

INTRODUCTORY SESSION

Generative AI & Intelligent Automation in Healthcare Operations

*Transforming care delivery through AI, automation,
5G connectivity & smart hospital infrastructure*

Querkey

Inferrix

Athonet 5G

The Convergence Moment for Healthcare AI

\$45B

AI healthcare market by 2026

40%

Reduction in admin burden

30%

Diagnostic accuracy gain

60%

Hospitals piloting GenAI by 2025

Clinical AI is maturing

- LLMs drafting SOAP notes & discharge summaries
- Multimodal AI reads imaging + text + labs together
- GenAI reduces clinical documentation by up to 50%

Infrastructure is ready

- Private 5G enables real-time hospital-wide connectivity
- IoT sensors + edge AI replace legacy wired BMS systems
- Wireless mesh: 50–70% less cabling, 40% faster deploy

Business case is proven

- 30% energy savings via smart building automation
- Revenue cycle AI recovers 8–12% of lost claims
- Asset tracking cuts equipment search time by 60%

Four Layers of the Intelligent Hospital

LAYER 1

INFERRIX

Smart Infrastructure

IoT sensors · Wireless BMS · 5G Private Network · Edge compute

LAYER 2

ATHONET 5G

Data & Connectivity

Real-time asset tracking · Patient flow · Energy telemetry · EHR integration

LAYER 3

INFERRIX · QUERKEY

AI & Automation

GenAI workflows · LLM clinical NLP · Predictive analytics · Anomaly detection

LAYER 4

QUERKEY

Outcomes & Revenue

Net Zero reporting · Revenue cycle automation · Staff productivity · Patient experience

Revenue Cycle Management with Generative AI

*AI that finds revenue
you didn't know you were losing*

8–12% of claims recovered

70% faster denial resolution

100% coding audit coverage

HOW QUERKEY WORKS

Intelligent Prior Authorization

GenAI drafts, submits and tracks prior auth requests, reducing manual effort by 80%

Denial Prediction & Prevention

Analyses claim patterns to flag likely denials before submission, fixing issues proactively

Automated Coding & Documentation

LLMs extract diagnoses from clinical notes and auto-assign ICD/CPT codes with audit trail

Real-Time Revenue Dashboard

Unified view of AR aging, denial rates, and recovery opportunities across payers

The Invisible Uncaptured Value Hospitals Don't See

Hospitals don't just lose revenue in billing — they lose ₹5–8 Cr annually in operations they can't see

₹5–8 Cr / Year

- Asset Loss & Write-offs: ~10% → <2% achievable
- Staff Time Waste: 30+ min/day searching equipment
- Idle Equipment = Lost Revenue: 20% downtime typical

Where the Money Actually Goes

- ₹2–3 Cr → Lost Revenue (idle devices)
 - ₹1.5–2 Cr → Staff productivity loss
 - ₹1–2 Cr → Asset loss / write-offs
 - ₹0.2–0.3 Cr → Workforce inefficiency
 - ₹1.5–2.5 Cr → Energy waste
- Majority of losses are operational, not clinical or financial-system driven

This Is Not Cost Cutting. It's Value Recovery.

BEFORE

No real-time visibility
Manual tracking
Siloed systems
Reactive operations

AFTER

Asset loss: 10% → <2%
Downtime: 20% → ~5%
Search time: ↓ 70–90%
Energy waste: ↓ 10–15%

₹3–10 Cr one-time recovery

What isn't tracked isn't optimized — it quietly turns into loss. The real opportunity is unlocking what you already have.

Asset & Resource Tracking

- Real-time location of wheelchairs, beds, infusion pumps
- Staff & patient tracking — no Wi-Fi required
- OT utilization & room occupancy analytics
- Mobile app alerts for misplaced equipment
- Reduce search time by 60%+

Process Automation

- Wireless nurse calling with staff allocation metrics
- Automated compliance & ESG reporting
- Smart washroom hygiene cycle management
- Blood bank & pharmacy temperature alerts
- Anomaly detection & fault prediction AI

Energy & Net Zero

- Up to 30% reduction in energy consumption
- 25% lower smart building automation costs
- HVAC, VRV, chiller plant wireless control
- Solar plant output & efficiency analytics
- GRIHA / ESG compliance dashboards

Where Generative AI Creates Value in Healthcare

Clinical Operations

- GenAI for clinical notes & coding
- AI-assisted diagnosis support
- Automated prior auth & billing

Revenue Cycle

- Denial prevention with ML
- Claims scrubbing & resubmission
- Real-time payer analytics

Asset & Facility Mgmt

- RTLS for equipment & staff
- Predictive maintenance AI
- Smart energy & Net Zero

Patient Experience

- AI chat for appointment & triage
- Personalised care plan generation
- Remote monitoring & alerts

AI-Powered Devices

- Embedded inference at the edge
- Wearable biosensor + LLM synthesis
- FDA SaMD regulatory pathway

5G & Connectivity

- Private 5G replacing WiFi/wired
- Network slicing for clinical traffic
- MEC for real-time edge processing

THE QUESTION IS NOT IF, BUT HOW FAST.

Healthcare organisations that move now on GenAI and intelligent automation will define the next decade of care.

- 1 Querkey automates revenue cycle — recovering claims & cutting admin
- 2 Inferrix unifies IoT, BMS & AI into one smart hospital stack
- 3 5G + GenAI + Edge = the foundation of the intelligent hospital



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