MANAGEMENT OF A MEDICATION RECONCILIATION PLAN AT ADMISSION IN DIFFERENT LEVELS OF GERIATRIC HEALTHCARE

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BACKGROUND AND OBJECTIVES
Medication reconciliation and review reduce drug related problems (DRP) and improve patient safety. Elderly population is at risk of DRP during transitions at different levels of health care.
Pharmacists giving pharmaceutical care at long term facilities could detect this problems and improve treatment quality and patient safety.
Detect and classify DRP in long term care institutions and evaluate the clinical interventions impact in quality prescription in order to improve patient safety. Give pharmaceutical care focused on the person by detecting and quantify the DRP and evaluate the impact of the interventions.

METHODS
Prospective study conducted in intermediate care hospitals and long term care institutions (336 beds).
All treatments were reviewed at patient admission (all patients included). DRP were detected taken into account actual prescription, previous discharge reports and controls and medical history. The DRP were classified by the American Society of Health-System Pharmacists (ASHP)(1).
Problems and discrepancies were notified to the clinician during the first 48 hours after patient admission.
The impact of the interventions in prescription quality was evaluated through the Medication Appropriateness Index (MAI)(2).
All interventions were managed by PowerPivot® software.

RESULTS

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<th>July 2016 – August 2017</th>
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<td>▪ Mean age: 81 (range 39-105 years)</td>
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<td>▪ 60 % female</td>
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<td>▪ Average drugs per patient: 8,85 ± 4,03</td>
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1832 patients
880 patients
1370 interventions 75% accepted
in 952 patients no problem was found

DRP: 1074 (82%)
Mediation errors: 240 (18%)

INAPPROPRIATE DOSE, DOSAGE FORM, SCHEDULE, ROUTE OF ADMINISTRATION OR METHOD OF ADMINISTRATION 15%
PROBLEMS ARE ARISING FROM THE FINANCIAL IMPACT OF THERAPY 21%
CONDITION FOR WHICH NO DRUG IS PRESCRIBED 13%
MEDICATION PRESCRIBED INAPPROPRIATELY FOR A PARTICULAR CONDITION 10%
MEDICATION WITH NO INDICATION 5%
THERAPEUTIC DUPLICATION 5%
ACTUAL AND POTENTIAL DRUG-DRUG, DRUG-DISEASE, DRUG-NUTRIENT AND DRUG-LABORATORY TEST INTERACTIONS THAT ARE CLINICALLY SIGNIFICANT 4%
ACTUAL AND POTENTIAL ADVERSE DRUG EVENTS 4%
LACK OF UNDERSTANDING OF THE MEDICATION 4%
FAILURE TO RECEIVE THE FULL BENEFIT OF PRESCRIBED THERAPY 7%
PRESCRIBING OF MEDICATION TO WHICH THE PATIENT IS ALLERGIC 1%
FAILURE OF THE PATIENT TO ADHERE TO THE REGIMES 0%

(MAI POST- intervention: 0,95 (p< 0,0001) MAI PRE-intervention: 2,99)

CONCLUSION
Patients are at risk of DRP in the moment of admission in long term care facilities. Treatment revision improve the quality of the prescriptions and guarantees a continuous health care assistance.
Although more research is needed, pharmaceutical care in Intermediate care hospitals and long term care institutions enable the optimization of pharmacotherapy after an acute episode, taking into account the new patient needs and focusing in patient centered care.