

IMPLEMENTATION OF AUTOMATED ALERT SYSTEM IN HIGH-ALERT MEDICATIONS IN A NETWORK OF HOSPITALS

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What was done?

The main objective was to identify and standardize in prescription and administration the **high-alert medications (HAM)**, included in pharmacotherapeutic guide (PG) in a network of Spanish hospitals with about 1.330 beds.

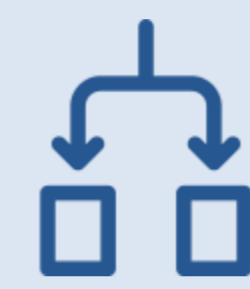
Why was it done?

Our aim was to improve the safety of HAM appointed by ISMP Spain (Institute for Safe Medication Practices) specially restricting the prescription, creating automated alerts and advising in administration.

How was it done?



Literature about HAM and recommended strategies was reviewed.



We divided these drugs into two groups:

- ✓ **HAM** (heightened risk of causing significant patient harm when they are used in error)
- ✓ **very HAM** (an error could cause death of patient).



We identified both groups in electronic prescription. Alerts were configured by systems team.



HAM

All prescribers are able to prescribe these drugs and they find yellow warning sign in left side of the drug in prescription screen and nursing electronic work plan for administration.

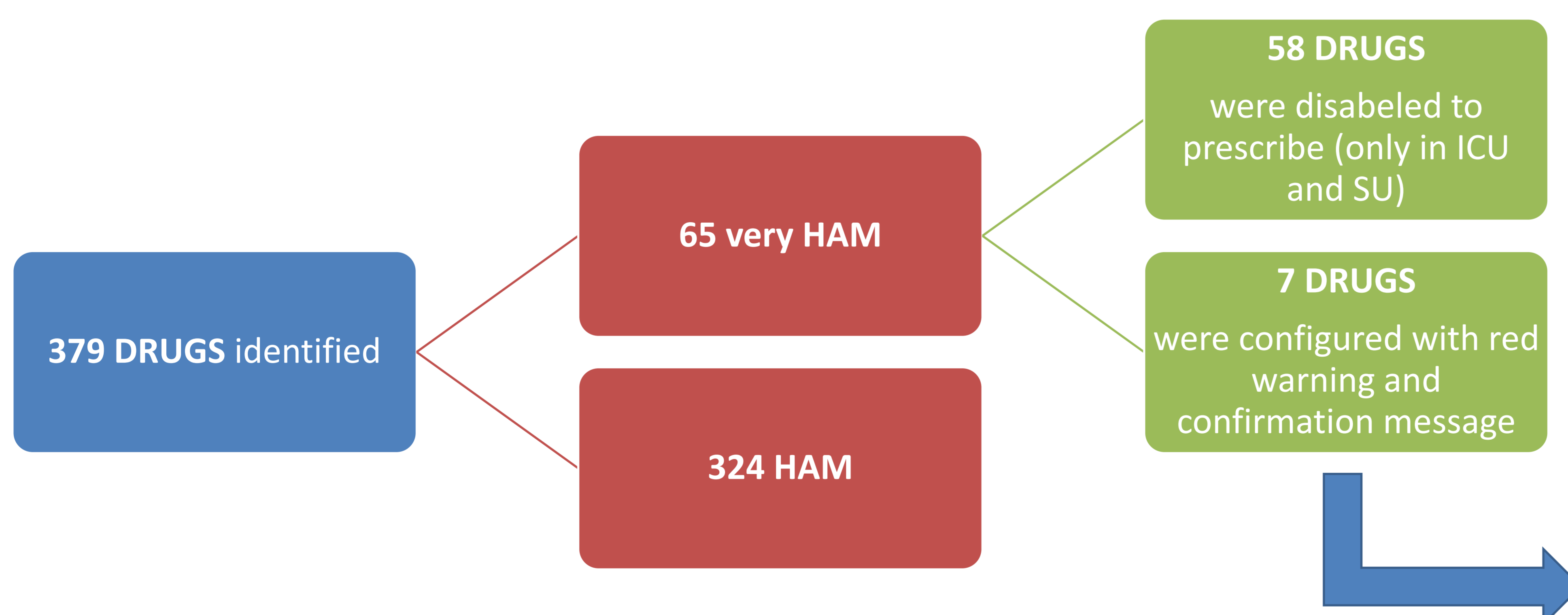


Very HAM

These drugs need tracheal intubation or monitoring measures when they are administered to patients. Only prescribers in intensive care (ICU) and surgery units (SU) are able to prescribe them.

For certain drugs, needed in medical hospitalization units, all prescribers are able to prescribe them, and they must confirm the prescription with confirmation message. They find red warning sign in prescription screen and nursing electronic work plan.

What has been achieved?



CÓDIGO VM	ARTÍCULO	CONFIRMACIÓN MÉDICA
780635	DOBUTAMINA 250 MG/20ML IV amp (!!!)	sí
6748466	ISOPRENALINA 0.2 MG/1 ML amp (!!!)	sí
6777992	KETAMINA 500 MG/10 ML vial (50mg/ml) (!!!)	sí
6803165	LABETALOL 100 MG/20 ML amp (!!!)	sí
922773	LEVOSIMENDAN 12.5 MG/5 ML vial (Simdax) (!!!)	sí
	CARBOPROST 250 MCG/1ML amp	sí
629469	METILERGOMETRINA 0.2 MG/1 ML amp	sí

What next?

As next phase of our project, we must develop a procedure to identify and create alerts in new drugs added to our PG as systematic risk assessment process.

We must evaluate the real impact of our alert system in prescribers and nurse team, to reduce alert fatigue.

We will work in automatic reports with ignored alerts.