

ATC code: 5. Research performed on artificial model

TIMES AND ERRORS FOR DISPENSING NARCOTICS DRUGS IN AUTOMATED SYSTEM VERSUS MANUAL SYSTEM

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BACKGROUND AND IMPORTANCE

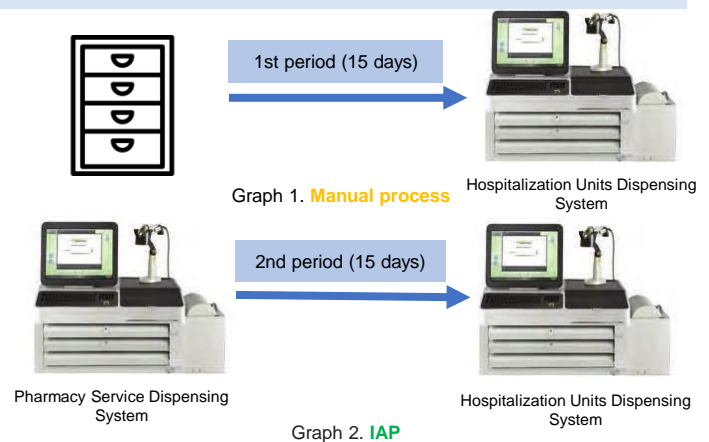
Narcotic drugs require a special control and monitoring by the Pharmacy Service to ensure their correct storage and dispensing. An **integrated automated process (IAP)** could promote a safer and more efficient process.

AIM AND OBJECTIVES

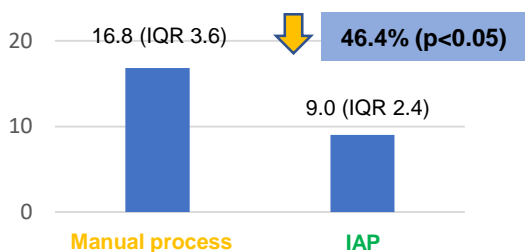
Describe and analyze drug replenishment times and dispensing errors through a **manual process** versus an **IAP**.

MATERIAL AND METHODS

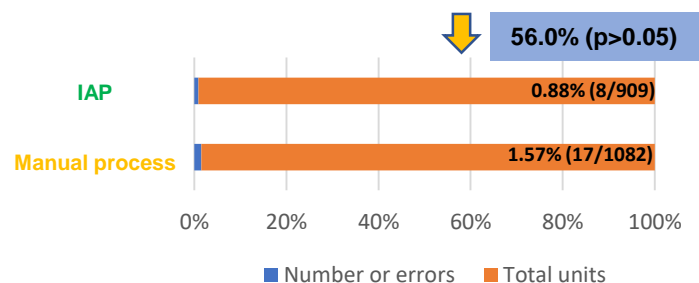
- **Design.** Prospective observational study of one-month duration, divided in two periods (15 days).
- **Variables:**
 - ❖ Drug replenishment times described as: medians and interquartile ranges (IRQ).
 - ❖ Dispensing errors described as: percentage with respect to the total number of units.
- **Statistical method:** Mann-Whitney U and Chi-Square



RESULTS



Graph 3. Drugs replenishment times (seconds/unit)



Graph 4. Dispensing errors (%)

CONCLUSION AND RELEVANCE

The implementation of an integrated automated process allowed to reduce replenishment times by 46.4%, as well as dispensing errors by 56%. This improvement provides a safer and more efficient drug replenishment circuit that should be implemented in routine clinical practice.