

# OPTIMISATION OF STORAGE AND UNIT DOSE DISPENSING CIRCUIT

## DOSE DISPENSING CIRCUIT



DD-004



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### Background

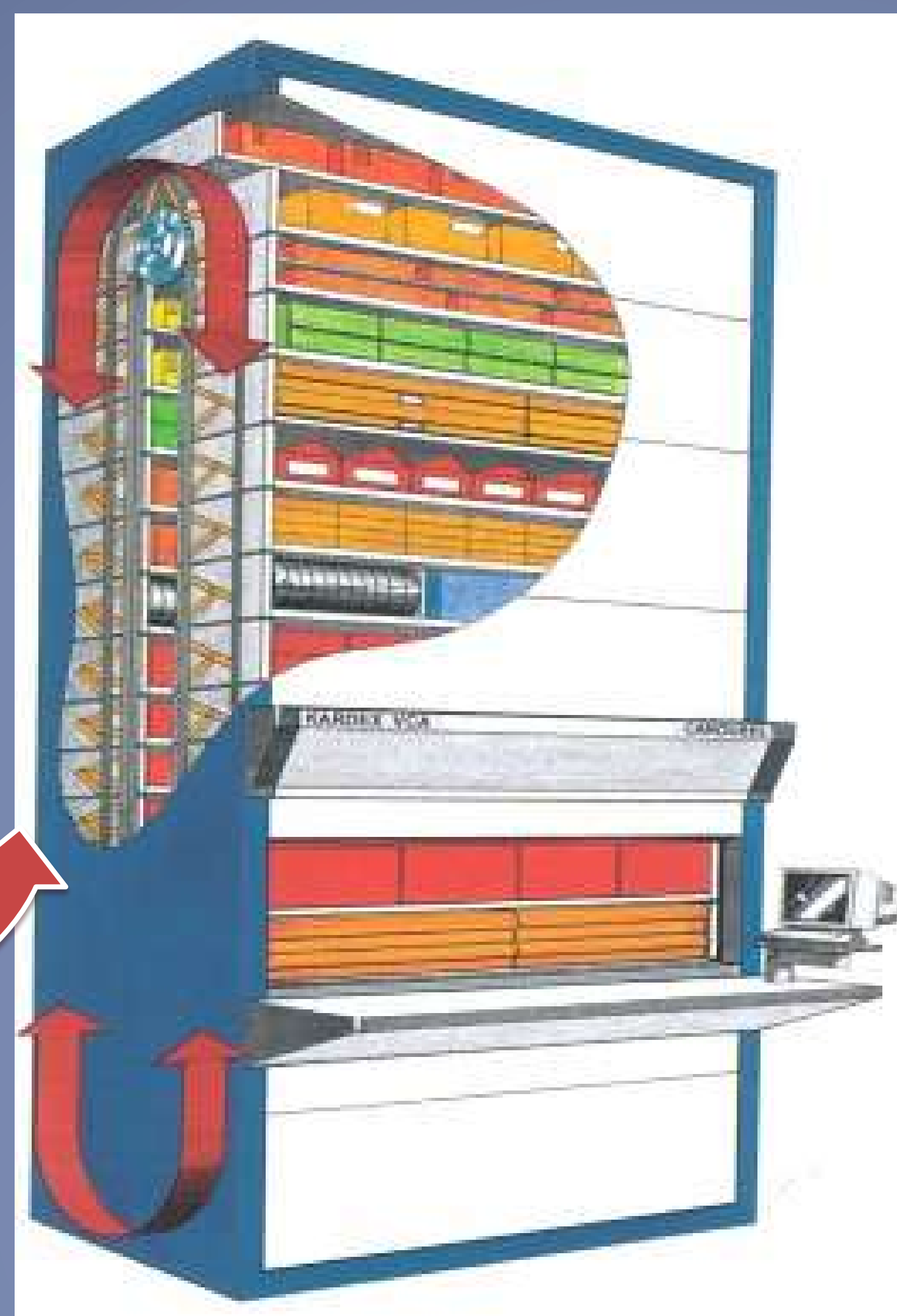
The unit dose dispensing of medication is a key activity in all hospital pharmacy services. On creating the new hospital, the settings of the semi-automatic Kardex verticals® (KV) system of dispensation and drug storage, were based on previous consumption of a hospital with less activity, needing to be upgraded.

### Purpose

Identification of drugs required the unit dose dispensing circuit, external to KV.

In order to

optimize the efficiency of human resources for unit dose drug preparation and dispensation, reducing errors and improving patient safety in hospital



### Material and Methods

Retrospective observational study conducted in a tertiary hospital.

#### Data base:

- list of KV external drugs,
- frequency of these medications in unit dose circuit,
- their location and reasons for not being located in KV

### Results

Presentations with the highest incidence of appearance as external products	Incidence
risperidone 6mg tablets	9.29%
clotiapine 40mg tablets	7.81%
progesterone 200mg capsules	7.25%
dexchlorpheniramine 2mg/5mL solution	7.06%
cinacalcet 30mg tablets	3.53%
calcium carbonate/cholecalciferol	3.53%
apixaban 5mg tablets	3.35%
droperidol 2.5mg amp/vial	2.42%
paromomycin 125mg/5mL	2.23%
chlorpromazine 25mg tablets	2.23%
ketamine vial	2.23%
baclofen 25mg tablets	1.86%
ticagrelor 90 mg tablets	1.86%
fosfomycin 3g sachets	1.67%
clotrimazole 1% ointment	1.67%

Locations of the external presentations	Incidence
low consumption shelf	3.41%
outpatient area	7.95%
magistral formulae	1.14%
semi-automatic drug dispensing and storage system Kardex Horizontal®	60.23%
non-hospital pharmaceutical guide shelf	11.36%
pediatric products	7.95%
restricted drugs	7.95%

Causes of the no localitation in KV	Incidence
low consumption by the unit dose dispensing circuit	38.63%
low consumption by all hospital dispensing circuits	3.41%
special monitored dispensation	1.14%
magistral formulae	1.14%
multidose presentations	2.27%
non-hospital pharmaceutical guide	11.36%
outpatient dispensation	7.95%
required for hospital unit order dispensation	17.05%
pediatric presentations	7.95%
restricted use	7.95%
recent inclusion in the hospital pharmaceutical guide	1.14%

### Conclusions:

• After years in operation, this current study detected opportunities for improvement, proposing the inclusion in KV of:

• With this improvement, we intend to increase the work speed and enhance the distribution of staff time, reducing errors in unit dose dispensing, thus increasing the productivity of service and patient safety.

Risperidone 6mg, clotiapine 40 mg, progesterone 200 mg, calcium carbonate/cholecalciferol, baclofen 25mg and fosfomycin 3g