

# Hospital Pharmacists pioneering in installation of an automated dispensing system in General Public Hospital, Chania, Greece

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## What was done?

During the last 2 years, Hospital Pharmacists actively participated in the supply, installation and functional integration of the first Automated (Robotic) Dispensing System in Greece, in Chania General Hospital. It is a centralized distribution system installed in pharmacy department, which receives, stores and distributes packages of medicines (RIEDL Phasys, GPI S.p.A).

### Main features and components:

- ❖ Dimensions: Width 1,606 mm, Height 3,519 mm, Length 10,912 mm
- ❖ Loading capacity: up to 21,500 packages
- ❖ 1 multi-picking automated gripper
- ❖ three distribution exits
- ❖ fully automated unloading: 360 to 760 packages per hour
- ❖ semi-automatic loading systems (LTL): 900 packages per hour
- ❖ fully automated loading systems (AIS): 200 packages per hour

Under Hospital Pharmacists' direction, medicine management procedures were modified to ensure Automated Dispensing System's functionality.



## Why was it done?

Hospital Pharmacists were facing challenges related to:

- ✓ stuff shortages in a high risk environment with increasing uncertainty
- ✓ implementation of Directive 2001/83/EC on Falsified Medicines; deadline for Greece is 2025
- ✓ medicines' shortages for which optimal inventory management procedures are needed
- ✓ patient safety and quality of pharmaceutical services: quality assurance processes, medicines' traceability, monitoring expiration dates and respond-time to ward's requests

## How was it done?

Since Pharmacy department of Chania General Hospital was the first to install an Automated Dispensing System, a new route had to be inaugurated, concerning how Hospital Pharmacists:

- developed the proposal
- documented and justified such a supply to be prioritized in funding
- performed market research in Europe, as no such national market existed
- drafted technical specifications, to assure the best system supplied
- participated in an international tendering procedure (budget 130,000€)
- planned and supervised installation and functional integration of the system
- managed interoperability between Automated Dispensing System's software and pharmacy's Information System (ORCO®, Organization & Computing SA)
- faced issues related to different barcodes on medicines' packages

From 1/8/2022 to 31/12/2022

Dispensed medicines by robot (% total)	Dispensed packages by robot (% total)	Dispensed packages (solid oral) by robot (% total)	Number of medicines in use inside the robot (% total)
51%	37%	93%	42%

## What has been achieved?

After 3 months of use:

- ❑ 50% of medicines' codes and 35% of total packages are dispensed with Automated Dispensing System monthly
- ❑ 1.4 full time pharmacy assistant's equivalent is saved
- ❑ response-time to requests decreased
- ❑ traceability and quality are better assured
- ❑ falsified medicines' check can run automatically
- ❑ storage space is saved



## What next?

Hospital Pharmacists are ready to share nationally and internationally their experience in developing and installing an Automated Dispensing System with colleagues interested in adopting similar solutions.

Hospitals from the same region have already shown their interest.



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27th Congress of the EAHP  
22-24 March 2023  
Lisbon, Portugal

GPI number: SPD12154