

PHARMACY RESIDENTS IN THE INTENSIVE CARE UNIT: EDUCATION AND TRAINING

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What was done?



STANDARDIZED MEDICATION AUDIT TOOL

ensure uniform pharmaceutical care delivery aligned with the Hospital Pharmacy Specialty training program.

Helps in the training process of pharmacy residents

Why was it done?

The four-year specialist training program for Hospital Pharmacy in Spain includes:



1 year of clinical training

Through **medical units** where residents develop clinical skills

essential component of clinical proficiency and integration into the healthcare team.



WHY ICU?

presence of a pharmacist during rounds as a full member of the care team has been associated with a **↓ rate of adverse drug events.**

How was it done?

Multidisciplinary team identified the most common **clinical problem**

- **Specific outstanding problems** in particular patient types.
- **Specific efficacy and safety indicators** for each clinical problem.

Pharmacotherapeutic recommendations

← clinical evidence or internal protocols.

Variables: biodemographic and clinical data, analytical parameters and clinical issues.

DATA: NAME:	Box: Allergies/Intolerances:	Gender:	Age:	Diagnostic/Relevant medical history: Current medication:
Nutritional support	Type of nutrition (protein/lipids/carbohydrates) Weigh, nutrition via (enteral/parenteral) Biochemical parameters: electrolytes, prealbumin, albumin, triglycerides. Renal and hepatic function: creatinine, BUN, urea, GOT, GPT, phosphatase, GGT.			
Thromboembolic prophylaxis	Type (mechanical, pharmacological), Initiation, Bleeding risk, Platelet count			
Glycemic control	Glycemia, Insulin requirements			
Hemodynamic monitoring	Arterial tension Cardiac frequency			
Pain management	Pain scale punctuation, Adverse drug reactions (ADR)			
Infection management	Current antibiotic (prophylaxis, empirical) Therapy adequacy: pathogen Isolated, resistances Signs: temperature, shivering			
Mechanical ventilation	Current sedative and analgesic therapy Sedation scale, ADR			
Therapy monitoring	Drugs (therapeutic range), plasma level ADR, Drug-drug interactions			

Standardized medication audit tool
+
model for recording pharmaceutical interventions

Table 1. Pharmacotherapeutic monitoring chart (adaptation)

What has been achieved?

- Establish **homogeneous standards for pharmaceutical care** that **optimizing pharmacotherapy outcomes** in patients.
- **Facilitates the assessment of residents' skill acquisition during their training**
- Promoting **consistency** among the entire care team.

What's next?

- **Assessing the tool's usefulness and its impact on residents' training benefits will be of interest.**
- Moreover, it may serve as a reference model for **other clinical rotations.**
- **Integration of CHART into computer tools used in daily clinical practice.**

