

# ASSESSMENT OF INDICATORS RELATED TO AUTOMATED DISPENSING SYSTEMS

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## Objectives

Automated dispensing systems (ADS), such as Pyxis<sup>®</sup>, have improved efficiency and safety in drugs management at hospitals. But the correct use of these systems is essential for the proper performance and availability of drugs. The aim of this study was to assess indicators related to ADS, focused on discrepancies in stock.

## Study design

During 2013 and 2014, the number of dispensations (ND), inventories (NI) and resupplies (NR) in the six ADS were collected through the Web-Reporting<sup>®</sup> software, as well as the number of discrepancies. Two indicators were defined and associated with ward dispensing mistakes:

- Inventory discrepancies (ID), as the percentage of the number of discrepancies detected during the inventory divided to NI. These are performed by nurses in each unit.
- Resupply discrepancies (RD), as the percentage of the number of discrepancies detected during the resupply divided to NR. These are corrected by pharmacy assistants.

## Results

In each of these five units, the following results were obtained:

	Number of dispensations	Number of inventories	Number of resupplies	Inventory discrepancies	Resupply discrepancies
Emergency Department					
2013	84,529	1,778	8,816	54.2%	29.8%
2014	92,010	3,378	9,400	30.0%	28.1%
Post-operative Care Unit (2 ADS)					
2013	52,824 and 30,071	2,022 and 1,546	7,693 and 4,931	50.1% and 34.7%	17.7% and 17.8%
2014	51,999 and 20,199	2,774 and 1,921	8,089 and 3,802	33.2% and 18.3%	17.3% and 16.2%
Pre-hospitalisation Unit					
2013	21,741	733	2,323	49.4%	24.7%
2014	25,845	2,568	2,727	19.6%	23.7%
Short Stay Unit					
2013	35,230	1,262	3,180	37.1%	21.6%
2014	34,521	1,833	3,235	18.3%	18.6%
Neonatal Intensive Care Unit					
2013	18,040	1,112	2,267	29.9%	29.9%
2014	17,548	1,192	2,370	14.4%	26.3%

## Conclusions

A high rate of discrepancies in stock of medicines was found, with important differences among units. These indicators have shown effectiveness in monitoring the processes. It is needed to establish a training program for nurses to improve the management of ADS.

## Disclosure

Authors of this presentation have nothing to disclose.

