

BACKGROUND AND IMPORTANCE

The validation of medical prescriptions by the Hospitalar Pharmacist is a key factor in the provision of healthcare. This validation process leads to pharmacist interventions (PIs) that are entered in the electronic prescribing system. A wide range of interventions might be made: prescription according to protocols and guidelines, drug interactions and allergies, dose adjustment according to analytical parameters and therapeutic concentration levels, among others.

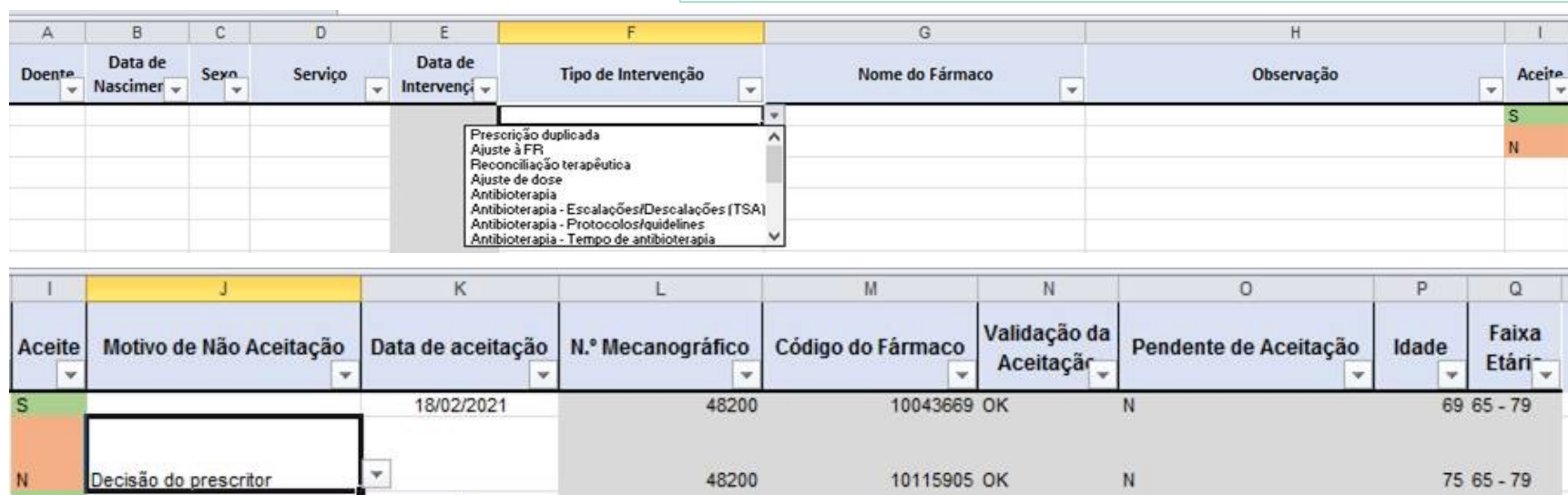
An equal record tool of PIs allows a better clinical follow-up of the patient, optimizes the daily work and increases pharmacist inclusion and intervention in the multidisciplinary team. Therefore, we developed an Excel file with predefined fields that would allow this registration by all the pharmacists.

AIM AND OBJECTIVES

The purpose of this study was to develop and implement an Excel file used for PIs record, categorization and monitoring and report acceptance rates by physicians in an Internal Medicine Department.

MATERIALS AND METHODS

A retrospective study was conducted in Hospital de Cascais between January and September 2021. Three pharmacists have recorded their PIs, concerning Internal Medicine Services, on the Excel file. All the interventions registered among that period were characterized and analyzed according to medical team acceptance. This toll allows the record of patients data, type of intervention (antibiotic therapy, therapeutic reconciliation, dose adjustment, among others), drug, pharmacist recommendation, acceptance date or rejection and motives.



| A | B | C | D | E | F | G | H | I |
|--------|-------------------------|-------------------|-------------------|-------------------|---|-----------------------|------------|--------------|
| Doente | Data de Nascim | Sexo | Serviço | Data de Intervenc | Tipo de Intervenção | Nome do Fármaco | Observação | Aceite |
| | | | | | <ul style="list-style-type: none"> Prescrição duplicada Ajuste à FR Reconciliação terapêutica Ajuste de dose Antibioterapia Antibioterapia - Escalações/Descalações (TSA) Antibioterapia - Protocolos/guidelines Antibioterapia - Tempo de antibioterapia | | | S |
| | | | | | | | | N |
| I | J | K | L | M | N | O | P | Q |
| Aceite | Motivo de Não Aceitação | Data de aceitação | N.º Mecanográfico | Código do Fármaco | Validação da Aceitação | Pendente de Aceitação | Idade | Faixa Etária |
| S | | 18/02/2021 | 48200 | 10043669 | OK | N | 69 | 65 - 79 |
| N | Decisão do prescritor | | 48200 | 10115905 | OK | N | 75 | 65 - 79 |

Image 1 – Screenshot from the user interface of the tool

RESULTS

742
PIs

52 % (♂) 
74 years 

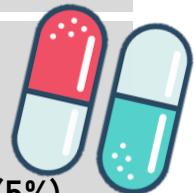
Acceptance rate
77%

Only **11%** of non accepted PIs are Physician rejection

Types of PIs

- ✓ Dosage adjustment to renal function (23.36%);
- ✓ Antibiotherapy (13.43%)
- ✓ Route of administration (10.66%)

Drugs

- ✓ Enoxaparin (16%)
 - ✓ Vancomycin (6%)
 - ✓ Amoxicillin/Clavulanic acid (5%)
- 

CONCLUSION AND RELEVANCE

The record of PIs with this toll facilitates and encourages the follow-up and resolution of prescribed drugs related problems through a more effective communication with other professionals. The implementation of this toll contributed to increase the acceptance rate in our hospital. The aim is to improve this toll and include the economic evaluation outcomes of accepted PIs.

The creation of a national PIs register system, available for all hospital pharmacists, would enhance our role as clinical pharmacists and standardize practices in order to develop research work.