

37. NEW DRUG DISPENSING APPROACH TO MAXIMISE PATIENTS' SAFETY

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BACKGROUND:

During the V2010 Certification procedure, Health Authority experts noted the presence of unidentifiable medicinal products (i.e. removed from their original packaging) in the Arras Hospital, France. The Regional Health Agency set a fine of up to EUR 140,000 per year, to be paid if nominal dispensing objectives were met.

OBJECTIVES:

- Provide healthcare services with 100% of unit doses for dry oral forms
- Deploy automated nominal dispensing on 60% of the beds
- Secure the drug circuit, and improve the nurses' working conditions, while reducing medication costs

METHODS:

Based on a proposal made by the pharmacy, the project was conducted by involving multidisciplinary working groups, before being validated by the hospital management.

Following a call for tenders, it was decided to purchase a machine for drug packaging and nominal dispensing, able to manage all pharmaceutical forms. A need was identified to recruit 1.5 Full-Time Equivalent (FTE) pharmacy technicians per 100 Medical Centre Hospital (MCH) beds per day, and 0.5 FTE pharmacy technicians per 100 beds per week – about half those required for manual nominal dispensing.



RESULTS:

What has been achieved?

- ✓ An ECODEX machine was purchased (EUR 931,780, options and training included), expected to prepare 400 treatments per day in dry oral and other forms
- ✓ A pharmacist was recruited to manage the project and train the teams, as well as two hospital pharmacy technicians to supply and maintain the machine and control the outputs
- ✓ An average of 34,000 dry oral form unit doses were produced per month
- ✓ In the Neurology Test Service, 31 beds were converted to Automated Nominal Dispensing, with the following anticipated outcomes:
 - 57% reduction in the number of errors found on patient treatments
 - Time savings (about two hours per day)
 - 19% reduction in quantities of medication used when dispensed by machines, and 41% reduction of stock on wards



Patient Treatment of Exotic Forms.
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Patient Treatment of Dry Oral Forms.
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TAKE-AWAYS:

What worked well?

- ✓ Involving all the affected stakeholders in the project and calculating the return on investment
- ✓ Successfully installing the new machines, which was challenging despite having an ECODEX technician permanently on site – especially automating the dispensing of exotic forms (ASSIST), which is the first of its kind
- ✓ Changing the ways of working, as a result of automation and the predominant use of computers
- ✓ Ensuring that each staff member focuses on his/her core business and that each stage of the circuit is linked logically and optimally
- ✓ Securing the drug circuit by using these machines, thereby fulfilling the regulatory requirements and the growing expectations of patients in a complex budget context
- ✓ Planning to deploy this service in other services with long average lengths of stay and sensitive treatment for which security is important (e.g. Psychiatry and Geriatrics)

