

Small Hospital, Big Leap

A clinician-built digital hospital — self-designed EMR, automation and governance at a 45-bed multispecialty hospital



Shree Kkasturi Medicare Pvt. Ltd. (Kasturi Hospital)

Mira Bhayander, Maharashtra · 45-bed multispecialty since 2001 · ICU · NICU · Dialysis · 24×7 Casualty

Built in-house on Google Workspace

Focus Area

Implementation & Effective Use of Clinical Applications

Kasturi Hospital at a glance

A 45-bed multispecialty hospital serving Mira Bhayander since 2001

Led by two clinician Medical Directors with 20+ years of practice — Dr. Rakhi Agarwal (M.S. General Surgery, FAIS, FICS; Chairman, IT Cell, IMA Maharashtra State) and Dr. Rajeev Agarwal (M.D. Paediatrics) — both active in the Indian Medical Association and recognised by NGOs for social service.

Advanced critical care, 24×7 diagnostics, complex and minimally invasive surgery, free ambulance pickup, home care, wellness programmes and cashless hospitalisation — in a patient-centred, modern, NABH Entry-Level accredited facility.



45

Inpatient beds



2001

Caring since



24×7

Casualty & trauma



3

ICU · NICU · Dialysis units

The challenge: paper records quietly undermined safety



Slow retrieval in emergencies

A returning or trauma patient's history was hard to find fast — exactly when it mattered most.



Investigations repeated

Earlier reports couldn't be located in time, so tests were re-done — cost and delay for the patient.



Medication risk

Allergies and drug histories were scattered across multiple paper files, raising the chance of error.



Storage burden & medico-legal risk

Years of physical files to store and protect; retrieving an old record — e.g. a death certificate years later — was slow and a real liability.

Why it matters nationally: India's small and mid-size hospitals hold most of the country's beds — and face this exact problem, without the budgets of large chains.

Our approach: continuity before compliance



We chose patient safety first.

Rather than chase certification, our clinician-leaders built the digital foundation so a patient's full story is on one screen, at the point of care — every time.

1

Complete, legible, instant records

Every patient's clinical record retrievable at the point of care.

2

Reduce avoidable harm

Fewer medication errors, missed allergies and duplicated tests.

3

Connect & automate

Records, lab, pharmacy and workflows connected — repetitive steps automated.

4

Lean, in-house, ABDM-ready

Built affordably on Google Workspace; standards-based foundation.

“Digitalisation does not remove NABH requirements — it automates them.” — Dr. Rakhi Agarwal

What we built: one connected ecosystem

A self-designed EMR at the core — capture once → available everywhere → usable for care & audit



Registration & admission

Auto demographics; automated admission information.



Self-designed EMR

Indoor case paper, SOAP notes, medication orders — OPD & IPD.



Lab · pharmacy · radiology

Results and reports auto-linked into one record.



Workflow automation

OT posting, TPA, diagnostics, HR — via WhatsApp/SMS.



Quality dashboard

NABH indicators tracked from live data.



Governance & consent

Retention policy, trilingual consent, DPDP-aligned.



Built in-house on Google Workspace — low-cost, clinician-architected, and replicable by any small hospital.

A self-designed EMR — the electronic Indoor Case Paper

SHREE KKASTURI MEDICARE PVT. LTD.
Indoor Case Paper · Patient Details

UHID / IPD No.	2xxxx / 7xx
Patient name	— (redacted) —
Age / Sex	50 / Female
Consulting Dr.	Dr. — (redacted)
Final diagnosis	Uterine fibroid
Patient outcome	Normal discharge / Transfer / LAMA / Expired
Reg. → Discharge	13-07-2025 → same-day summary

One structured record per patient



Demographics & case-paper details

File/UHID/IPD linkage, room, TPA & insurer, outcome.



SOAP progress notes by treating doctors

Day-to-day clinical notes captured in structured form.



Medication orders by RMO

Drug, dose, timing and relation to food — legible, every time.



Investigations auto-linked

Lab & pathology values and PDF reports inside the record.

De-identified mockup of the live system · branded · page-numbered

The clinical record in action

Progress notes (SOAP)

S/B Dr. Rakhi Agarwal
Post-Burn Day 1 — IVF RL + 5% DNS;
Temp 98.6°F, P 94, BP 100/60.
Maintain strict I/O charting.

S/B Dr. Rakhi Agarwal
Parkland fluid calc documented;
plan & vitals recorded each shift.

Medication order (RMO)

Medication	Timing
Inj. Meropenem 1g NS	TDS
Inj. Metro 100ml	2:30p-10:30p-6:30a
Inj. Pan 40 mg	OD · 2pm
Inj. Emeset 4 mg	2p-10p-6a
Inj. Tramadol 100ml NS	BD · 2p-11p

Investigations auto-linked

Pathology — 26 Jun
Hb 11.2 · Hct 32.98 · MCV 81.86
S. Creatinine 0.75 · Calcium 8.02
HbA1c 6.83

Pathology — 27 Jun
BSPP recorded · PDF report attached

+ *Diagnostic-centre reports delivered automatically*

De-identified mockups of the live system · lab values illustrative

An automation ecosystem

Repetitive workflows automated in-house on Google Workspace, delivered over WhatsApp / SMS



SKMPL OT Dept. — OT posting

Provisional OT posting · filled by RMO with operating surgeon

Surgery: Cystoscopy + B/L DJ stenting

Date/Time: 26-04 · 12:30 PM | IPD 31

Surgeon & anaesthetist captured · SGA · C-Arm: Yes



TPA Payment Receipt

Auto-notified to the right stakeholders

Month Mar-24 · UHID 2xxxx · IPD 7xx

TPA: Paramount · Insurer: New India Assurance

ECS ₹43,633 · TDS ₹4,849 · ECS date 02-Apr

Automations in daily use



Appointment scheduling



Admission information



OT posting orders



TPA payment receipts



Diagnostic-report delivery



Reminders & report delivery

And across operations: HR leave, payroll & recruitment messages, a daily bank-balance update to directors, and patient greetings.

A quality dashboard — NABH by design

Indicators computed from live data, so documentation and audit happen automatically

Monthly admissions tracked (illustrative)

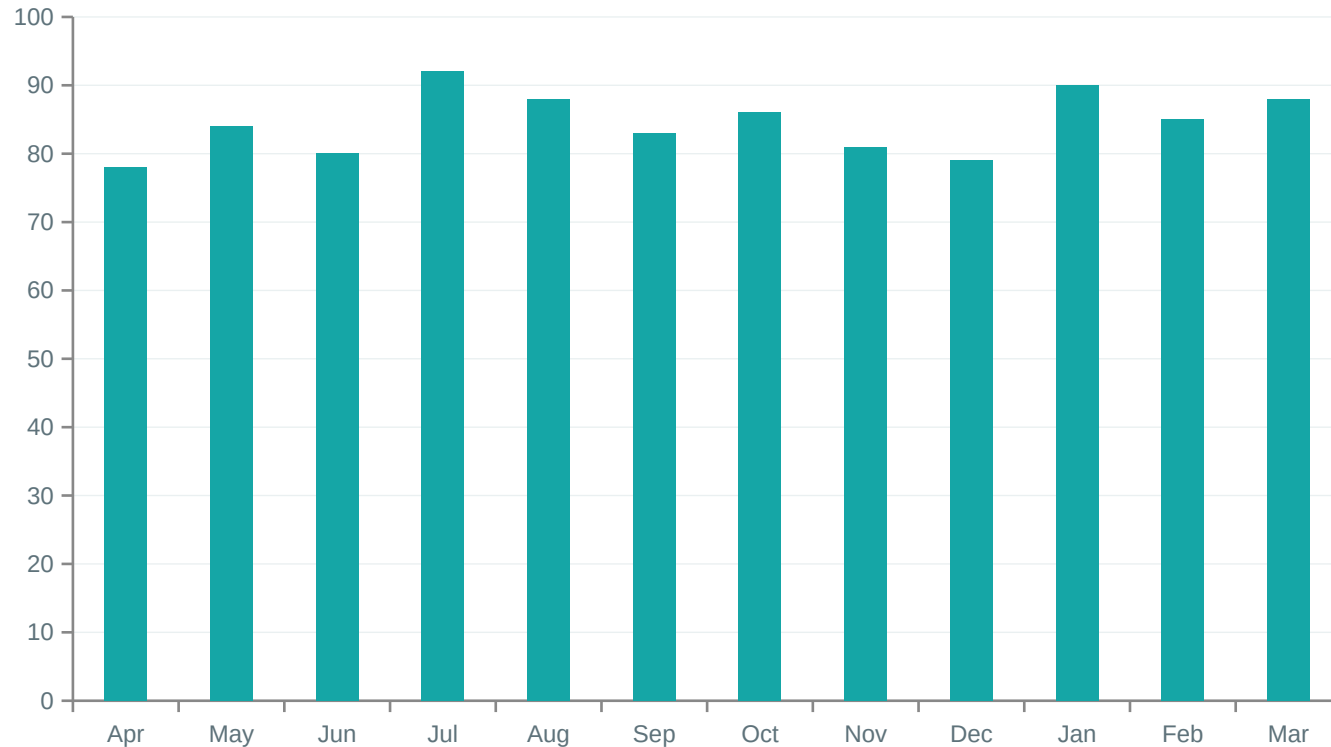


Chart illustrative; NABH indicators are computed from the hospital's live records.

Indicators auto-tracked



% admissions with adverse drug reactions



Discharge-summary turnaround



Repeat-investigation rate



LAMA / transfer / mortality

Governance, consent & data protection

Built for compliance — documentation, traceability and audit by design



Medical-record retention policy

Written, approved policy aligned to NMC/MCI, NABH, Consumer Protection Act, Evidence Act, IT Act 2000, ABDM — with retention periods by record type.



Trilingual digital consent

Patients consent in their own language — English, Hindi and Marathi — for creating and sharing digital records.



DPDP Act 2023 aligned

Informed consent, purpose limitation, patient access/correction, and breach awareness — hospital as data custodian, not owner.



Access control & audit trails

Role-based access (doctor / nurse / admin) with who-did-what audit trails.



Encryption & automated backup

Secure storage with auto-backup and disaster protection.



Retention, archival & destruction

Policy-based storage and disposal across record types.

NABH by design: documentation, traceability and audits happen automatically from the live system — not reconstructed for assessments.

Built to the NABH focus area

Implementation & Effective Use of Clinical Applications — how this case study meets each criterion



Workflow integration of HIS/EMR in clinical settings

A self-designed EMR embedded in daily OPD, IPD, OT and casualty workflow.



Interoperability between clinical modules (EMR · LIS · Pharmacy · Radiology)

Lab, pathology, pharmacy and diagnostic reports flow into one record.



User adoption strategies and training models

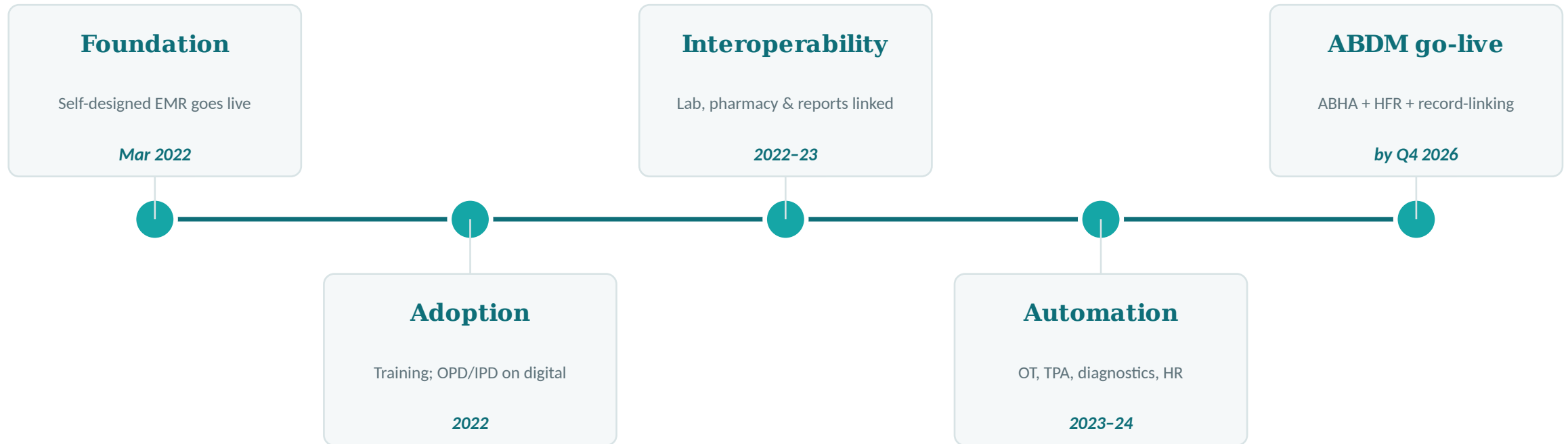
Clinician-led design, bedside training, Directors leading by daily use.



Measuring clinical outcomes & efficiency post-implementation

Retrieval, repeat-test, discharge and lab-TAT metrics + a quality dashboard.

The implementation journey



Records digital since March 2022 · ABDM go-live targeted within 3-6 months (earlier dates approximate).

Outcomes & impact

Measured since March 2022 · FY 2025–26 (≈5,500 OPD, ≈1,000 admissions)

 **30–45 sec**

Record retrieval at point of care

1–2 min incl. computer start-up; retrieval itself 30–45 sec.

 **Zero**

Avoidable repeat tests (past year)

No duplicate investigations except clinically justified re-tests.

 **Caught**

Medication error caught at prescribing

e-Prescribing flagged a Hydralazine / Hydroxyzine LASA mix-up.

 **Same day**

Discharge summary issued

Most often within the same hour of discharge.

 **≤ 1 hr**

In-house lab turnaround

Down from 2+ hours before digitisation.

 **By design**

NABH documentation & audit

Indicators auto-generated from the live system, not reconstructed.

Safety & continuity — real-world impact



A medication error, caught

A patient with uncontrolled hypertension was nearly given Hydroxyzine instead of Hydralazine — a look-alike/sound-alike mix-up. e-Prescribing flagged it, preventing delayed blood-pressure control. (Identifiers anonymised.)



Care that survives staff changes

When a consultant leaves, the incoming doctor sees the full, up-to-date treatment status in the digital record — so the patient's care continues without a gap.



Records that hold up over time

A relative needed the death certificate of a patient who had died years earlier. Because records are digitised, retrieval was instant — removing a serious medico-legal risk.



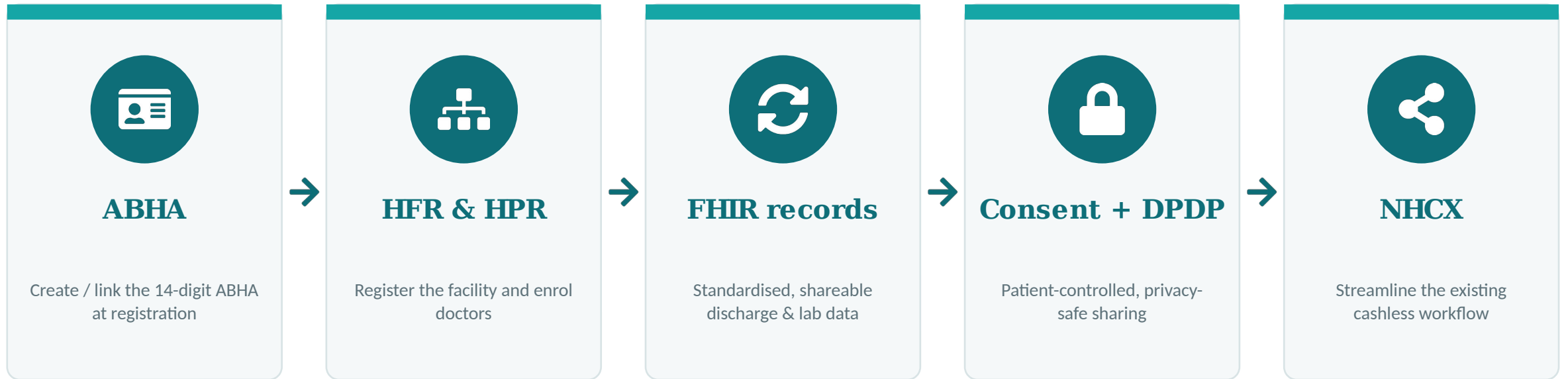
≈500 patients educated through our digital platform.



2,000+ doctors taught by Dr. Rakhi & Dr. Rajeev — conferences, webinars, workshops.

The roadmap: engineering for ABDM readiness

A credible, dated plan — go-live targeted within 3–6 months (by Q4 2026)



Honest framing: the EMR, interoperability, automations and governance are live today; the ABDM layer is in progress, targeted to go live within 3–6 months.

A replicable blueprint — and what's next

1



Digitise records first

Capture continuity & safety wins immediately.

2



Connect the modules

Records, lab, pharmacy, radiology in one record.

3



Build lean & in-house

Affordable tools like Google Workspace; automate.

4



Layer ABDM in stages

ABHA → HFR/HPR → FHIR → NHCX.

What's next: extend FHIR + ABHA-at-registration • complete ABDM milestones • pursue NABH Digital Health Standards certification • connect cashless via NHCX.

Affordable • clinician-led • safety-first — already spreading: the nationwide learning APEX is built to scale, toward Viksit Bharat 2047.



“Small hospital, big leap.”

A clinician-built digital hospital — EMR, automation and governance — delivered safely, in stages, and offered as a replicable roadmap for India's small and mid-size hospitals.

Shree Kkasturi Medicare Pvt. Ltd. (Kasturi Hospital) • NABH Entry-Level Accredited

Dr. Rakhi Agarwal — Medical Director • Chairman, IT Cell, IMA Maharashtra State

Dr. Rajeev Agarwal • Suyash Agarwal (Digital Health Lead)

dr.rakhi@kasturihospital.com • www.kasturihospital.com