

HEALTHCARE BI CASE STUDY

Hospital Intelligence

From fragmented records to decision-ready
visibility across care, capacity and finance.

Power BI case study | Hospital Dashboard.pbix



The hospital needed one operating picture

The case addresses a familiar hospital problem: valuable information existed, but the path from question to answer was slow and fragmented.

- Fragmented operations** Data accumulation reduced the efficiency of day-to-day management.
- Slow information access** Teams lost time searching for relevant patient, doctor and hospital information.
- Disconnected decisions** Clinical, operational and financial signals lived in separate conversations.

5

decision views

Overview
Patients
Doctors
Hospital
Finance

The hospital model turns fragmented records into governed insight

The project connects source data, transformation logic and a role-based report layer.



MODEL FOOTPRINT TRACED IN THE PBIX

The model diagram lists 14 entity tables plus a dedicated _Measure table. Key entities include patient_info, appointment, Bills, beds_info, patient_tests, staff, Department and medical_stock_info.

The report is organized for fast movement from overview to action

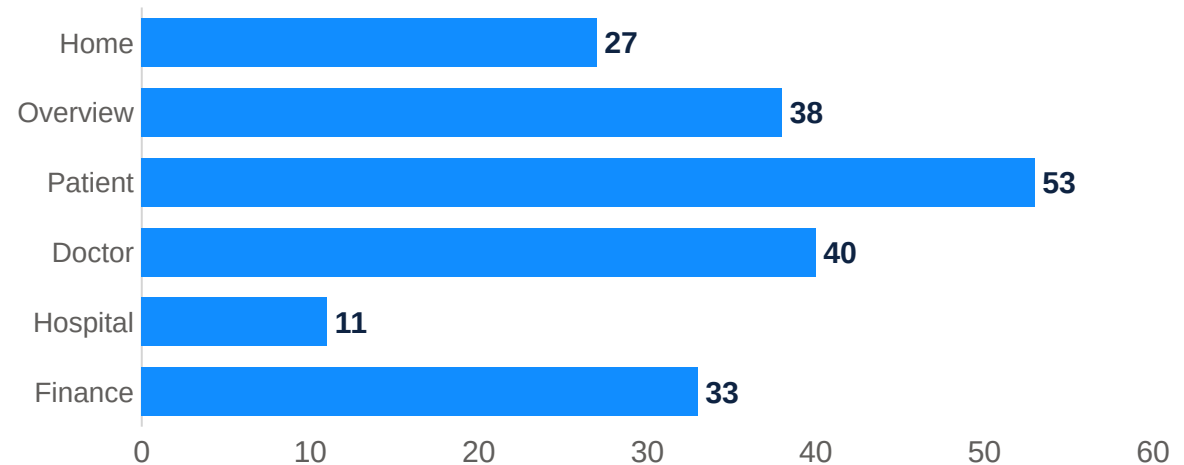
The local PBIX contains six pages: a Home landing page plus five analytical views.

6

PBIX pages

Home / Overview / Patient
Doctor / Hospital / Finance

Visual containers by page



Counts include layout, navigation and decorative objects; they describe report depth, not data volume.

Clinical visibility connects patient flow, care signals and experience

Overview provides the operating picture. Patient adds record-level context for investigation and follow-up.

Flow and capacity	Patient count, Discharge%, bed status and room type.
Care context	Diagnosis, medicine quantity, tests and admission/discharge dates.
Experience	Satisfaction rating, feedback, appointment time and charge type.

Two levels of clinical context

Portfolio-level

Trends, capacity and discharge patterns

Patient-level

A focused view for care follow-up

Operational views expose the people and capacity behind care delivery

The Doctor and Hospital pages turn workforce, scheduling and capacity data into an operating conversation.

DOCTOR

Workforce economics and performance

	Economics	Fees, patient spend, salary, commissions and rates.
	Availability	Department, specialization, availability and appointments.
	Performance	Targets, estimated commission and satisfaction signals.

HOSPITAL

Capacity, tests and daily flow

	Capacity	Beds by room type and status.
	Clinical flow	Patient tests with status, result and notes.
	Scheduling	Age categories, surgeries, staff and doctor appointments.

Finance brings billing, clinician economics and pharmacy inventory into one operating view

The Finance page connects revenue signals with the costs and supply flows that shape hospital performance.

Billing performance

Total Bill Amount, Bill Counts, Charge Type and monthly values.

Clinician economics

Doctor fees, salaries, commission amount and commission rate.

Pharmacy and stock

Medicine Sale QTY, Stock, supplier name and medicine catalog.

Management lens: billing performance, labor cost and medical supply flow in the same report.

The case study demonstrates an end-to-end BI delivery

The value is the chain from data design to a shared decision surface.

14

source tables

A relational base for patient, care, staff, beds, inventory and billing data.

3

custom views

A prepared layer for reusable, traceable reporting logic.

5

executive views

Overview, Patients, Doctors, Hospital and Finance in one report.

RESULT

A single dashboard surface consolidates clinical, operational and financial signals for faster, more traceable decisions.

The next step is operationalization, not more dashboard surface area

The foundation is in place. The next value comes from making the model dependable in the daily operating rhythm.

01

Refresh and governance

Confirm refresh cadence, KPI owners and definitions.

02

Decision workflows

Add targets and alerts for bed occupancy, patient flow and billing exceptions.

03

Scale with control

Apply role-based access, monitor data quality and preserve traceability.

Review boundary

The local PBIX exposed report definitions, fields and model structure, but not rendered KPI values or refresh history in this analysis. This deck uses no invented figures.