

Healthcare Management System – DFD Documentation

1. System Overview

The Healthcare Management System (HMS) manages patient registration, checkups, consultations, payments, treatments, and result delivery. It ensures smooth data flow between patients, medical staff, and payment modules while maintaining accurate records.

2. Main Processes

- **Patient Registration & Service Selection:** Patients enter the system, provide personal details, and select required medical services.
 - **Report Generation & Display:** The system generates and displays preliminary test results or medical reports.
 - **Advice Delivery:** The system provides recommendations based on reports, guiding the patient on next steps.
 - **Payment Handling:** Patients complete payments, which are validated before proceeding to consultation or treatment.
 - **Data Verification:** Patient and report information are checked to ensure correctness before consultations or treatment.
 - **Consultation & Treatment:** Patients consult doctors and receive treatment, which is recorded in the system.
 - **Final Checkup:** After treatment, a final checkup confirms the patient's medical status.
 - **Result & Confirmation:** Final results or confirmations are sent to the patient, completing the workflow.
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3. Entities and Data Stores

- **Patient:** Provides details and receives reports, advice, payments, and confirmations.
 - **Payment Module:** Handles transactions and triggers system progression based on payment status.
 - **Checkup / Consultation:** Stores examination data, test results, and treatment records.
 - **Doctor / Advisor:** Provides consultations, diagnoses, and recommendations.
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4. Data Flow & Interactions

Patients register and select services, the system generates reports and advice, payments are processed, consultations and treatments are performed, and final results are sent back, with data flowing among Patient, Payment, Checkup, Advice, and Doctor modules.

