

A NEW SEMI-AUTOMATIC TOOL FOR ASSESSING TREATMENT PRESCRIBING BASED ON REAL TIME BLOOD TESTS

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BACKGROUND

Optimization of renal insufficiency (RI) patients' treatment is necessary to avoid excessive or insufficient dosing of drugs.

LIMITATION: Time for identification and selection of RI patients' adequate treatments.

PURPOSE

To assess obtained data for the first two months after a new semi-automatic validation tool for physicians' prescriptions of RI patients' treatments.

METHODS

Descriptive prospective study of pharmaceutical interventions: Medication prescribed to RI patients during the first two months after new software implantation was evaluated.

Farmatools® from Computerized-Physician-Order-Entry-System (CPOE) was used to obtain treatments of all kidney failure patients.

were integrated
in Access® using
ODBC.

Omnium® laboratory database Clearance of creatinine (CLCr) urine values were achieved for equation MDRD-4 (IDMS).

Every day, a report for RI patients' prescribed treatment was automatically generated and a suitable treatment was proposed by the new software. The pharmacist informed the physicians about differences detected between original prescriptions and semi-automatic recommendations tool, using CPOE.

- Number of pharmaceutical interventions
- Medical departments
- Drugs involved

Were analysed

RESULTS

2076 inpatients during study period

Medication prescriptions and RI were checked Every day

New software allowed the pharmacist to check:

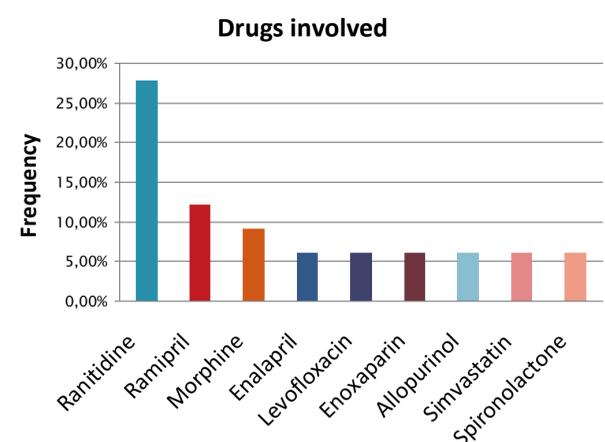
- CLCr values
- Prescribed treatments

Each inpatient Less than 10 minutes

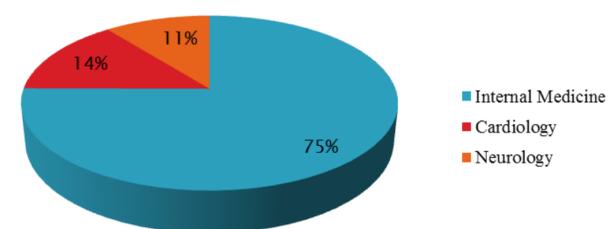
33 pharmacist recommendations

in 32 inpatients

Drugs involved	Frequency
Ranitidine	27.8%
Ramipril	12.1%
Morphine	9.1%
Enalapril	6.1%
Levofloxacin	6.1%
Enoxaparin	6.1%
Allopurinol	6.1%
Simvastatin	6.1%
Spirolactone	6.1%



Departments involved



CONCLUSIONS

1. The new semi-automatic validation tool allows time optimization: assessing team of RI patients was able to check all inpatients treatments quickly each day.
2. More than a quarter of pharmacist interventions involved ranitidine.
3. Most frequent discrepancies detected were carried out in Internal Medicine and Cardiology inpatients.