



HOSPITAL PHARMACY INFORMATION SYSTEM

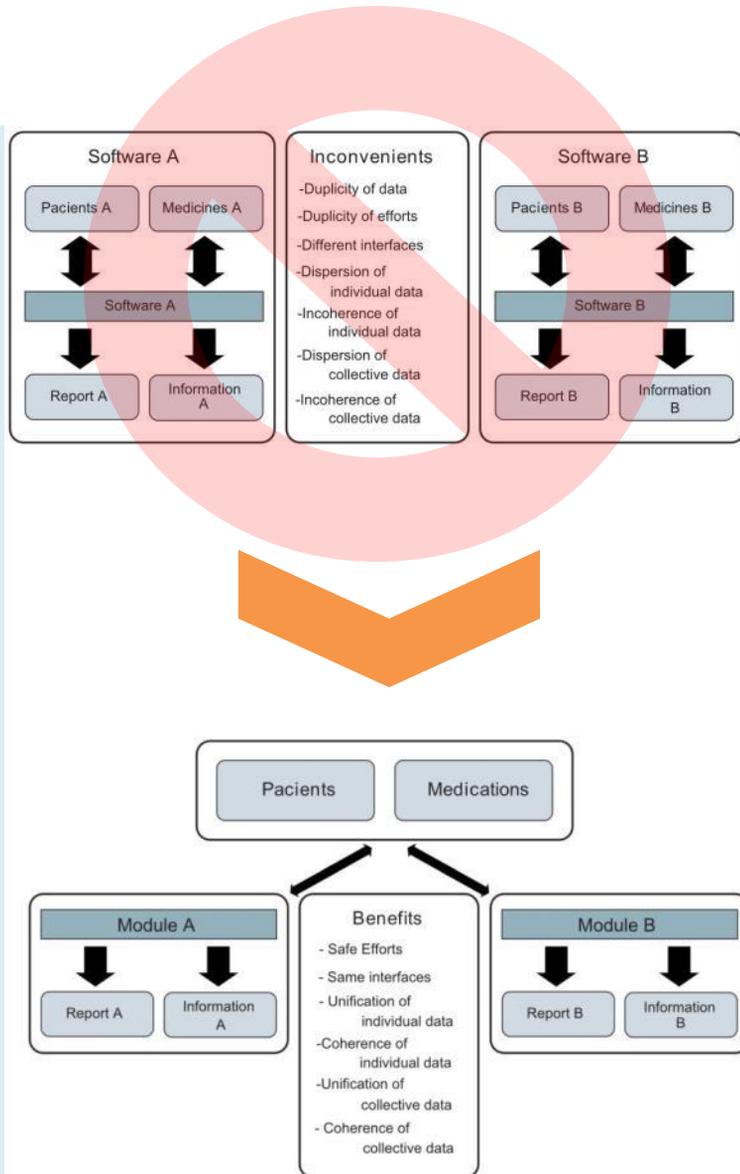


What is FARHOS?

FARHOS is a complete **Hospital Pharmacy Information Management System**.

It fulfils all the requirements about the Hospital Pharmacy management like purchase orders and requisitions, pharmacy stocks and warehouse drug issue to patients and billing, pharmacy drug distribution, unit dosage to inpatients and outpatients:

- ✓ It integrates in only one technological solutions all the necessary modules for the purchase management, stock warehouse, electronic prescription, pharmacy drug dispensing and interaction alerts. FARHOS reliably solves all aspects of clinical and hospital pharmacy management.
- ✓ It includes connectivity with other software applications hospital and pharmaceutical. Incorporating a specific module for data exchange with other applications such as hospital admissions, outpatient clinics, laboratories, warehouses, dispensers, etc.
- ✓ It allows to synchronize data at any time about the location of patients in hospital beds and verify data on outpatient visits when a patient comes to the external pharmacy to withdraw medication.
- ✓ It has an alert system in the management of selected drugs and pharmaceutical validation.

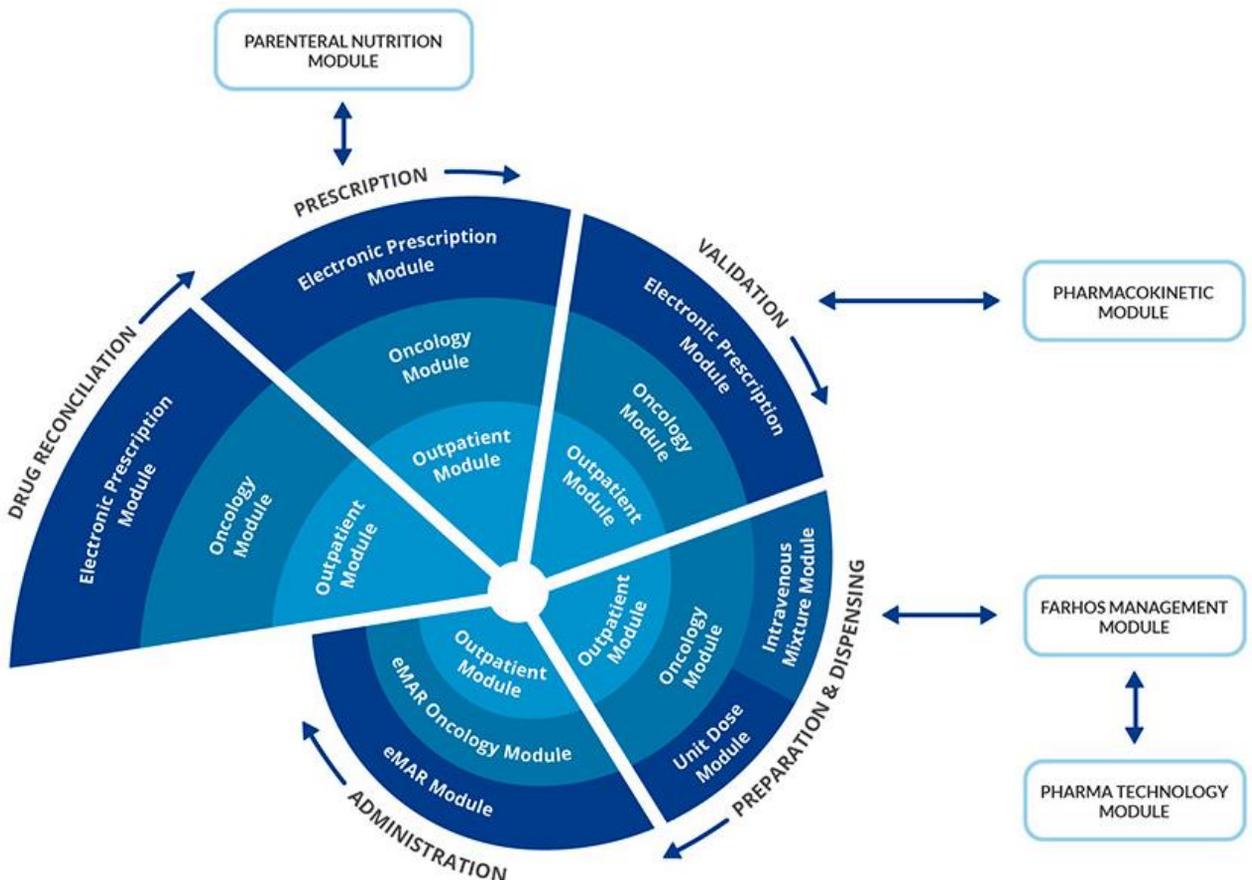


It was developed by a team of specialists pharmacists in hospital pharmacy with extensive knowledge and experience accumulated.

What is FARHOS?

FARHOS includes the following modules:

- ✓ Purchasing management and warehouse management.
- ✓ Distribution to hospitals.
- ✓ Medications in plant dispenser
- ✓ Standard and pediatric unit doses.
- ✓ Intravenous Therapy.
- ✓ Nutrition.
- ✓ Oncology and cytostatic preparation, with prescription
- ✓ Assisted electronic prescription.
- ✓ Administration and nursing drug validation.
- ✓ Pharmacotechnics (manufacturing and repackaging of medications).
- ✓ Loans between Hospitals
- ✓ Clinical Pharmacokinetics and Pharmaceutical Care (Pharmaceutical Care).
- ✓ Distribution outpatient. Including Oral Oncology.
- ✓ Connecting with automatic dispensing systems. (ROWA, Kardex, Pyxis and Pharmaself).



FARHOS connects with other systems.

FARHOS integrates the information with:

- ✓ Integration with Hospital Information Systems (HIS)
- ✓ Distribution Systems for hospital's plant unidosis.
- ✓ Storage robotized systems for pharmacy drugs
- ✓ Automatic dispensing systems of pharmacy drugs. (Outpatient)
- ✓ Integration of all modules (outpatient oncology, electronic prescribing, pharmacokinetics and managing mixtures) with other systems of hospital pharmacy management.



Why FARHOS?

FARHOS is the solution with greater coverage of operational and technological requirements **for health professionals:**

Excellent technological solution:

- ✓ Based on open technology standards and modular architecture.
- ✓ 3-tier Architecture
- ✓ Open architecture for integration with different protocols (XML, HL7, IHE, etc..). Integration platforms
- ✓ Integration with other hospital systems developed (HIS, SAP, Meta4, etc.)
- ✓ Administration and development tools
- ✓ Implementation multicenter
- ✓ Compliance with the Data Protection Laws and integration with electronic signature systems
- ✓ Managing users and permissions. Integration with LDAP
- ✓ BPM: Document management and workflow management
- ✓ Portability of platforms and devices.

Operational benefits for the organization:

- ✓ Ample time support
- ✓ Public and private sectors credentials
- ✓ Open solution with multiple integrators.
- ✓ Continuous versions update

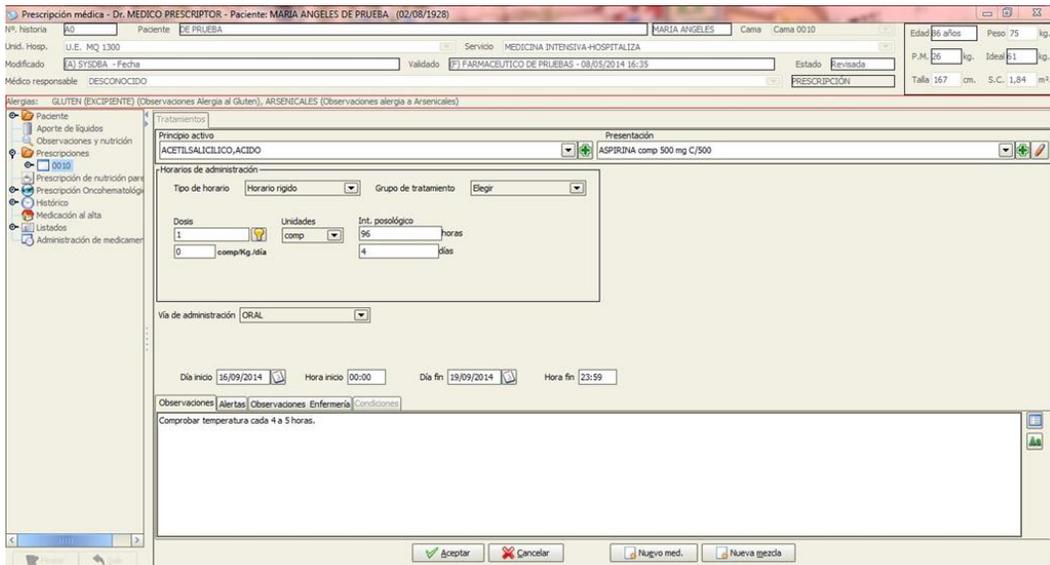
Coverage of the most advanced processes and functions required by the users:

- ✓ Planning processes management, supply, logistics, distribution, and monitoring inter-hospital loans.
- ✓ Nutrition management, IV therapy, oncology, etc.
- ✓ Assisted medical prescription based on rules and control protocols.
- ✓ Automated commands Planning
- ✓ Pharmacotechnics
- ✓ Distribution outpatient and ambulatory
- ✓ Integration with automatic storage devices.
- ✓ Reporting
- ✓ Clinical Trial Management



Why FARHOS?

FARHOS provides higher performance than other solutions on the market with a lower cost to hospitals: **Unidosis Prescription System**



FARHOS Unidosis Prescription

Support prescription, maintaining accurate and necessary notices and quality controls to increase the safe use of drugs. Alert management and prescribing protocols

Mixtures' Prescription and Nutrition

Alert management and prescribing protocols (general or specialized by department).

Prescription by substance, generic, brand name, etc..

Annotations for patient or protocol management and document management. Maintenance of observations per drug generic or general.

Alert management and prescribing protocols (allergies, therapeutic duplication, incidence, diagnosis, pregnancy and lactation, etc..)

Pharmacy databases management to propose substitutes. Incorporates pharmaceutical guide management.

Integration with any hospital system

Integration with automated dispensing cabinets.

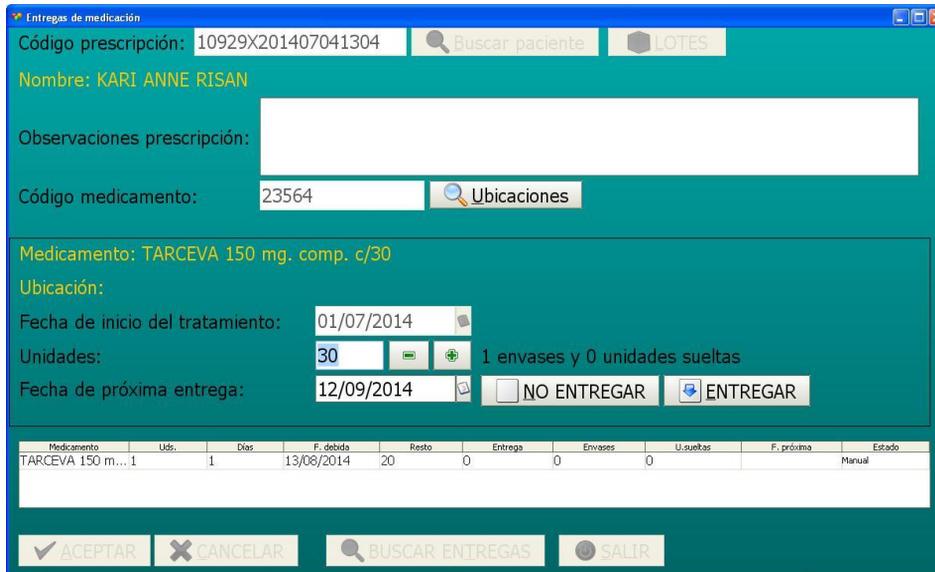
Prescription for historical or previous episode.

Management of limitations on income (premedication).

Prescription by protocols based on weight, body surface area, or metabolic weight

Why FARHOS?

FARHOS provides higher performance than other solutions on the market with a lower cost to hospitals: **Outpatients Management**



Entregas de medicación

Código prescripción: 10929X201407041304 Buscar paciente

Nombre: KARI ANNE RISAN

Observaciones prescripción:

Código medicamento: 23564 Ubicaciones

Medicamento: TARCEVA 150 mg. comp. c/30

Ubicación:

Fecha de inicio del tratamiento: 01/07/2014

Unidades: 30 1 envases y 0 unidades sueltas

Fecha de próxima entrega: 12/09/2014 NO ENTREGAR ENTREGAR

Medicamento	Uds.	Días	F. debida	Resto	Entrega	Envases	U. sueltas	F. próxima	Estado
TARCEVA 150 m...	1	1	13/08/2014	20	0	0	0		Manual

FARHOS Outpatients Management

Prescription from anywhere in the Hospital network. Integration with any system of the hospital network

Control of protocols and treatments. Medications return and treatment processes

Compliance reports and even issuing warnings to patients as reminders that must pass through pharmacy to pick up medication. Follow-up of treatments and notices by SMS or e-mail to the patients. Reports of adherence to the treatment

Prescribing processes are performed from the query itself or the hospital ward, facilitating clinical decision making in cytostatic treatments, nutritional blends, etc.. Dispensation in section floor or in automated warehouses.

Registration of incidents detected, control of dispensations, and information of the patient to ensure confirmations forfeitures of preparations. Control of protocols and treatments

Gathering any kind of medication and integration with robots of pharmacy and bar code recognition, and ATM.

Integration of digital signature

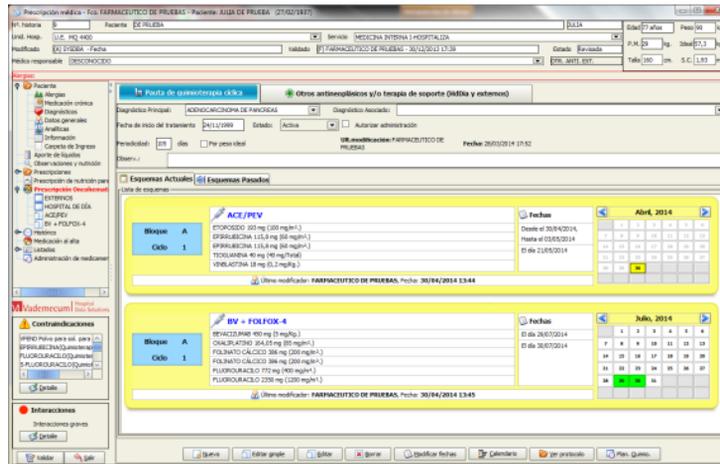
Managing interactions with other treatments

Medication admission and of discharge: reconciliation of income forms and registration forms and patient education

Module integrated with external oncology: oral chemo, electronic infusers, planning cycles and protocols for pediatric oncology assistants (control growth percentiles, etc..).

Why FARHOS?

FARHOS provides higher performance than other solutions on the market with a lower cost to hospitals: **Oncology Patients Management**



FARHOS Oncology

Integrated in FARHOS whole sharing patients, medication, allergies, interactions and patient medication record, including modules Outpatient and Day Hospital

Data support safe and reliable. Adapted to the personal data protection law.

Prescription-based in protocols. Prescription by substance and subsequent calculation according to existing presentations.

Confirmation of arrival to the hospital for the preparation and individual patient or for a day.

Infusers' calculation integrated. Ability to include prescription oral cytostatic.

You can manage simultaneous protocols. Connecting to HIS systems for details of admission, both inpatient and day hospital. Improved speed to handle high workloads.

Prescription of dose and possible reduction based on mixture by mixing. Possibility of prescribing dependent N cycles, several cycles can be plan ahead.

Wide variety of reports and graphs and historical present. History requirements and improved preparations.

Possibility of management authorization by the physician or other authorized personnel.

Adapted to prescriptions of oral chemotherapy drugs can be dispensed from these units * outpatient if desired.

Possibility of calculating dose per kilogram, body surface area or AUC. You can manage changes in dates individually if they match any holiday or weekend.

Possibility of dispensing drugs from ** Day Hospital. * Subject to contract outpatient module ** Subject to contract the main module of electronic prescribing

Wide variety of lists and groups. Tags with read capability complete through barcode. Quick messaging between different user profiles.

Room management positions and chemotherapy. Planning hourly vacancies. Scheduling holidays, and availability of seats in those times. Rescheduling of visits adjusting to availability.

Why FARHOS?

FARHOS provides higher performance than other solutions on the market with a lower cost to hospitals: **Intravenous Mixtures**

FARHOS Intravenous Mixtures

Integrated in all Farhos sharing the functionality and the master data.

Data safe hardware and reliable data. Adapted to the personal data protection law.

Confirmation of patient arrival to the hospital to optimize the mixtures preparation.

Possibility of prescribing intravenous mixtures using protocols. Quick and easy perfusion menu.

Preparations Management in its various states until processing.

Alerts for the use of intravenous mixtures in stock.

Fixing automatic expiration date through its stability.

Listings of preparation and barcode labels.

Integration with external systems such as robots automatic processing of intravenous mixtures.
Integration with external systems for the weighing.

Generation of mixtures for several days and not just for today.

Purge control for precise dosages.

Possibility of Management of "stock solutions" which individual dispensations load.

Consumption management based in automatic intravenous mixtures prepared

FARHOS Clinical Assessments

CTMS: Registry protocols, researchers and patients. Templates and test management module

Control of samples, packaging, raw materials, etc. Templates and test management module

Process for the preparation of formulations and officinal preparations. Module pharmacotechnics

Repackaged of oral dosage forms in dosage of units. Module pharmacotechnics

Barcode Print Management pharmacological test logistics, identification, labeling, batch control and limitation.

Why FARHOS?

FARHOS provides higher performance than other solutions on the market with a lower cost to hospitals: **Electronic Medicine Administration Record (eMAR) and ERP.**

FARHOS Electronic Medicine Administration Record

Allows to confirm de patients attendance to the date for the medical visit and treatment for outpatients case.

Allows to confirm by the physician that the patient may be given medication.

It has real-time information in Pharmacy to confirm whether or not the medication is prepared.

Allows to Identify the patient using bar coded bracelet to avoid mistakes.

Control by the barcode reader of the medication for the patient.

Allows to indicate the cancelation of the administration by nurse service and the reason.

Manages the registration of the medicine administration to the patient in the system by the nurse service.

Closes the full course of the medicine from being prescribed, until it is administered to the patient.

It records the person who administered the medicine to maintain the trazability.

FARHOS Economical Management

Purchasing and Supply Management

Multi-warehouse system and transfer of pharmacy drugs

Control of consumption and production of records and audits

Dynamic Dashboards for analytical monitoring (by group, drug, department, etc..).

Management of suppliers based upon EFQM for the homologation and control

Narcotic Record Book: Recipes, administrative inspection reports, etc..

Stock control system and purchasing planner

Automation with e-procurement platforms

System reconciliation of invoices and packing slips

Accounting transactions automatic management exportable to accounting system

Automatic adjustment of inventories

References

Complete Solution

- ✓ Hospital General Universitario “Gregorio Marañón” (Madrid).
- ✓ Hospital Universitario Severo Ochoa (Leganés)
- ✓ Hospital Asepeyo de Coslada (Madrid).
- ✓ Hospital Asepeyo de Sant Cugat (Barcelona).
- ✓ Hospital Psiquiátrico José Germain de Leganes (Madrid).
- ✓ Hospital Dr. Rodríguez Lafora, Psiquiátrico de la Comunidad de Madrid.
- ✓ Hospital de Guadarrama (Madrid).
- ✓ Hospital Virgen de la Poveda (Villa del Prado Madrid).
- ✓ Hospital Aita Menni de Mondragón (Guipuzcua).
- ✓ Centro Hospitalario Padre Menni de Santander.
- ✓ Hospital Psiquiátrico San Luis (Palencia).
- ✓ Centro Hospitalario Padre Benito Menni Valladolid.
- ✓ Centro Hospitalario Benito Menni (Elizondo - Navarra)
- ✓ Clínica Psiquiátrica Padre Menni (Pamplona).
- ✓ Centro Médico TEKNON Quironsalud (Barcelona)
- ✓ Grupo Quironsalud (4 hospitals).
- ✓ Hospital General de Pachuca (Hidalgo-México)
- ✓ Hospital TecSalud San José (Monterrey-México)
- ✓ Hospital TecSalud Zambrano Hellión (Monterrey-México)
- ✓ Hospital Mónica Pretelini (Estado de México)
- ✓ Hospital de Chalco (Estado de México)

Complete Solution

- ✓ Hospital de Axapusco (Estado de México)
- ✓ Hospital Pedro López (Estado de México)
- ✓ Hospital Nicolás San Juan (Estado de México)
- ✓ Hospital La Perla (Estado de México)
- ✓ Hospital Las Américas (Estado de México)
- ✓ Hospital Valle Ceylan (Estado de México)
- ✓ Hospital José Vicente Villada (Estado de México)
- ✓ Hospital Psiq. José Sayago (Estado de México)
- ✓ Hospital Psiq. Adolfo M. Nieto (Estado de México)
- ✓ Hospital Granjas la Salud (Estado de México)
- ✓ Hospital General Lic. Adolfo López Mateos (Estado de México)
- ✓ Hospital Materno Infantil Victoria Guadalupe de Atizapan (Estado de México)

Oncology Module

- ✓ Hospital Central de la Defensa (Madrid).
- ✓ Hospital Virgen de la Arrixaca (Murcia).
- ✓ Hospital General de Guadalajara.
- ✓ Hospital Ciudad de Coria (Cáceres).
- ✓ Hospital San Pedro de Alcántara. Cáceres.
- ✓ Hospital General de Lanzarote.
- ✓ Fresenius Kabi Chile Ltda. Unidad de Preparación de Citostáticos para 15 Hospitales en Santiago de Chile y Concepción (5 instalaciones).

Outpatients Module

- ✓ Hospital 12 de Octubre.(Madrid)
- ✓ Hospital de Cruces (País Vasco)
- ✓ Hospital de Basurto (País Vasco)
- ✓ Hospital de Zumárraga (País Vasco)
- ✓ Hospital Clínico Universitario de Salamanca