

meshEHR

Enabling the next generation of Healthcare Information Systems

The Problem

Health records are fragmented, insecure, and inefficient.



Patient has no control

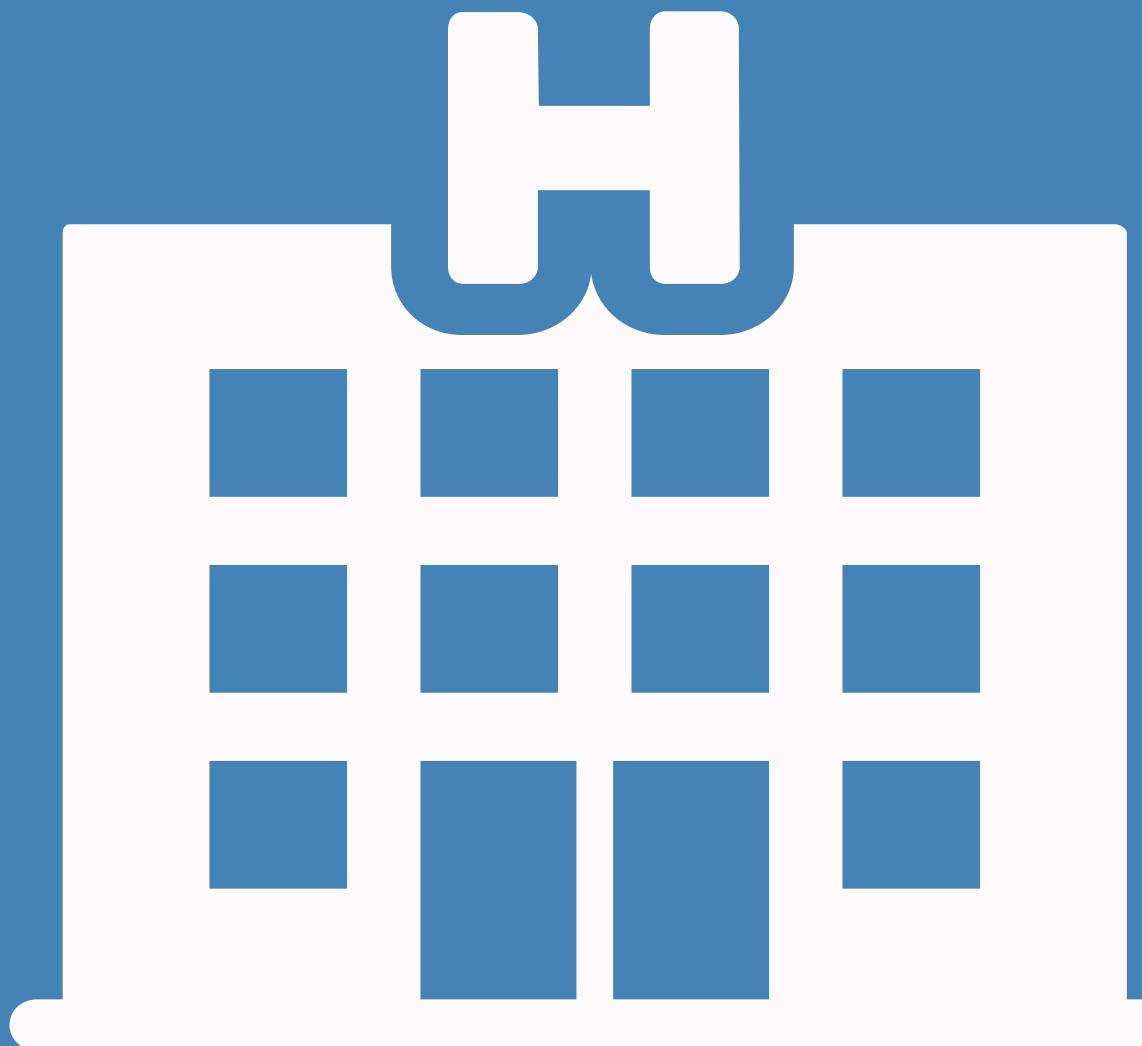
Expensive regulatory compliance

Lack of Interoperability

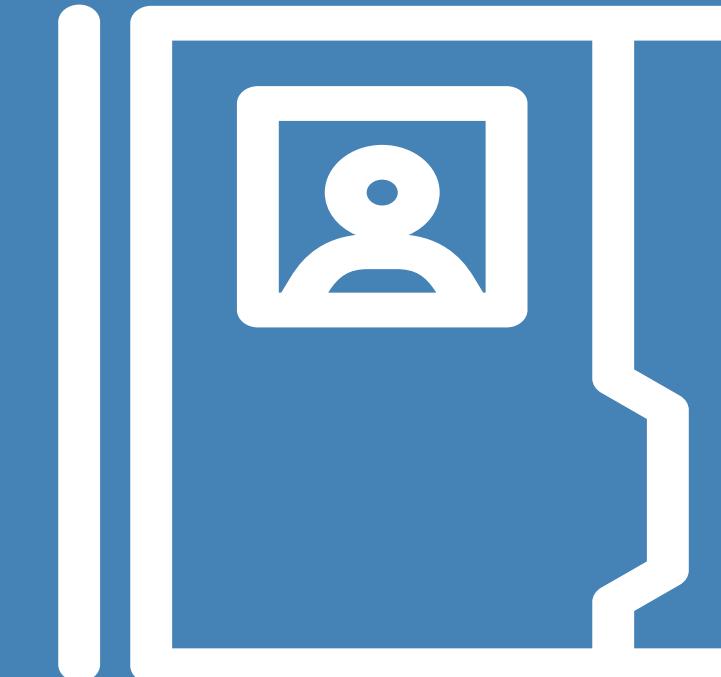
Fragmented and unavailable records

The Mesh Ecosystem

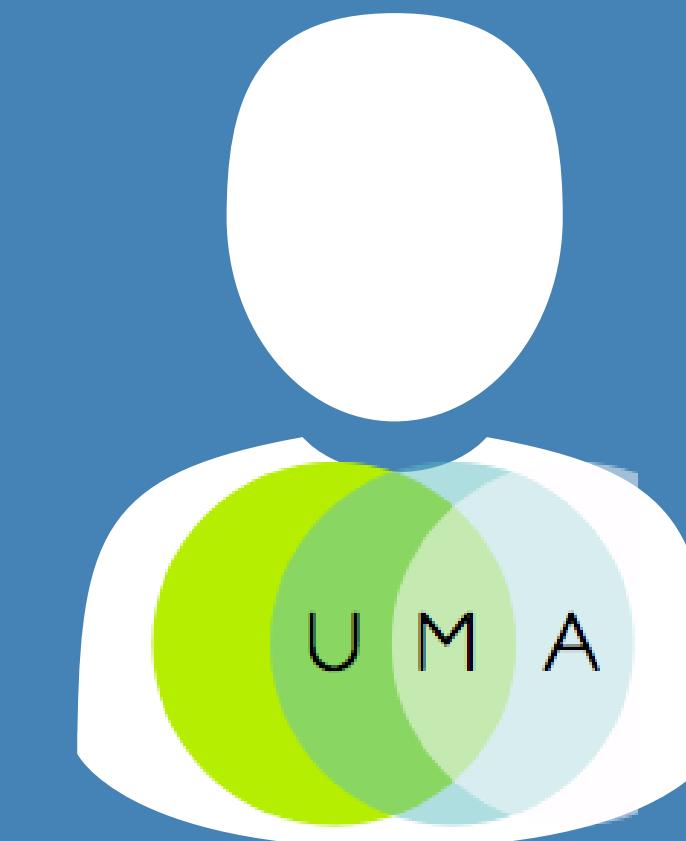
**Large Providers directly interface with Mesh API
and provide authentication via HEART Spec.**



MeshEHR

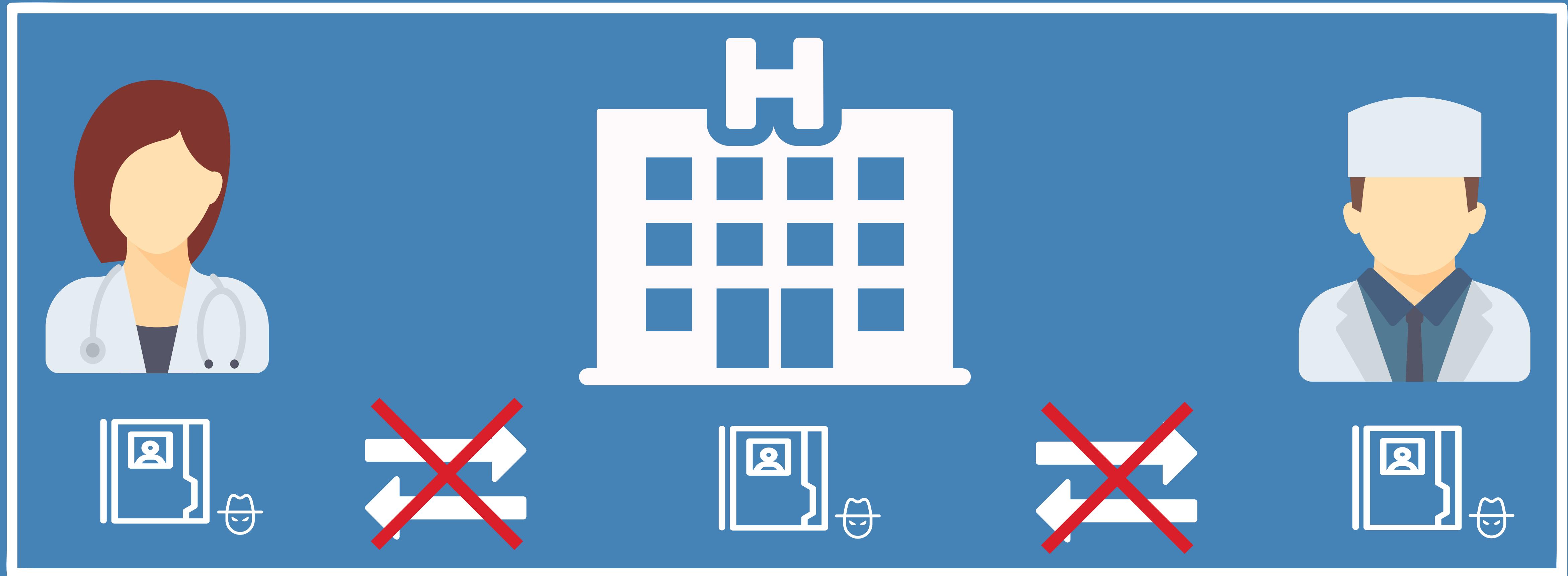


**General Practitioners Interact through workstation and
authenticate via HEART Spec.**



**Patient may access via Mobile, Web-App, or Terminal.
UMA provides secure access token for record data.**

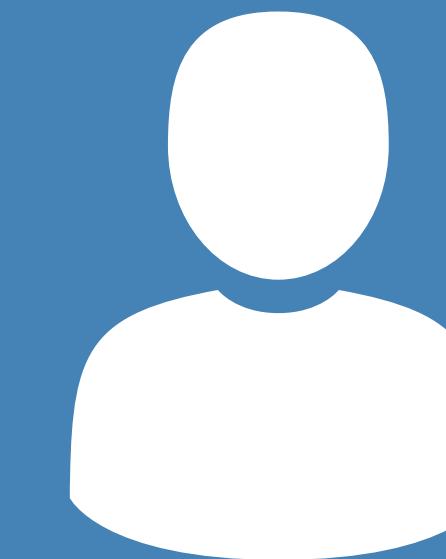
The Health Information Ecosystem is fragmented



In present implementations, The Patient:

Records Security: LOW

Records Availability: LOW

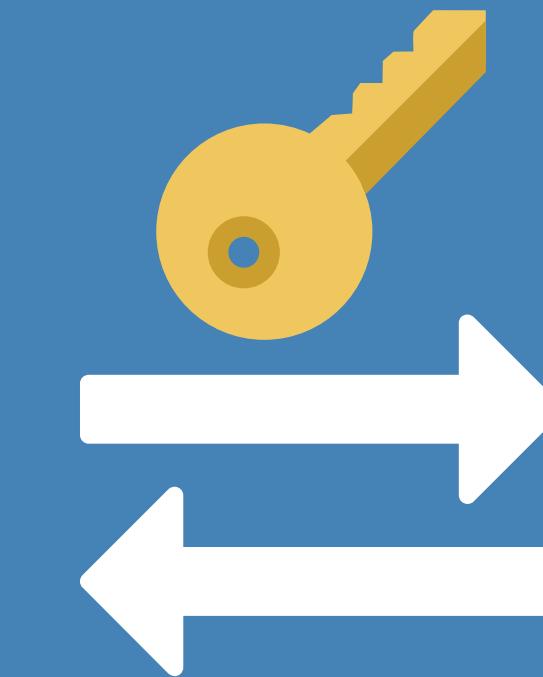
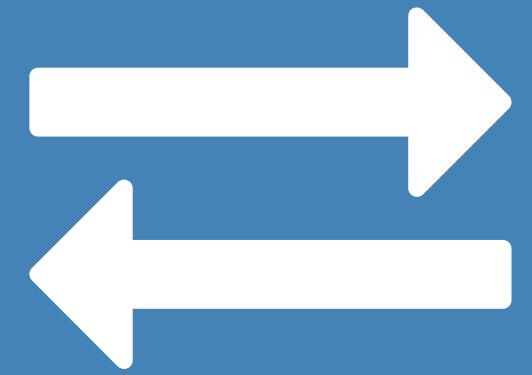


- must rely on third parties to store their data
- has no control of their records
- owns records in multiple, isolated locations

The Solution

A User-Centric Model.

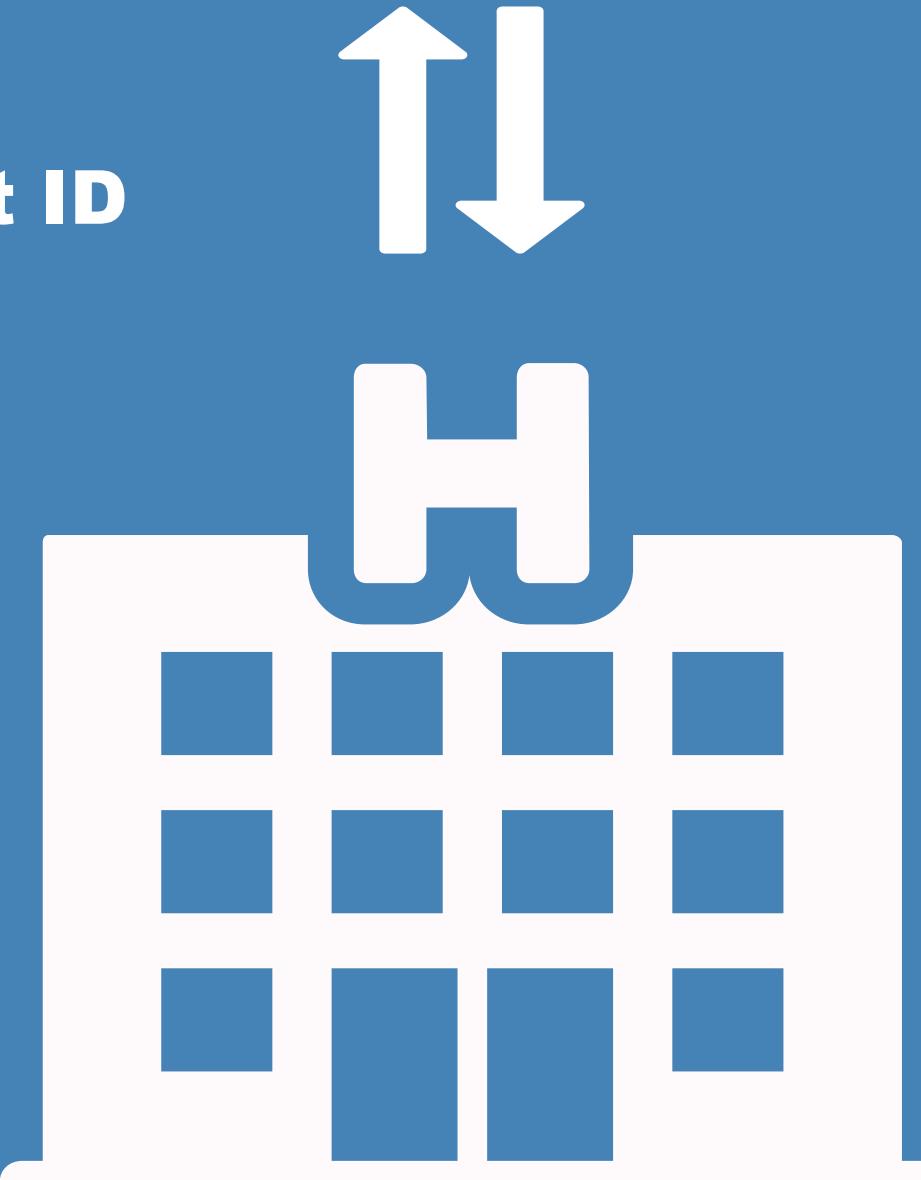
Patients Provision whom may access their records.



Practitioners attribute encrypted data to patient ID via MeshEHR Interface.

Records Security: HIGH

Records Availability: HIGH



Cryptographically secured record sharing

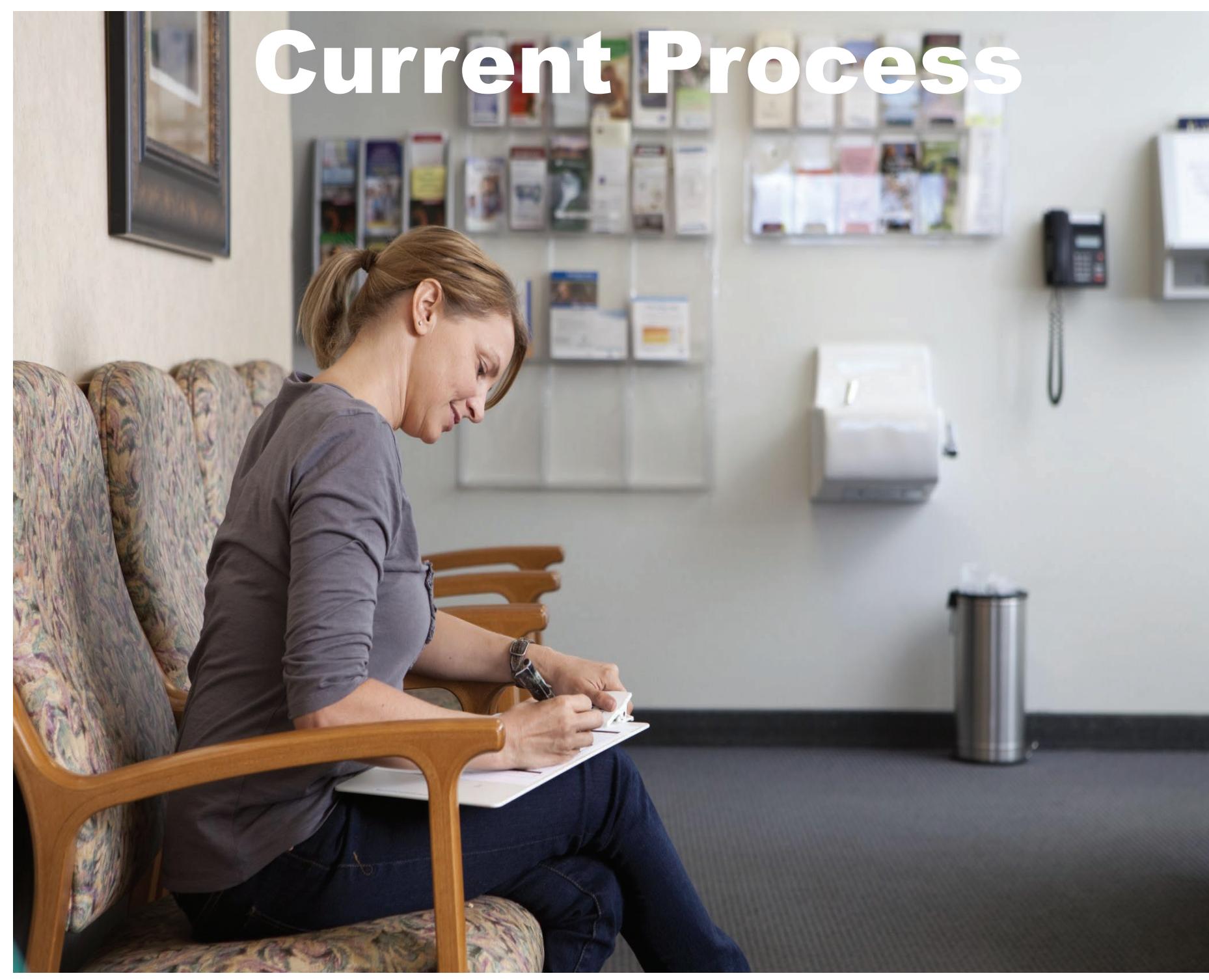
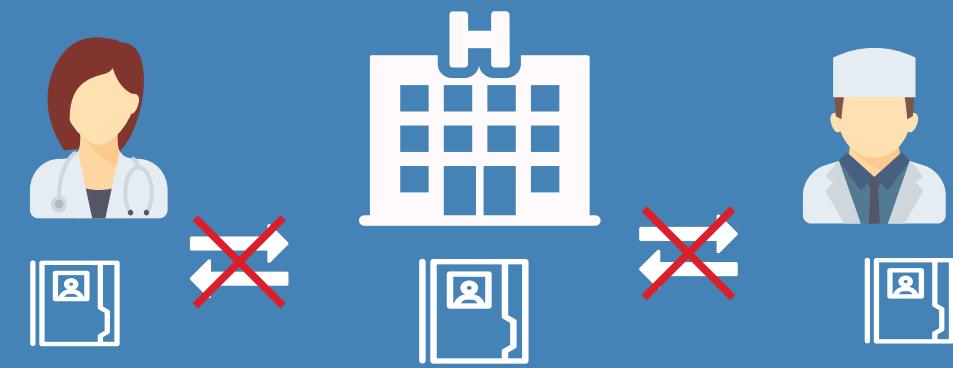
Patients control access to their information

Data is stored on a distributed network to ensure availability and security

Participants share a unified ledger of provisioned records.

User Experience

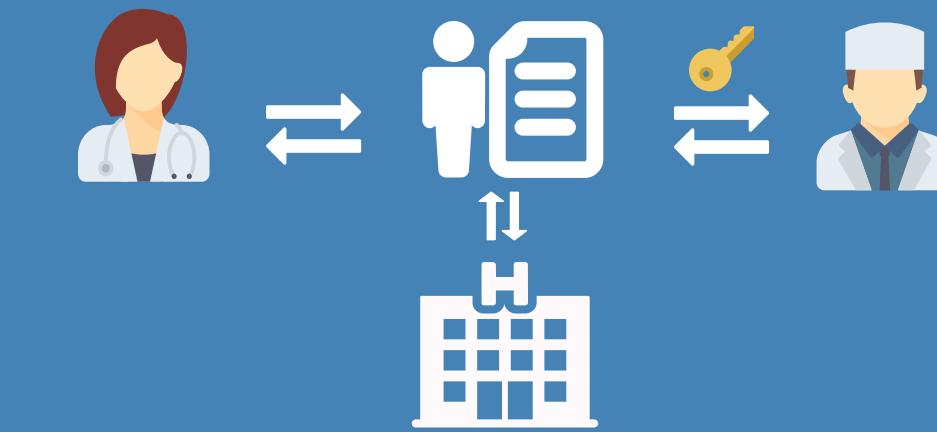
Streamlining and Securing Healthcare Information



Current Process

Easier than ever.

- 1: Patient arrives
- 2: Sign in via HEART UMA
- 3: Shares info with Doctor
- 4: Receives service
- 5: Doctor updates Profile



After Mesh Integration

Time Consuming

Insecure

Produces fragmented, inefficient records

Efficient

Secure

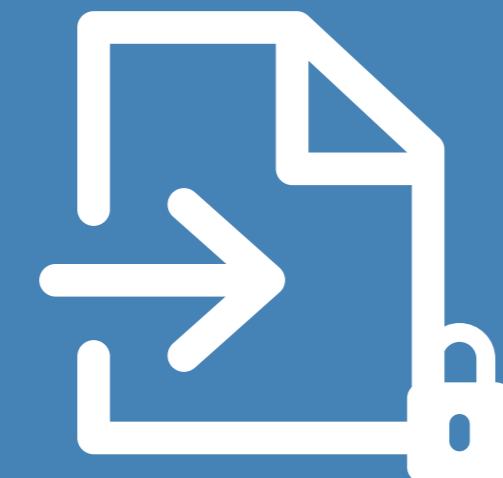
Enables Unified Record System

Within the Mesh Network, regulatory agencies may be provisioned

- oversight of Information exchange, and ensure that entities are compliant through a transparent and automated system.**
 - Records are interoperable and available on a unified platform, enabling secure, transparent information exchange between parties.**
- NIST and The Office of The National Coordinator for Healthcare Information Technology are interested inthe distributed network, or blockchain technology, for Healthcare IT solutions.**

The Mesh Platform Process

1: The Doctor securely issues patient record through MESH interface



3: Patient securely shares their record



2: The Patient may view their record

Technology Validation

The following Government Agencies are working to employ blockchain technology for secure information sharing and authentication. Mesh Provides a modular framework for implementation.



The Office of The National Coordinator for
Healthcare Information Technology

<https://www.sbir.gov/sbirsearch/detail/867797>

<https://www.sbir.gov/sbirsearch/detail/1144411>

