# UNIT-DOSE DRUG DISTRIBUTION SYSTEM. HOW TO IMPROVE THE PROCESS IN A TERTIARY HOSPITAL

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#### **BACKGROUND.**

The Unit Dose System of medication Distribution (UDDS) is a pharmacy-coordinated method of dispensing and controlling medications in organized health-care settings. In our hospital, medications contained in single

unit packages are delivered during the morning for a 24 hour period.

However, after delivery, many drugs are requested throughout the day for different reasons. Medication dispensed by this way is more susceptible to medication errors than those included at UDDS.

#### **OBJECTIVES.**

To assess drug requests (out of UDDS) from clinical units, identify the reason for the request and try to improve the process to reduce the number of them.

#### **METHODS.**

Retrospective descriptive study in a two month period in which request forms from various clinical units (traumatology, rheumatology and pneumology) were analyzed, quantified and classified in 7 subgroups.

## **RESULTS.**

During the study period 605 requests for drugs were analyzed and was observed the following distribution:

DRUGS NOT PRESCRIBED



DRUGS THAT THEORICALLY WERE DISTRIBUTED AT UDDS

DRUGS FOR AN ERRONEOUS ROUTE OF ADMINISTRATION

DRUGS THAT WEREN'T DISTRIBUTED AT UDSS FOR DIFFERENT ERRORS (HUMAN ERROR, COMPUTER ERROR)

CHANGES IN TREATMENT AND NEW HOSPITALIZED PATIENTS

DRUGS NOT INCLUDED IN THE HOSPITAL PHARMACOTHERAPEUTIC GUIDE

DRUGS THAT AREN'T DISTRIBUTED AT UDDS FOR DIFFERENT REASONS (MULTI-DOSE VIALS, DRUGS THAT MUST BE GIVEN ONLY IN SOME SITUATIONS LIKE PAIN OR INSOMNIA)

#### **CONCLUSIONS.**

-55% of drug requests were injustified, with a high percentage of drugs that weren't prescribed, which is often caused by verbal orders from doctors.

-45% of drug requests were justified, with a high percentage of new hospitalized patients and changes of treatment.

-To improve the drug distribution chain and patient safety we have decided to implement electronic petition through electronic medical order. By this way we could reduce dispensations of drugs not prescribed and ensure a safe and correct distribution for new hospitalized patients and changes of treatment. -According to this study, it would reduce in a 55% approximately the number of dispensations out of UDDS.

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