



# Intelligent National Health Management Platform

*Revolutionizing Healthcare Access Through Digital Innovation  
Connecting Care, Saving Lives, Powering the Future of Medicine*

***Team DOT\_ZIP***

Kushal Prasad Joshi | Bibek Ghimire | Shasanka Acharya | Kamal Rokaya

# AGENDA

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The Problem

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The Problem



Our solution

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The Problem



Our solution



Traction and Validation

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Traction and Validation



Solution Architecture

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Platform Workflow

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Social Impact

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The Problem



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Platform Workflow



Sustainable Business Model



Our solution



Solution Architecture



Social Impact

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-  Traction and Validation
-  Platform Workflow
-  Sustainable Business Model
-  Our solution
-  Solution Architecture
-  Social Impact
-  National Rollout Strategy

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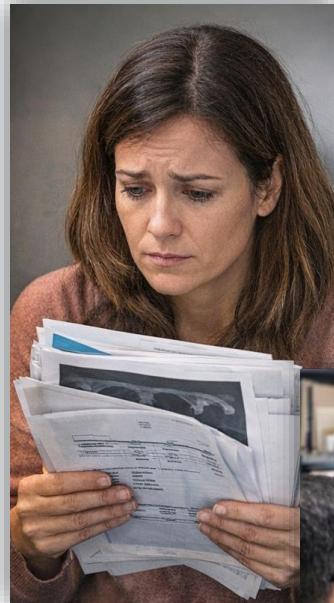
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|  Traction and Validation             |  Solution Architecture          |
|  Platform Workflow                   |  Social Impact                  |
|  Sustainable Business Model          |  National Rollout Strategy      |
|  Infrastructure and Operational Cost |  Intelligence & Analytics Layer |

# THE PROBLEM

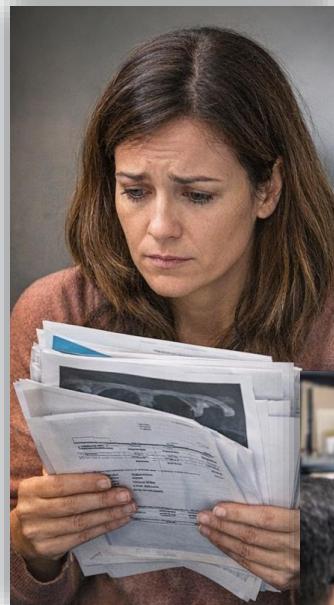


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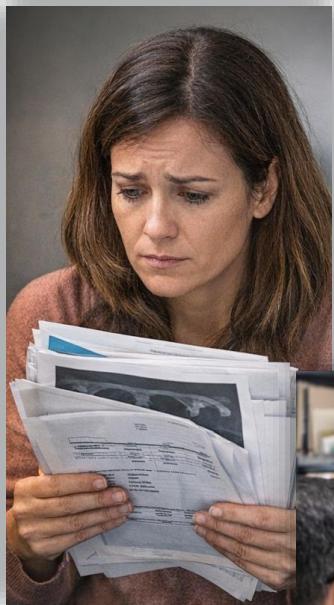
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- Emergency visits – doctors work blind

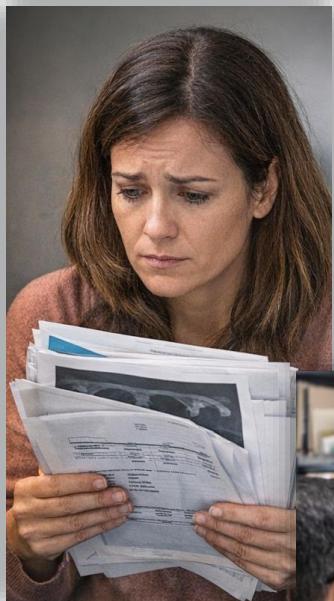


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## System Suffers

- No centralized health intelligence
- Outbreaks detected too late
- Billions lost in redundant diagnostics



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# OUR SOLUTION



# OUR SOLUTION



## Our Platform

- 🌐 One platform. One lifetime record. Everywhere.
- 📶 User device first design & encrypted cloud storage.
- ⚠️ Emergency-ready architecture with instant override protocols

# OUR SOLUTION



- **Unified lifetime health record:** from birth to golden years
- **Global UUID:** every patient, hospital, doctor uniquely identified
- **Consent-first architecture:** patient controls who sees what
- **Break-glass emergency override:** seconds matter, audit trails protect
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# TRACTION & VALIDATION

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## Problem Validation

### Conducted a Google form survey

- ✓ Majority have lost prescriptions or medical report at least once
- ✓ 90% + face difficulty accessing medical history when visiting new hospital
- ✓ Overall satisfaction with current medical record keeping system is low to very low

## Solution Validation

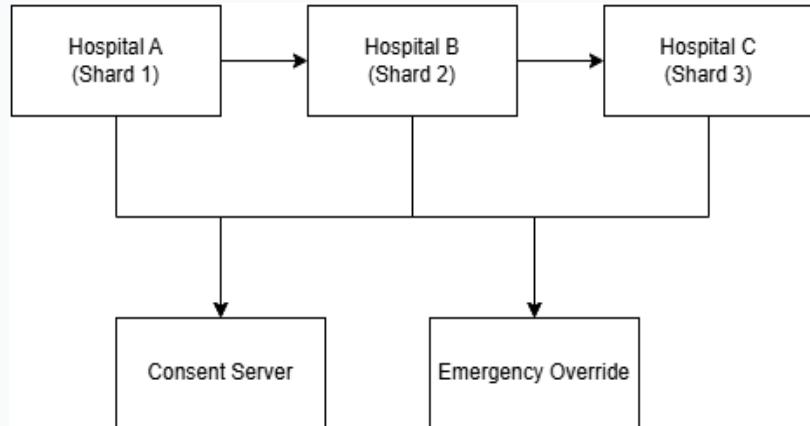
### Survey responses indicate strong demand for:

- ✓ Centralized digital medical records
- ✓ Easy access to medical history across hospitals

### Informal discussions with peers and healthcare worker confirm:

- ✓ Repeated diagnostics are common due to missing records
- ✓ Digital access would save time, money, and effort

# SOLUTION ARCHITECTURE

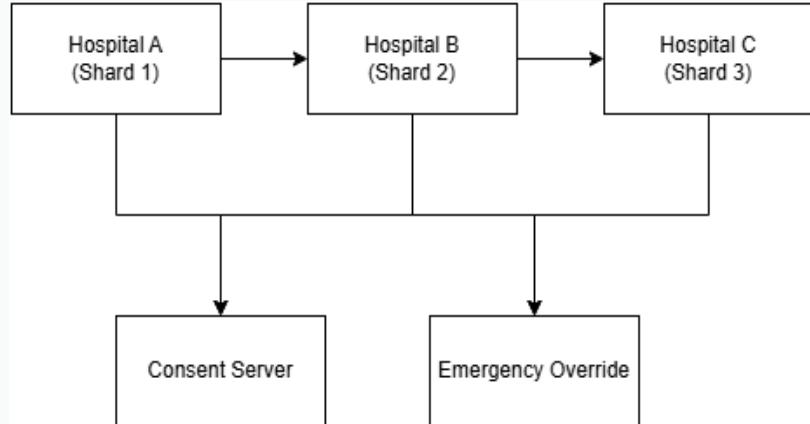


## Security Foundation

- End-to-end encryption
- Role-based access control
- Patient-controlled permissions

# SOLUTION ARCHITECTURE

## Core Components



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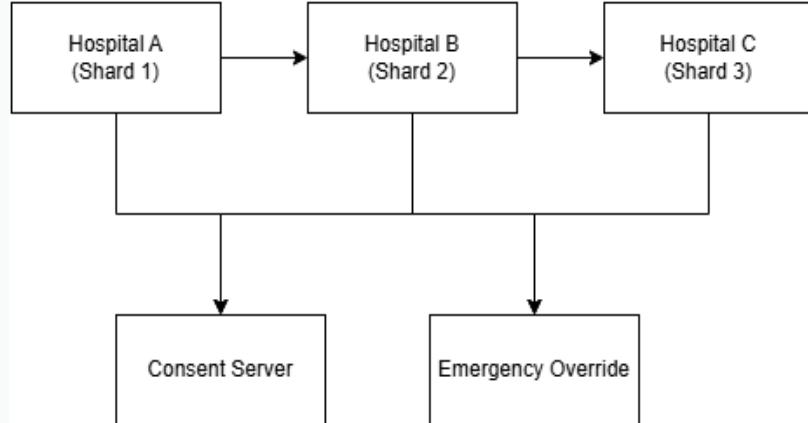
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## Core Components



### Patient are global

- One UUID, One record



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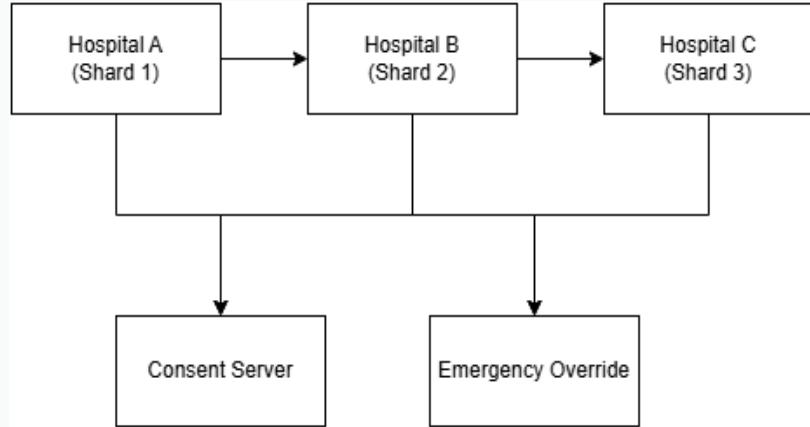
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- Must belong to a verified hospital/organization



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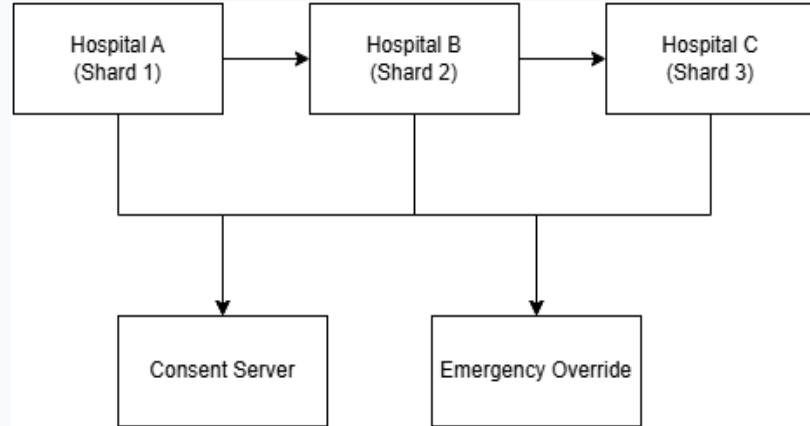
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### System Admin

- Approves every non-patient user (zero trust onboarding)



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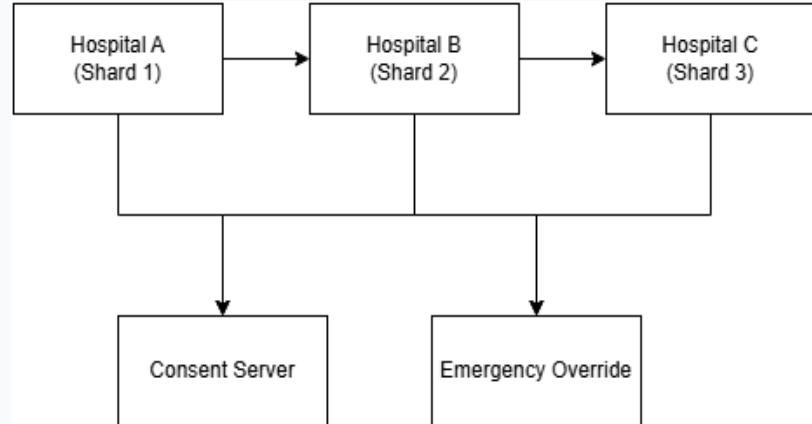
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### All Access Audited

- Who? What? When? Why? Immutable logs.



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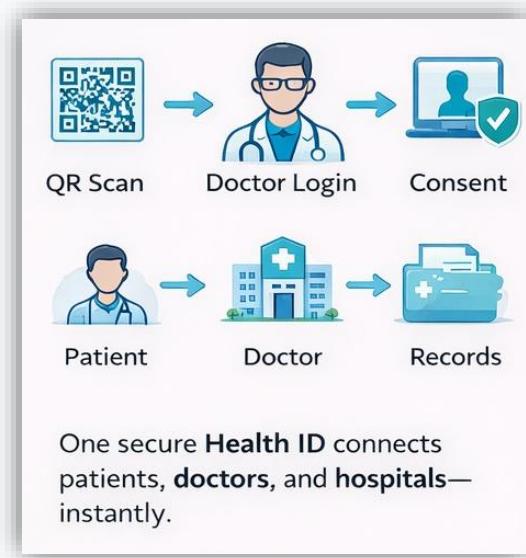


Role-based access control



Patient-controlled permissions

# PLATFORM WORKFLOW

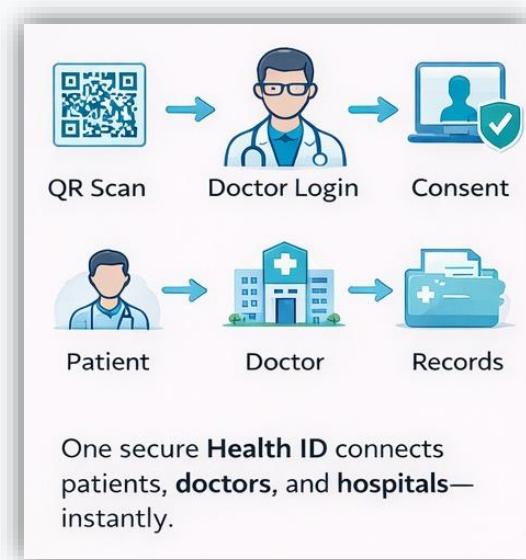


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## Patient Registration Once

Gets QR ready UUID



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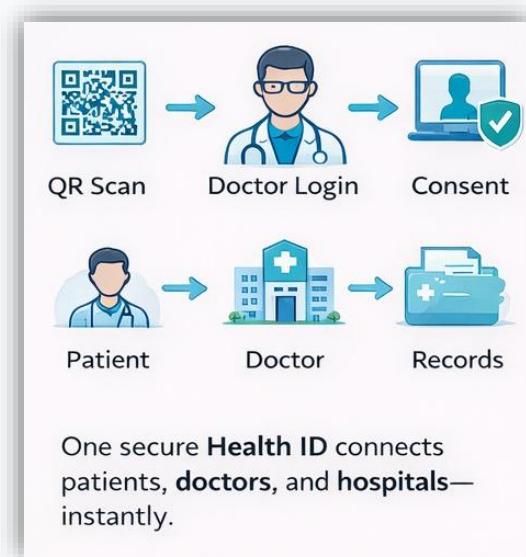
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Doctor logs in

Searches patient by ID/QR



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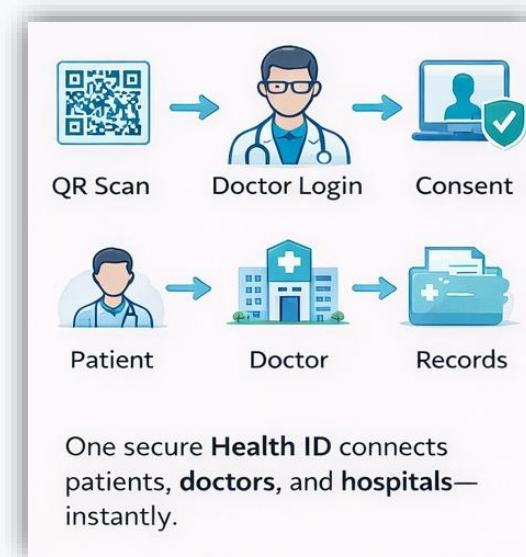
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**Consequent Requested**

OTP sent to patient (mock SMS)



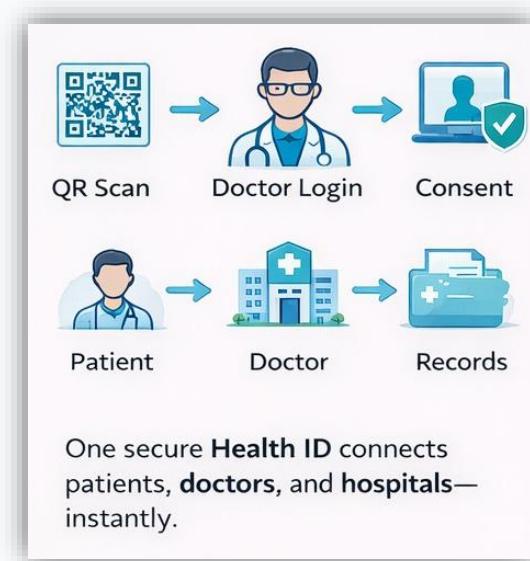
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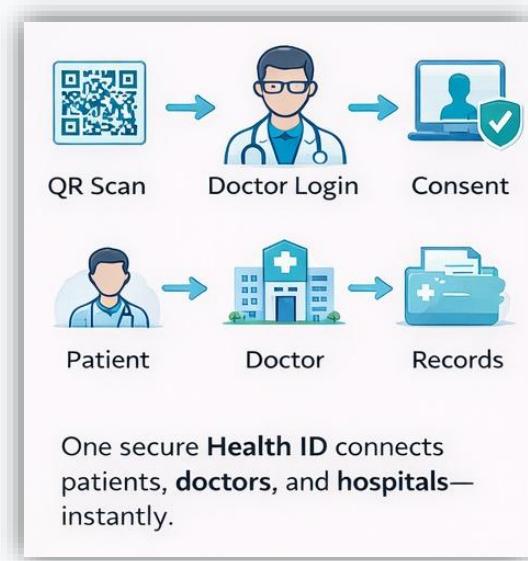
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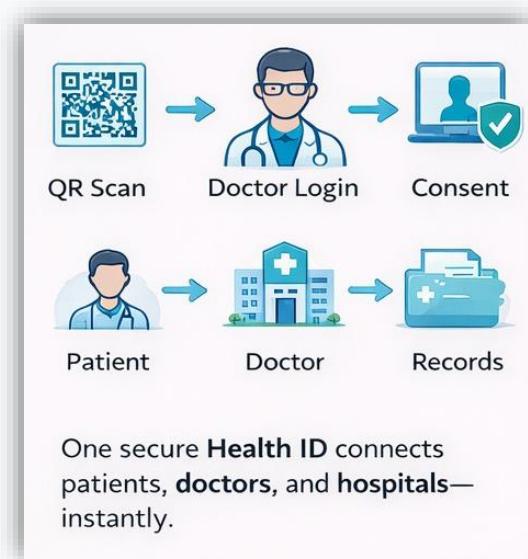
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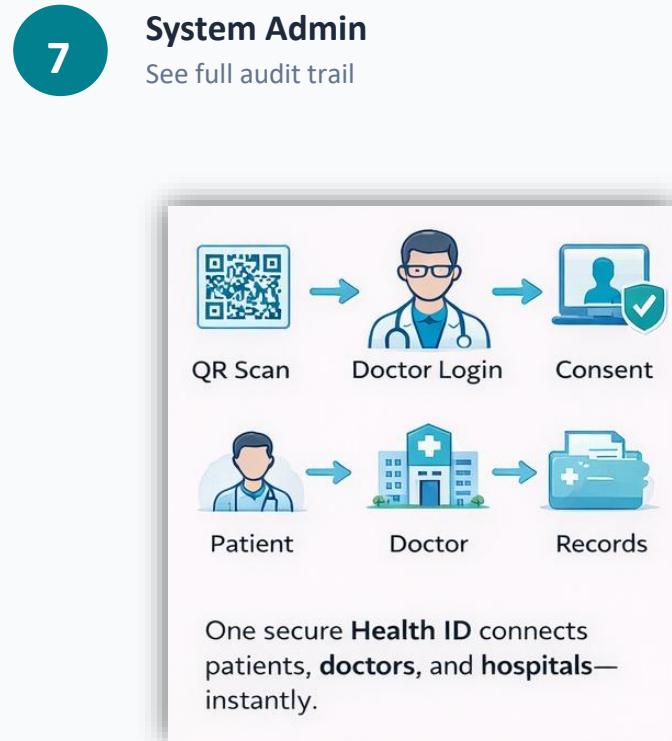
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# SECURITY & CONSENT – BUILT FOR TRUST

## Patient-controlled consent

- OTP-based one-time access
- Time-bound (limited time access)
- Revocable anytime

## Emergency override (break-glass)

- One-click access with mandatory justification
- Permanent audit record, no deletion ever

## Defense in depth

- JWT with role-based access control (RBAC)
- Column-level encryption for PII (national ID, phone)
- Bcrypt password hashing (production ready)
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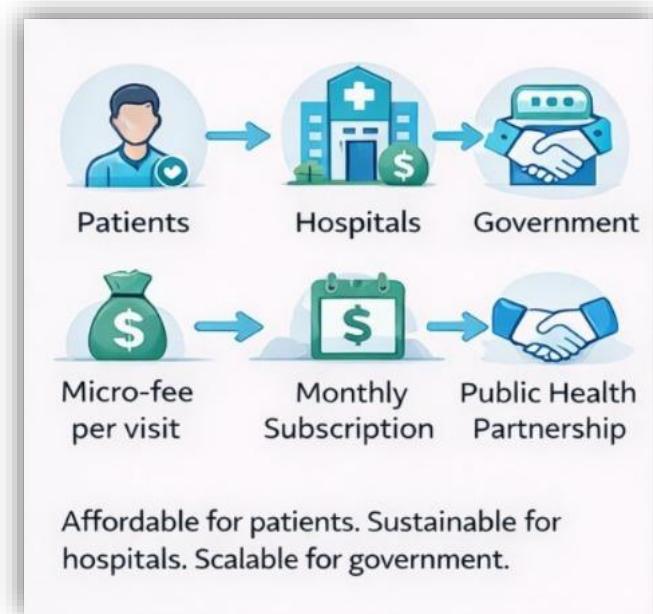
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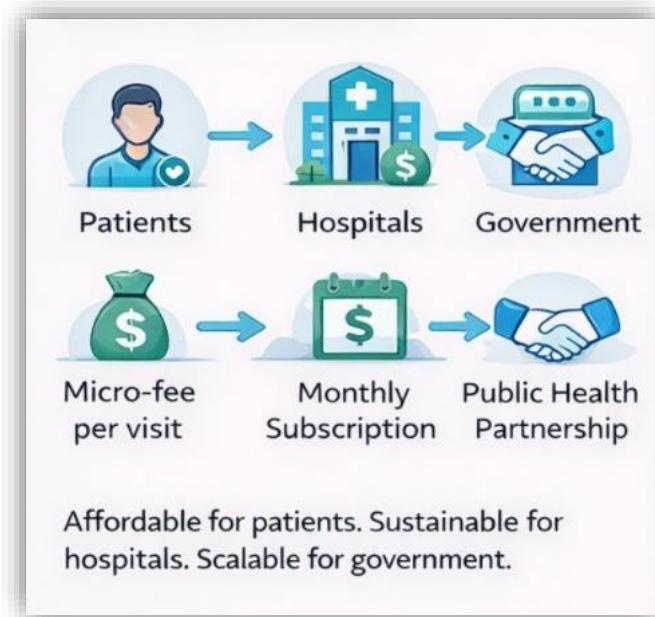
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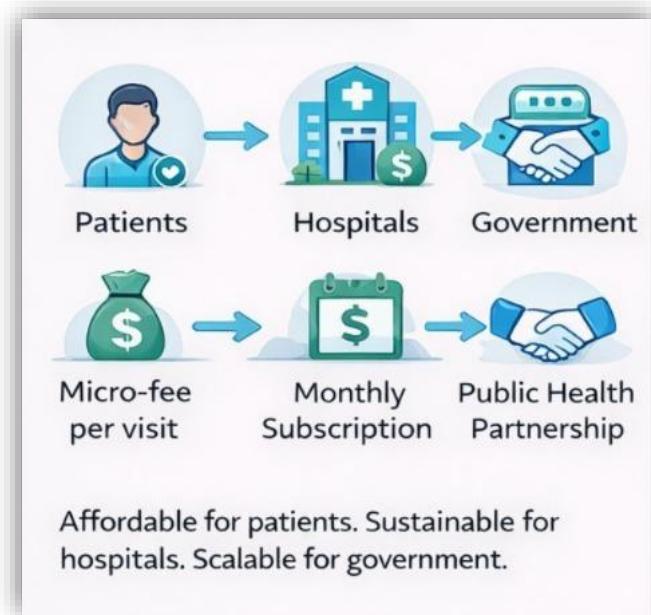
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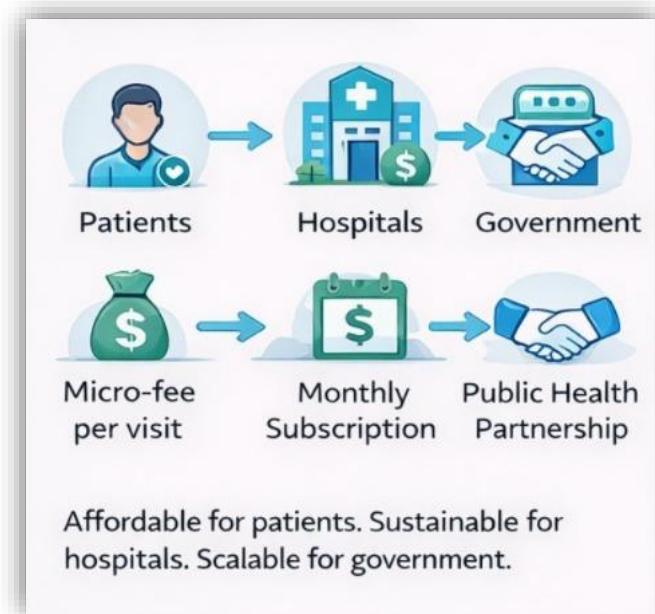
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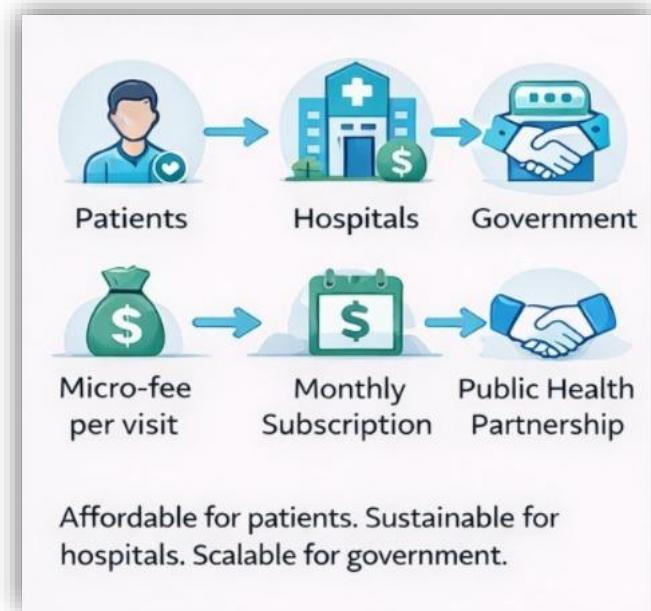
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We designed for scale from day zero.

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**Every patient's lifetime health journey → the richest dataset on earth.**

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Empowers the nation: data-driven health policy.

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<b>1. Pilot</b>	Implementation + training fee	Government / Insurance
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<p><u><b>Government pays: for national intelligence &amp; outbreak control</b></u></p>		

# THANK YOU

*Together, we can transform healthcare for every citizen.*