January 1<sup>st</sup>, 2017 and June 30<sup>th</sup>, 2017.

1. Search for EP in Pharma<sup>®</sup> for hospitalized patients
2. Implementation of a grid on the conformity of EPs containing 30 criterias among which the mains:
  - patient's bodyweight, the presence of pharmacist interventions (PharmInts), length of stay
  - analysis of the conformity of the prescribed molecules with respect to the label: posology, class redundancy, length of stay, refractory periods and time intervals between doses
  - analysis of the total drugs prescribed on the EP compared to the drugs prescribed during the day before the discharge of patient
3. Search in Axigate<sup>®</sup> for the EP or scanned in the EMR

## RESULTS/DISCUSSION

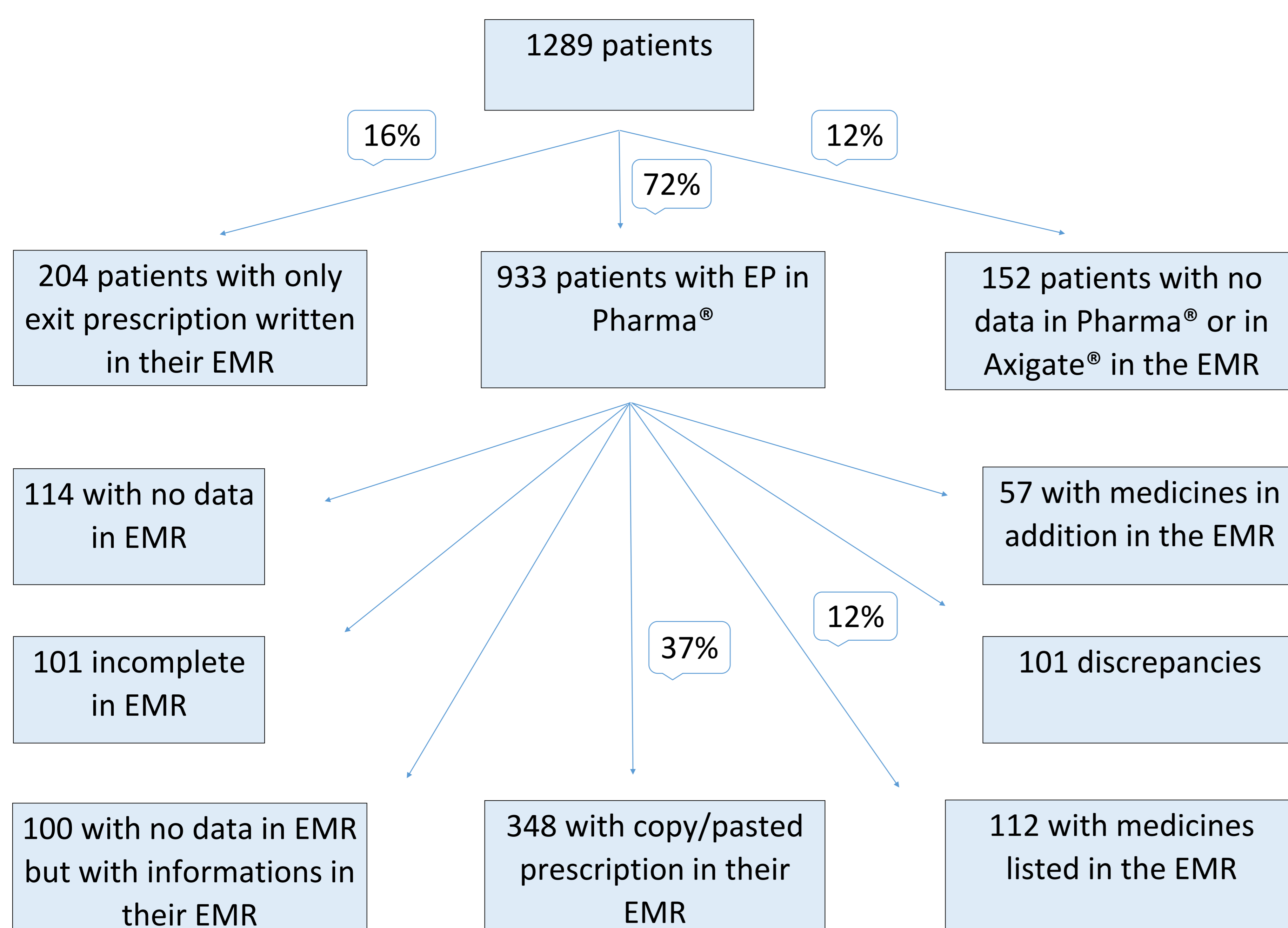


Figure 1. Analysis of exit treatment of 1328 patients: EP in Pharma<sup>®</sup> or/and in the EMR

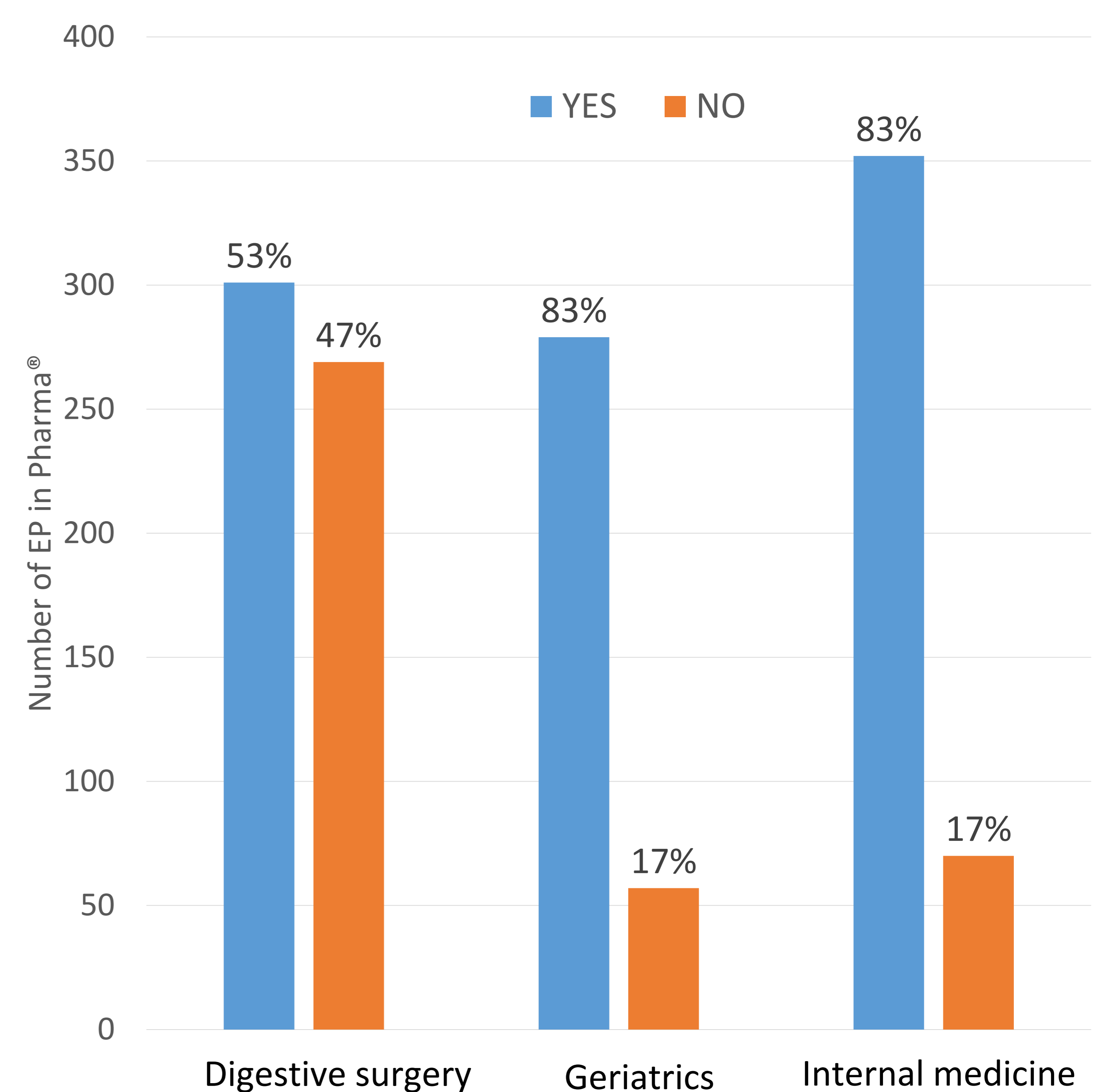


Figure 2. Percentage of EP in Pharma<sup>®</sup>

- Only one of the patients on three services had a scanned OSH in the EMR
- Conformity of exit prescriptions of the three departments:
  - 270 (29%) had no bodyweight provided even after the pharmacist interventions.
  - 255 prescriptions were incorrect (4% of 7258 total number of drugs prescribed) summarised in the diagram below.
- These errors were signaled by pharmacists examining CPOEs daily but not applied in exit prescriptions.

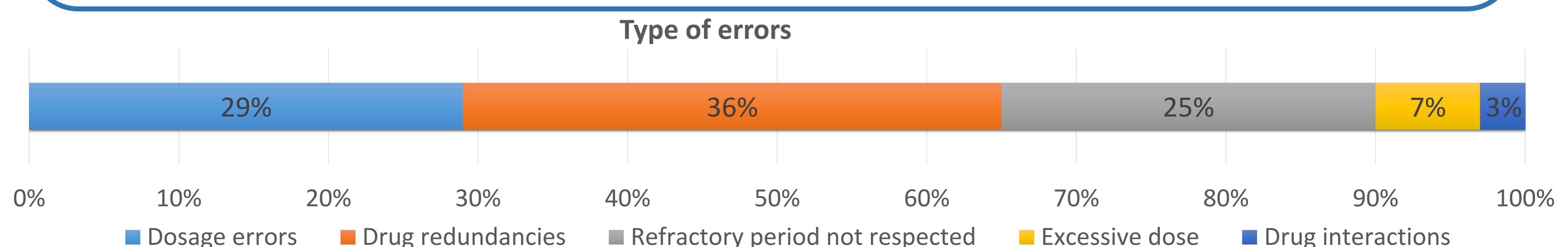


Figure 5. Percentage of type of errors

## CONCLUSIONS

The exit prescriptions are not completely recorded with CPOE Pharma<sup>®</sup>. Several errors are noted in patients prescriptions, mainly absence of bodyweight, incorrect drug prescriptions. The role of better software design with protocols drafted and revised by pharmacists is pivotal to avoid these errors.

Hospital pharmacist's initiatives, such as training and communication with physicians, have been set to improve exit prescriptions which will be served by community pharmacies.

This study also shows to us that the officinal pharmacist has an important place in the relay hospital-city and has to remain vigilant when validating the EP.