

MEDICATION PRESCRIBING ERRORS PROSPECTIVE OBSERVATIONAL STUDY IN AN INTENSIVE CARE UNIT

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BACKGROUND

Prescribing errors (PE) are an important cause of medication-related adverse events in Intensive Care Units (ICU) but limited data are available in ICU with electronic prescribing and administration (ePA) systems.



OBJECTIVE

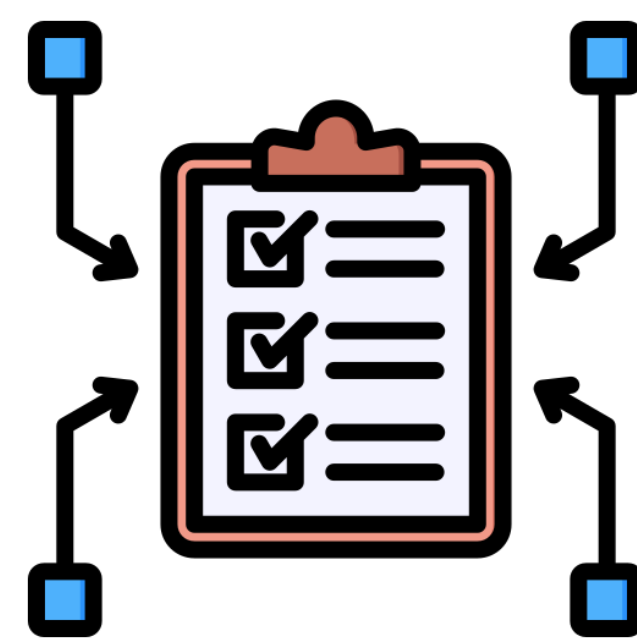
To determine the rate of PE in a ICU with ePA system, to classify incident types and to identify critical points where measures should be implemented to improve patient safety.

MATERIAL AND METHODS

Prospective, observational and cross-sectional study in an ICU with ePA system during 5 business days (November 2021)



Multidisciplinary team creation
pharmacists, ICU physicians and nurses and hospital's medication errors committee leader

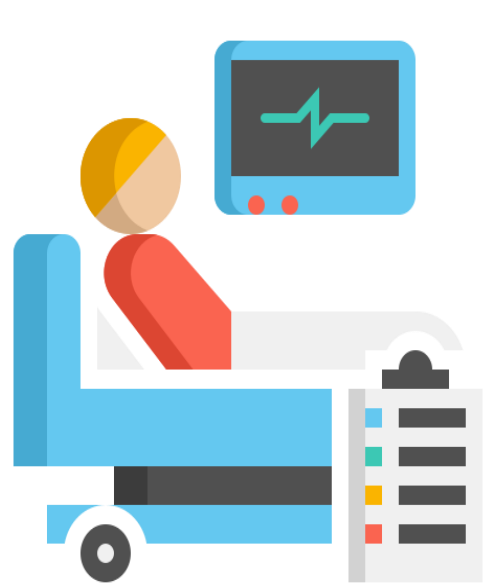


Inclusion criteria
ICU patients with an electronic prescription



Prescriptions were reviewed and analysed and PE detected were reported to the hospital's patient safety-related incident notification system

RESULTS



➔ **30 patients** with an average of 14.7 drugs prescribed and 60.7 (SD=13.2) years old

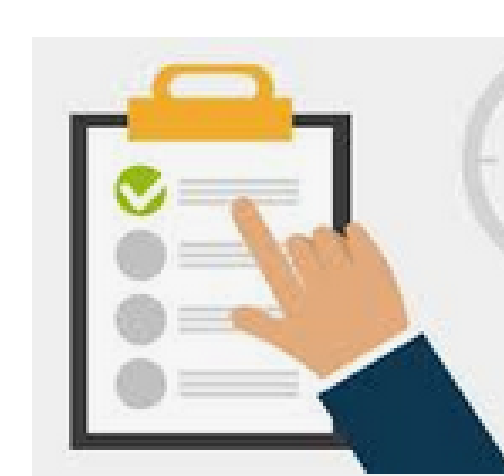
➔ 31 PE and 2 situations with the capacity to cause errors were detected



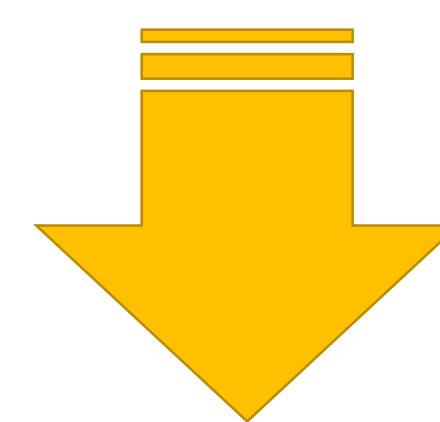
➔ 1,03 errors per patient, 0,07 errors per prescribed drug

➔ 47% of patient prescriptions had PE

PE TYPES:



➔ 33% wrong dose
29% excessive duration
13% drug not indicated by clinical situation
13% not administration prescribed drugs



Results were communicated to staff physicians and residents with **recommendations** to minimize them:

- Enteral nutrition adjustment if a propofol treatment initiate or modified
- Use available protocols in ePA system
- Review and eliminate non-active treatments
- Be especially careful with care transitions.



CONCLUSION AND RELEVANCE

1 This study has made it possible to **identify the weak points** of drug prescription in our ICU

2 The realization of periodic PE studies allow us to establish the **impact of the implemented actions** and **define new objectives** to improve **patient safety**.

