

**WSO2con2025**

# Technology for Saving Lives: Cloud-Native App Development Accelerating Healthcare Innovation



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**“For every 10-minute delay between arrival at the ER and the start of stroke treatment, patients with severe strokes may lose eight weeks of healthy life” – American Stroke Association**

**What if technology could change the outcome?**

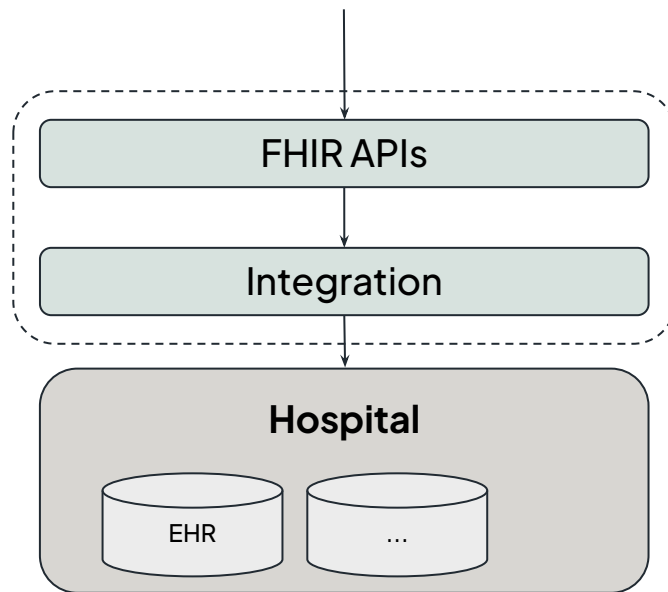


## Path to the solution – Step 1

### Hospitals need to start exposing interoperable APIs

#### Key considerations:

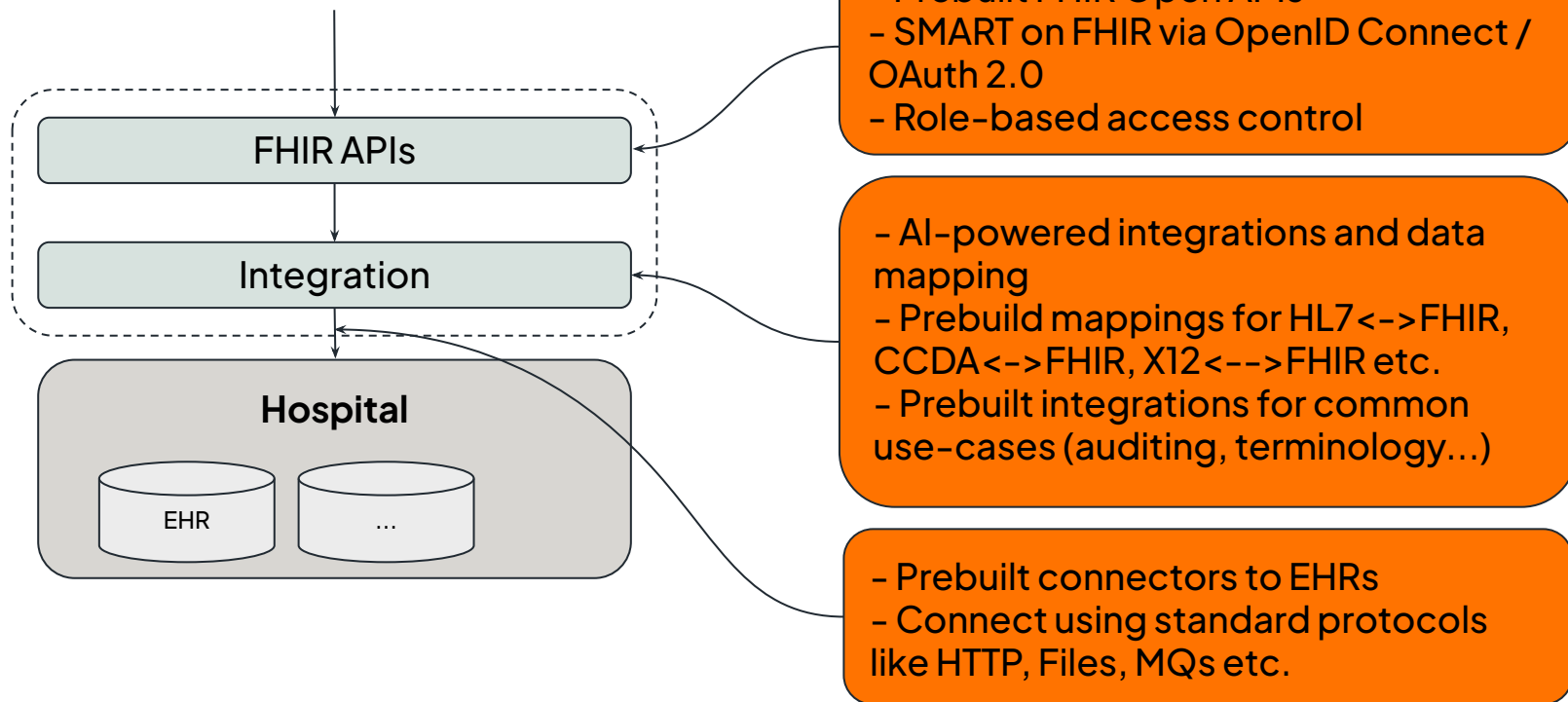
- Interoperable message format is FHIR.
- Legacy/proprietary message formats need to be transformed to FHIR.
- FHIR APIs need to be secured.
- Start with read-only FHIR APIs.
- Trusted applications can be onboarded.



## Path to the solution – Step 1

Hospitals need to start exposing interoperable APIs:

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## Path to the solution – Step 2

### Hospitals need to keep Master Patient Index up-to-date

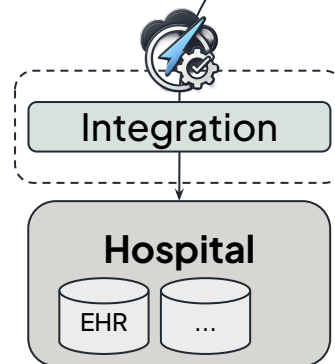
#### Key considerations:

- Master Patient Index should be managed by a regional governing body (eg: health ministry).
- Hospitals should run a periodical task or an event-driven integration with the MPI to keep MPI up-to-date.

Notification to the patient  
informing Unique Patient  
Identifier

Master Patient Index  
[UPI, Demographics,  
Hospital\_IDs]

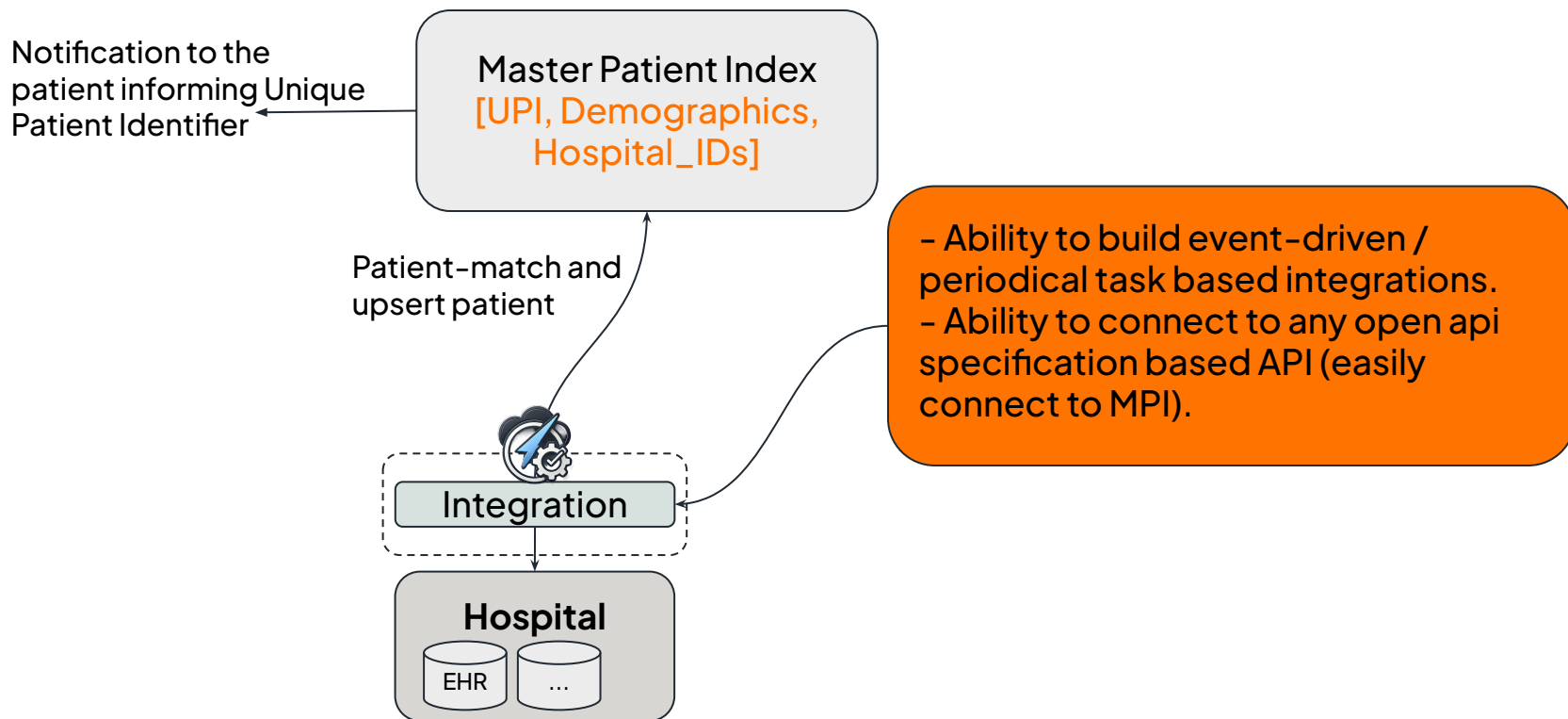
Patient-match and  
upsert patient



## Path to the solution – Step 2

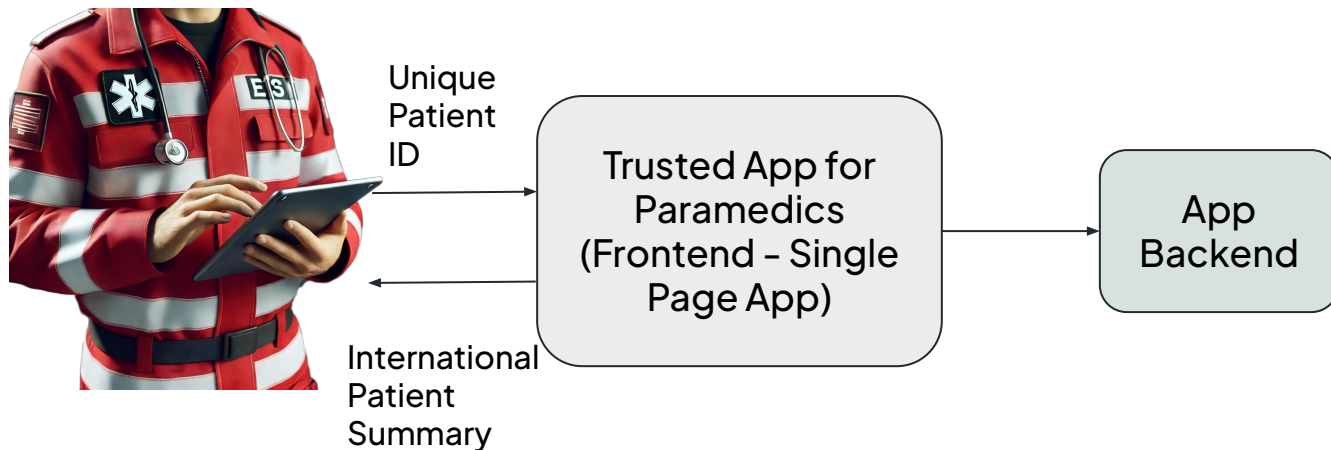
Hospitals need to keep Master Patient Index up-to-date:

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## Path to the solution – Step 3

### Trusted App for Paramedics



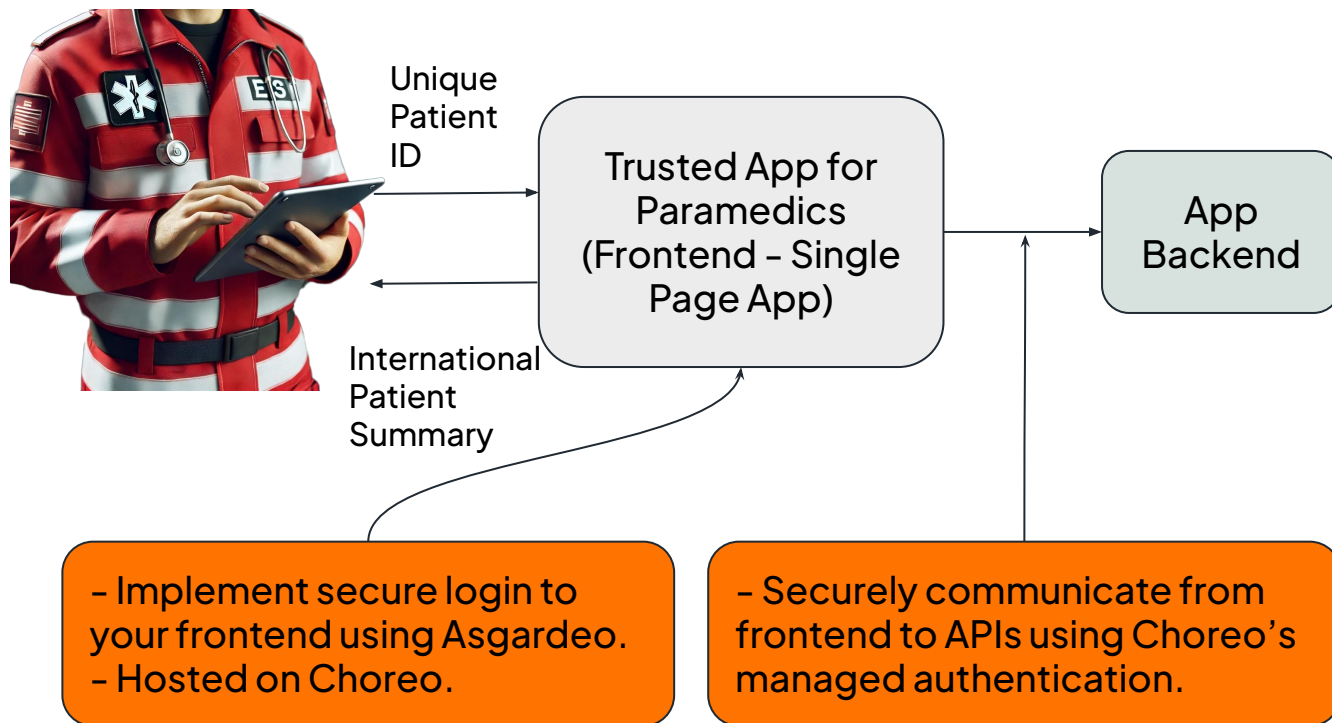
#### Key considerations:

- A paramedic should be able to login to the app and see a patient summary of the intended patient.
- Frontend to backend communication should be secured.

## Path to the solution – Step 3

### Trusted App for Paramedics:

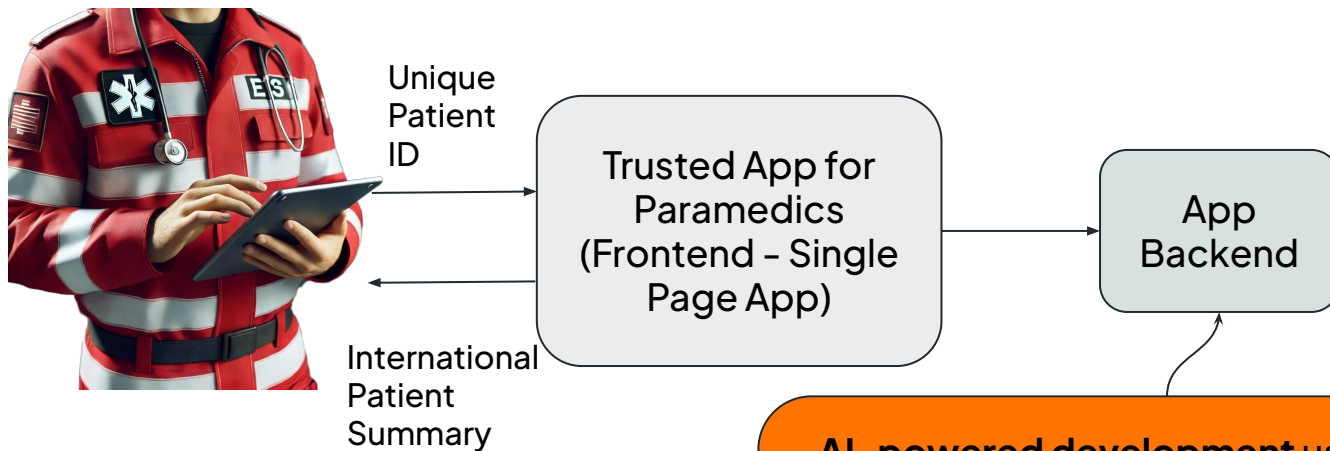
### WSO2 accelerates your journey



## Path to the solution – Step 3

### Trusted App for Paramedics:

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- AI-powered development using a Healthcare aware Copilot (~80%+ of the code is auto-generated).
- Prebuilt FHIR IPS library and first-class FHIR support to make you build app logic faster.



# Reference Architecture Level - 0



Unique Patient ID

Frontend App

App Backend

Unique Patient ID

Get the Connection Details

Master Patient Index  
[UPI, Demographics, Hospital\_IDs]

Hospital Registry  
[Hospital\_ID, URL, Credentials]

International Patient Summary

Fetch Data

FHIR APIs

Integration

Hospital

EHR

...

FHIR APIs

Integration

Hospital

EHR

...

## Assumptions:

- Patient's unique ID is in possession of patient or can be discoverable.
- IPS has sufficient information required by the paramedics.



**Demo**



100%

100%

### 1. Patient Information

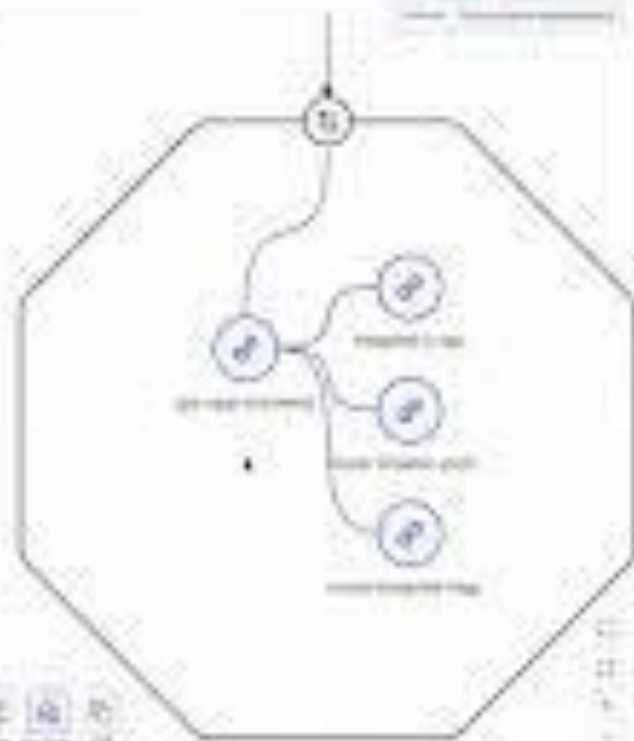
|              |                                            |
|--------------|--------------------------------------------|
| First Name   | John                                       |
| Last Name    | Doe                                        |
| Address      | 123 Main St, Suite 100, New York, NY 10001 |
| Phone Number | (212) 555-1234                             |

### 2. Insurance Information

| Insurance Type | Insurance Company      | Policy Number  | Effective Date |
|----------------|------------------------|----------------|----------------|
| Health         | Blue Cross of New York | BCNY-123456789 | 01/01/2023     |
| Dental         | Delta Dental           | DD-987654321   | 01/01/2023     |

### 3. Medication History

| Medication Name | Dose  | Frequency   | Start Date |
|-----------------|-------|-------------|------------|
| Aspirin 81mg    | 81mg  | Once daily  | 01/01/2023 |
| Metformin 500mg | 500mg | Twice daily | 01/01/2023 |









**Technology isn't just about innovation; it's about making a real impact—whether it's saving lives, improving care, or empowering people. Let's build a future where every second counts.**

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Thank you!

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