Hospital Management System — AI Hub Test Pack
Policies, SOPs & Extended Examples

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This document provides an extended, descriptive set of hospital policies, standard operating procedures (SOPs), and realistic synthetic examples. It is designed specifically to test Retrieval-Augmented Generation (RAG), agent workflows, compliance validation, classification, and predictive reasoning within the Hospital Management System AI Hub.

1. Purpose and Scope

The purpose of this document is to act as a single source of truth for all AI Hub modules.

It ensures that AI-generated outputs are grounded, auditable, and consistent.

Scope includes:

• Administrative workflows

• Clinical documentation support

• Patient scheduling and attendance

• Complaint triage and escalation

• Compliance and audit validation

This document is synthetic and for demonstration only.

2. System Roles and Responsibilities

Admin:

• Full access to hospital records and dashboards

• Responsible for policy enforcement and audits

• Can approve discharges and billing summaries

Doctor:

• Access limited to assigned patients

• Reviews AI-generated discharge drafts

• Makes final clinical decisions

Patient:

• Can view own appointments, invoices, and discharge summaries

• Cannot see other patient data

AI Assistant:

• Operates in draft and advisory mode only

• Must not replace clinical judgment

3. Data Handling, Privacy, and Security Policy

Data Principles:

• Minimum necessary data collection

• Purpose limitation

• Accuracy and auditability

PII and PHI Handling:

• Names, IDs, contact details must be redacted when PII Redaction is ON

• Use placeholders such as [PATIENT_NAME], [PATIENT_ID]

• Do not infer or fabricate missing data

Security Controls:

• Role-based access control (RBAC)

• Encrypted storage (demo assumption)

• Access logging for audits

Retention Policy:

• Patient and billing records retained for 7 years (demo)

4. AI Usage Policy and Guardrails

AI is used to assist, not replace, human decision-making.

The AI assistant must:

• Clearly mark outputs as drafts

• Cite policy sections when applicable

• Avoid speculative or diagnostic claims

• Escalate uncertainty to human review

The AI assistant must not:

• Prescribe medication independently

• Diagnose conditions

• Reveal restricted patient data

5. Clinical Documentation SOP – Discharge Summary

Objective:

To generate a structured discharge summary for clinician review.

Mandatory Sections:

A. Patient Identifiers (redacted if required)

B. Admission and Discharge Dates

C. Length of Stay

D. Diagnosis and Key Findings

E. Procedures Performed

F. Medication at Discharge

G. Follow-Up Instructions

H. Red Flags and Return Precautions

I. Billing Summary (if available)

Formatting Rules:

• Clear headings

• Bullet points preferred

• No assumptions beyond provided data

6. Medication and Follow-Up SOP

Medication Handling:

• Include dosage, frequency, and duration

• Flag allergies if documented

• State "as prescribed by clinician"

Follow-Up Planning:

• GP or specialist review timelines

• Lab or imaging follow-ups

• Lifestyle or dietary advice (non-medical)

All instructions must be marked as draft.

7. Appointment Scheduling and Attendance Policy

Appointment Lifecycle:

• Booking

• Confirmation

• Reminder notifications

• Attendance or no-show logging

No-Show Definition:

• Patient fails to attend within 30 minutes without notice

No-Show Consequences:

• Follow-up communication

• Account flagging after repeated events

8. No-Show Risk Prediction – Feature Guidance
Features Used:

• Previous no-show count

• Lead time between booking and appointment

• Time of day

• Day of week

• Appointment type

• Age band

AI Output Expectations:

• Explain contributing factors

• Suggest non-punitive interventions

9. Complaints Handling SOP
Complaint Intake Channels:

• Reception

• Email

• Online form

• Telephone

Severity Levels:

Level 1 – Minor inconvenience

Level 2 – Service quality or billing

Level 3 – Safety or privacy risk

Escalation:

• Level 3 escalated within 24 hours

10. Complaint Classification and Routing

Categories:

• Scheduling

• Wait Times

• Billing

• Staff Conduct

• Facilities

• Clinical Care

• Privacy

• Other

Routing:

• Front Desk

• Billing Department

• Clinical Team

• Compliance Office

11. Compliance Validation Checklist

The Policy Compliance Agent must verify:

• PII redaction

• Policy grounding

• Draft labeling

• Completeness

• Professional tone

• Source attribution

12. Extended Synthetic Examples

Example A – Discharge:

Patient: [PATIENT_NAME], Age 45

Admitted: 20-12-2025

Discharged: 23-12-2025

Diagnosis: Acute gastritis, dehydration

Treatment: IV fluids, monitoring

Medications: Omeprazole 20mg OD x14 days

Follow-Up: GP in 7 days

Billing: Room £360, Doctor £90, Medications £35, Other £15

Example B – No-Show:

Age band 30–39

Previous no-shows: 2

Lead time: 18 days

Appointment: 08:30 AM

Risk factors: Early morning, long lead time

Example C – Complaint:

"I waited over an hour past my appointment and the invoice shows an unexplained charge."

13. Suggested AI Hub Test Prompts

• What data must be redacted when PII Redaction is enabled?

• Draft a discharge summary for Example A.

• Validate the discharge summary for compliance issues.

• Identify no-show risk factors in Example B.

• Classify Example C and draft a response.

14. Version and Disclaimer

Hospital AI Hub Test Pack v2.0

Synthetic data only.

For demonstration, testing, and interview purposes.