**INTRODUCTION**

Nurses spend substantial time to manage drug logistics and to control substances in their wards. The traditional manual management is also a source for mixing up different medications. The introduction of automated dispensing systems (ADS) is an opportunity to improve the efficiency and the safety of drug supply.

**What?** The traditional pharmacy was replaced by two ADS: Pyxis® and Omnicell®

**Where?** In a 27 beds digestive surgical unit

**How long?** Each machine was used during 4 months

**In comparison with?** The traditional manual ward stock management

**What kind of medicines?** About 300 references, oral and i.v. including narcotics

**OBJECTIVES & METHOD**

We compared the efficiency of the drug logistic process, with and without ADS, evaluated major changes into the workflow and estimated the users’ satisfaction toward this new device.

**RESULTS**

Before ADS, nurses were in charge of ordering, storing and stocktaking all medications in their wards.

With an ADS, pharmacy staff took care of the ordering (thanks to the real-time computerized stocktaking and automatic orders 3x/week), delivery and storage.

In order to avoid any waiting time, pillbox are prepared on each schedule, instead of being prepared once for the entire day. It allows any change of medication on treatments.

**LOGISTIC FACTS**

<table>
<thead>
<tr>
<th>Without the ADS</th>
<th>With the ADS</th>
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<tbody>
<tr>
<td>+5h/week</td>
<td>-37%</td>
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<tr>
<td>Logisitc process by the Care unit</td>
<td>-45%</td>
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<tr>
<td>Logistic process of the Pharmacy</td>
<td>-72%</td>
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**CONCLUSION - DISCUSSION**

Our pilot study confirmed the interest of ADS to improve the efficiency of the drug logistic process, with a good satisfaction of the users. Furthermore, it allows the rethinking of the entire process and should be combined with other technologies such as computerized prescriptions and bedside scanning. Additional studies are needed to demonstrate the impact on patient safety.