

HEALTHCARE MANAGEMENT SYSTEM

Helpers HMS: Integrated Healthcare ERP

Comprehensive Operational Blueprint & System Architecture for Medical Workflows

Presented by Sabry Youssef | Helpers ERP Platform

Helpers HMS unifies clinical care and administrative control in one Odoo-native platform

01

Seamless Patient Lifecycle

Standardized journey from initial check-in and appointment scheduling through clinical consultation, diagnostic ordering, pharmacy, and final billing.

02

Granular Access Security

Role-Based Access Control (RBAC) combining model-level ACLs with SQL record rules to enforce strict data privacy and least-privilege compliance.

03

Modular Scalability

Flexible modular integration for specialized clinical units including laboratory, radiology, pharmacy, and inpatient hospitalization management.

Pre-registration duplicate checks guarantee high data integrity across clinical records

System Authentication & Onboarding

- **Odoo Ecosystem Integration**

Built natively within Odoo to synchronize financial, inventory, and human resource modules.

- **Role-Based Dashboard Access**

Staff members enter tailored workspaces defined strictly by operational role (Receptionist, Doctor, Admin).

- **Multi-Company & Branch Support**

Centralized oversight across multiple clinic locations with isolated or unified patient registers.

Patient Registration & Search Protocol

- **Mandatory Duplicate Search**

Strict operational requirement to search existing records before registering new patients.

- **Centralized Medical Identifier**

Generates a unique patient ID linking demographics, past visits, prescriptions, and invoices.

- **Dynamic Appointment Creation**

Enables reception to schedule consultations, assign doctors, and set urgency flags seamlessly.

Standardized 4-phase clinical lifecycle accelerates patient care and billing

01

Phase 1: Intake

Reception verifies identity, updates demographic data, and schedules consultation.



02

Phase 2: Consultation

Physician records chief complaints, diagnostic notes, and clinical observations.



03

Phase 3: Orders & Care

Automated dispatch of lab orders, radiology requests, and prescriptions.



04

Phase 4: Billing & Closure

Consolidated invoice generation, pharmacy fulfillment, and follow-up scheduling.

Role-Based Access Control enforces strict least-privilege data security

Security Layer	Functional Scope & Description	Enforcement Mechanism
Access Control Lists (ACLs)	Defines model-level functional permissions (Create, Read, Write, Delete) assigned specifically by staff role.	Validated against user groups (e.g., Receptionist vs. Doctor vs. HMS Manager).
Record Rules	Controls domain-level record visibility, restricting staff to specific clinic branches, departments, or patient sets.	Applied at database level via SQL filtering criteria on active sessions.
Least-Privilege Policy	Ensures users possess only the minimal operational rights required to execute daily medical or administrative duties.	Non-administrative verification and sandbox testing required prior to deployment.

Modular architecture enables seamless expansion to specialized clinical departments

Pharmacy & Prescriptions

Direct prescription dispatch from doctor consultations with automated inventory updates and stock reordering.

Laboratory Management

Electronic test ordering, sample barcode tracking, and automated lab result synchronization with patient history.

Radiology & Imaging

Diagnostic imaging request routing, radiologist reporting, and centralized DICOM/attachment archiving.

Inpatient & Ward Care

Complete hospitalization management, bed allocation, daily round logging, and discharge summary generation.

Bilingual documentation guarantees 100% synchronization with live codebase

Documentation Architecture & Quality Standards

- ✓ **Strict Software Alignment**

All instructional manuals and workflow guides are directly cross-referenced and validated against the live ERP software codebase and demonstration environment.

- ✓ **Bilingual Mirroring**

Complete structural parallelism between English and Arabic documentation directories, ensuring equal feature coverage and localized user experience.

- ✓ **Official ERP Terminology**

Mandatory compliance with official healthcare and ERP terminology across user interface toggles, field labels, and help guides.