E-Patient Connect

A Nationwide Platform for Secure Emergency Access to Patient Health Records

"One Patient, One Record, One Nation"

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Contents:-

BACKGROUND & VISION

The reality:

In emergencies, patients often arrive **unconscious, unidentified, or far from home**.
Doctors must act fast, often **without access to medical history, allergies, or ongoing conditions**.

The problem:

Despite progress in digital health, **patient medical data remains fragmented** across hospitals and states.
This lack of timely access **directly affects patient safety during emergencies**.

The vision:

A **secure national platform** where authorized doctors can:

- **Identify patients using biometrics (fingerprint / iris)**
- **Instantly access medical history**
- **Deliver faster, safer emergency care**

Aligned with national priorities: Ayushman Bharat Digital Mission (**ABDM**) | Digital India Vision

THE CORE PROBLEM

Current Challenges in Emergency Healthcare:

- Patients often arrive at hospitals **unconscious or without identification.**
- Doctors lack timely access to **critical medical information** such as allergies or ongoing medications.
- Hospitals and emergency services operate in **isolated information systems.**
- Families face difficulty **locating patients during emergency admissions.**

Why This Is a Concern?

These gaps result in **delayed treatment**, repeated diagnostics, and increased clinical risk, especially during emergencies where time is critical.

REAL-WORLD EVENTS HIGHLIGHTING THE NEED

- **Floods (Punjab & Jammu & Kashmir):**
  Patients lost IDs and medical records; relief camps and hospitals could not coordinate care.
  E-Patient Connect: Biometric identification enables retrieval of medical history and continuity of treatment across locations.

- **COVID-19 Pandemic (2020–21):**
  Hospitals lacked unified visibility of beds and patient records, causing delays in care and transfers.
  E-Patient Connect: Centralized digital records and real-time hospital data support faster admissions and better coordination.

- **Urban Blast / Mass-Casualty Event:**
  Unconscious and unidentified victims overwhelmed nearby hospitals, with no access to medical history or family details.
  E-Patient Connect: Instant biometric identification, access to medical records, improved hospital coordination, and faster family notification.

Key Message: India needs a **biometric-based, nationally connected emergency health system** to ensure safe, timely, and coordinated care during crises.

PROPOSED SOLUTION: E-PATIENT CONNECT

E-Patient Connect is a secure, government-aligned digital healthcare platform designed to strengthen emergency medical care by enabling biometric-based patient identification and controlled access to complete medical records.

The platform is built for situations where patients are **unconscious, unresponsive, or unable to communicate**, ensuring doctors can make **safe and timely decisions**.

Key Capabilities:

- **Health-specific biometric patient identification**
  (fingerprint and/or iris) for reliable identification during emergencies
- **Access to complete medical history** for authorized healthcare professionals
- **Emergency access** with role-based and time-bound controls
- **Second / secondary medical opinion** support across participating hospitals
- **Secure, real-time information access** within approved healthcare facilities

HOW IT WORKS ?

Emergency Care Workflow:

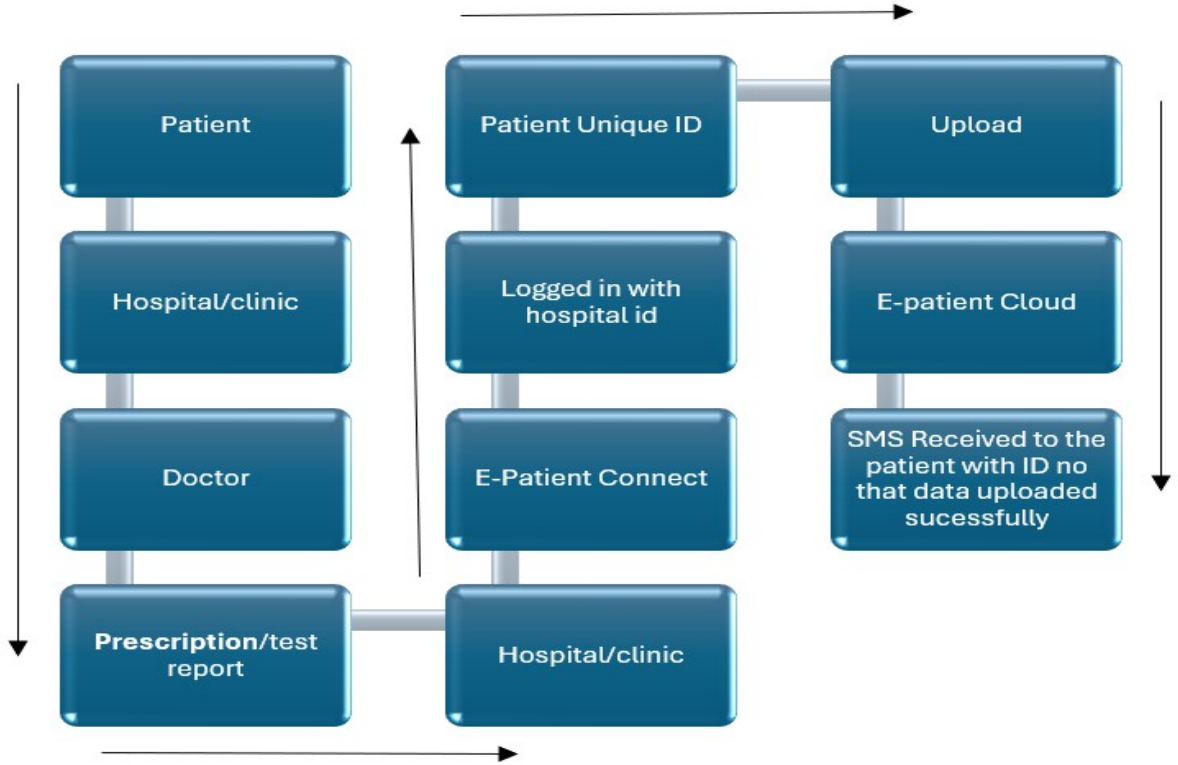
1. Patient arrives at the emergency department
2. Patient is identified using **health-specific biometrics**
   (fingerprint or iris, especially if unconscious or unable to communicate)
3. Authorized doctor securely accesses the patient's **complete medical history**
4. **Emergency treatment begins immediately**
5. **Second medical opinion** is enabled when required

Key Safeguards:

- Biometric identification is used **strictly for healthcare purposes**.
- Access is limited to **essential, life-saving medical information only**.
- Emergency access is **time-bound and role-based**.
- All access is **secure, logged, and fully auditable**.

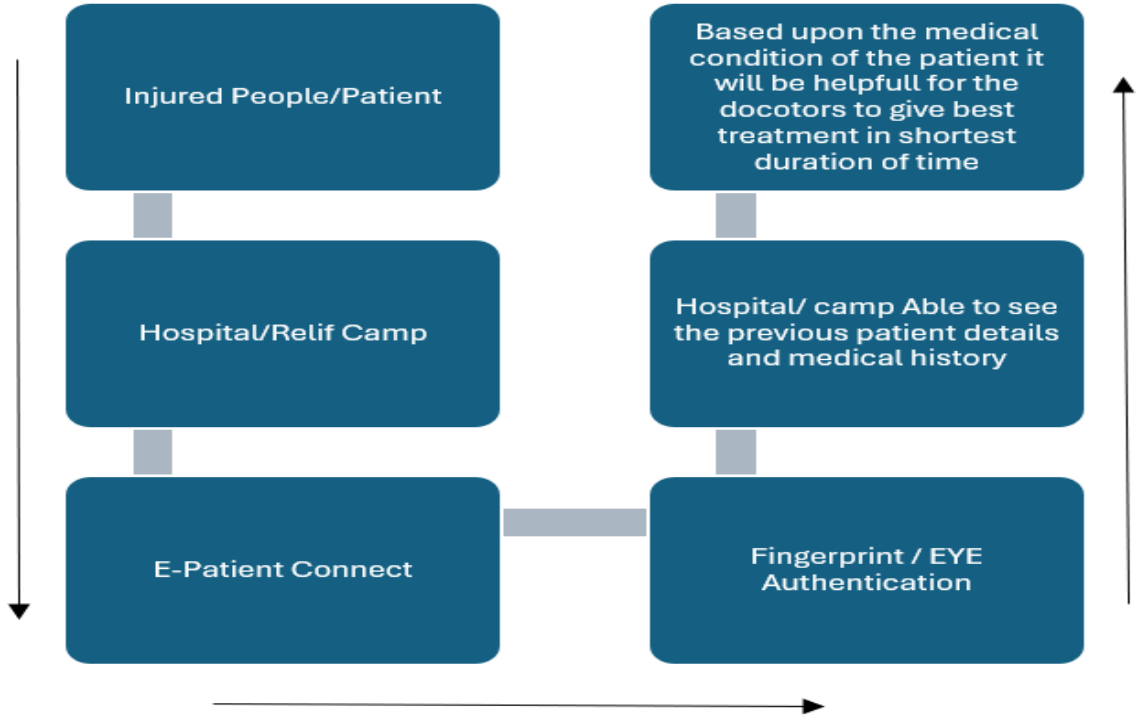
HOW IT WORKS ?

Daily Healthcare Activities in Hospitals and Clinics for Updating E-Patient Connect Data:



HOW IT WORKS ?

During emergency response situations:



PHASED IMPLEMENTATION APPROACH

E-Patient Connect will be rolled out in clearly defined phases to ensure control, safety, and governance.Implementation Phases:

- **Phase 1 - Pilot (Primary Focus)**
  Biometric-based patient identification with access to complete medical history, emergency data access, and second medical opinions in selected government hospitals.
- **Phase 2 - Expansion**
  Introduction of hospital bed mapping and health data analysis for government planning, with system expansion to the district level.
- **Phase 3 - National Scale**
  Nationwide availability with family tracking, insurance integration, and public access across public and private hospitals.

Each phase will proceed only after review and approval of the previous phase.

PHASE 1: PILOT

Phase 1 is a **controlled pilot** to test biometric-based patient identification and secure access to **complete medical records** during emergencies.

Scope:

- **Health-specific biometric patient identification***(fingerprint / iris, especially for unconscious or non-responsive patients).*
- Creation and updating of the patient's **complete medical history.**
- **Emergency access** to medical records for authorized doctors.
- **Secondary / second opinion** support between doctors.
- **Limited access for government authorities** for monitoring and evaluation.

Boundaries:

- Implemented in **5 - 10 government hospitals.**
- Focus on **emergency and trauma departments only.**

PHASE 2: Expansion

Scope:

- **Hospital bed availability mapping** *(including availability by hospital specialty where applicable)*
- **Access for government authorities** to analyze health data, such as:
  - Disease trends
  - Emergency patterns
  - Regional healthcare needs
- Expansion of the system to the **district level**

Boundaries:

- Data is used **only for analysis and planning.**
- Patient privacy is maintained through role-based, controlled, and approved access

PHASE 3: National Rollout

What we will enable:

- **Family tracking and notifications** during emergencies
- **Access for medical insurance companies** to support verification and claims
- **Nationwide availability** across public and private hospitals
- **Public access** through a national digital health platform

Important Notes:

- Phase 2 and Phase 3 will be taken up **only after successful completion of Phase 1**
- Each phase will require **separate approvals and policy review**

PRIVACY, SECURITY & COMPLIANCE

Privacy & Data Protection:

- Designed in alignment with the **Digital Personal Data Protection (DPDP) Act, 2023.**
- Access to patient data is **consent-based**, with emergency-only exceptions as permitted by law.
- Only **essential medical information** is accessible during emergencies.
- Biometric data is collected and used exclusively for healthcare identification purposes, with strict purpose limitation and no cross-domain usage.

Security Controls:

- Role-based access for authorized healthcare professionals.
- Time-bound emergency access with defined permissions.
- End-to-end encryption for data access and transmission.
- Biometric templates are securely stored (no raw biometric images).
- **Complete audit trails** for all data and biometric access events.

GOVERNANCE & APPROVAL FRAMEWORK

Government Oversight:

- Phase 1 implementation will commence **only after formal government approval.**
- The project will operate under the supervision of designated government authorities.

Steering Committee:

A cross-agency steering committee will be constituted with representation from:

- Ministry of Health & Family Welfare (MoHFW)
- National Health Authority (NHA)
- NITI Aayog, ISRO

Governance Structure:

- Clearly defined roles, responsibilities, and decision authority.
- Periodic progress reviews and reporting.
- Independent security, privacy, and biometric compliance review.

EXPECTED OUTCOMES (PHASE 1):

Clinical & Operational Outcomes:

- **Faster and reliable patient identification** during emergency admissions using biometrics.
- **Immediate access to complete medical history** for authorized doctors.
- **Safer and faster clinical decisions** during emergencies.
- **Reduced treatment delays** caused by missing or incomplete patient data.
- **Improved clinical collaboration** through second medical opinions.

System & Governance Outcomes:

- Validation of a **secure, biometric-enabled, consent-based access model**.
- Demonstrated compliance with privacy and security standards.
- Operational insights to inform Phase 2 planning.
- Evidence-based decision-making for future scale-up.

EXPERT FEEDBACK & VALIDATION

Summary of Feedback:

- Recognized as an **innovative, patient-centric, and nationally relevant** initiative.
- Considered **timely and much-needed** for India's healthcare system.
- Directly addresses **fragmentation of healthcare data.**
- Highly relevant for **emergencies, disasters, and mobile populations.**
- Strong potential to improve **emergency response and disaster preparedness.**

Experts Consulted:

- **Dr. Kumar YESSVSDPK**
  Deputy Director (Launch Support Systems), **ISRO**

- **Dr Sarvana Kumar**
  AHPI & Group unit head Mehta hospital

- **Dr. Alexander Thomas**
  Founder & Patron - **AHPI, ANBAI & CAHO** | Member - **IRDAI**

FUNDING & APPROVAL REQUEST

Request:

Approval and funding are sought for the **Phase 1 pilot implementation** of E-Patient Connect.

Phase 1 funding will support:

- Deployment in select government hospitals.
- Biometric-based patient identification for emergency care.
- Secure access to critical medical information.
- Pilot monitoring, evaluation, and reporting.

Governance & Scope:

- Phase 1 will be implemented under **government oversight.**
- Outcomes will be evaluated against **defined success metrics.**
- Decisions on subsequent phases will be taken **after Phase 1 evaluation.**

Phase 1 funding enables the Government to validate clinical impact, security, and feasibility before any scale-up.

CONCLUSION & WAY FORWARD

Conclusion:

E-Patient Connect presents a **controlled, government-led approach** to strengthening emergency healthcare by enabling **biometric-based patient identification** and **secure access to complete medical records** when patients are unable to communicate.

The proposed **Phase 1 pilot** allows the Government to **validate clinical impact, privacy safeguards, and operational feasibility** in real emergency settings, before considering wider adoption.

Way Forward:

- Approve the **Phase 1 pilot implementation.**
- Establish a **government-led steering committee.**
- Monitor and evaluate outcomes to guide **future phase decisions.**

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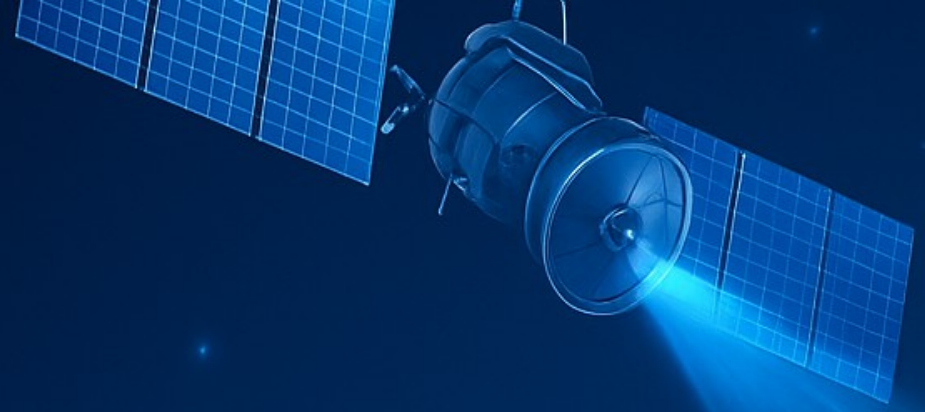
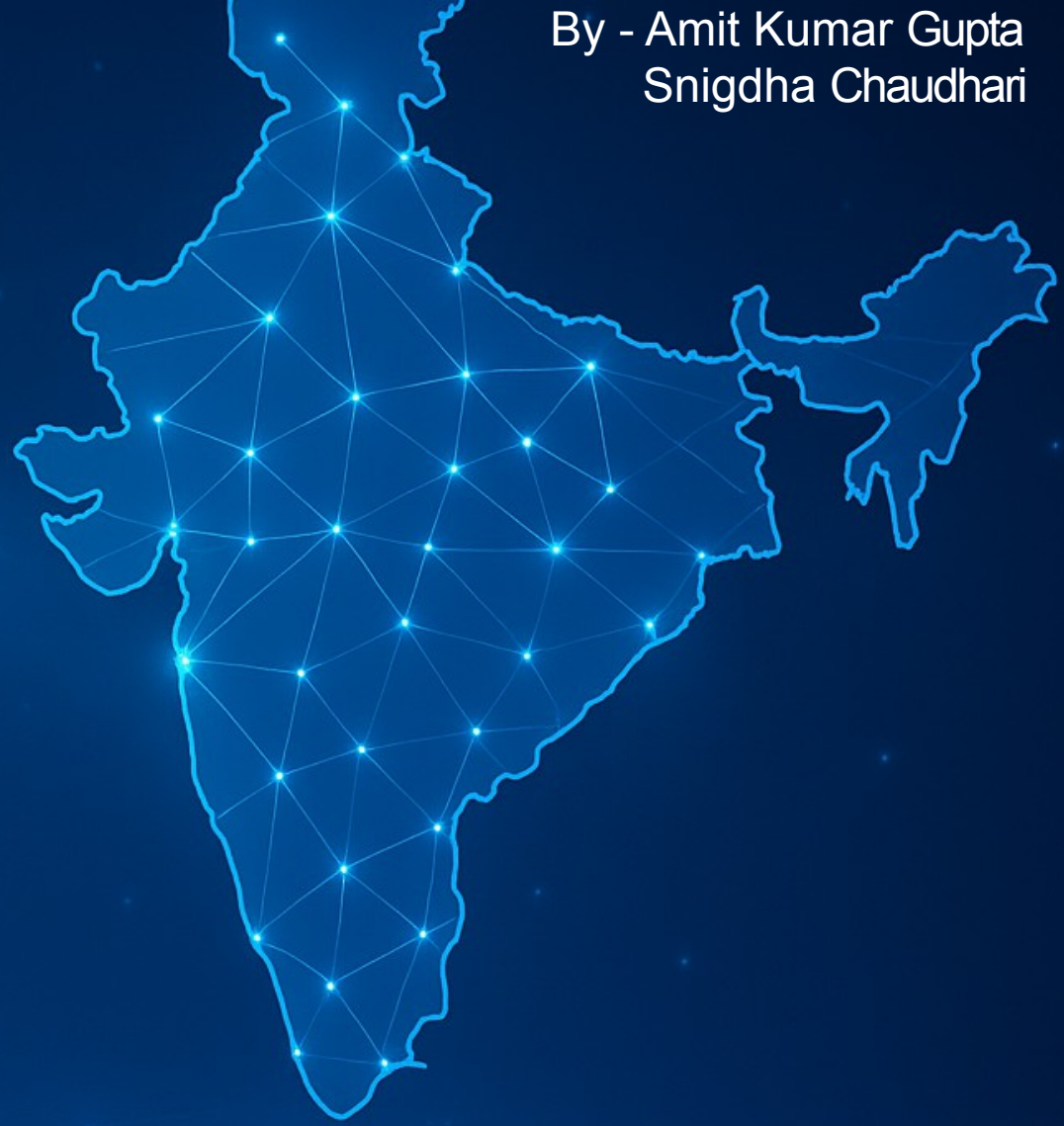


THANK YOU



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