

Disclaimer

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Connectathon #3

International Patient Summary Based NEHR data exchange

“Realizing the National Digital Health Blueprint”

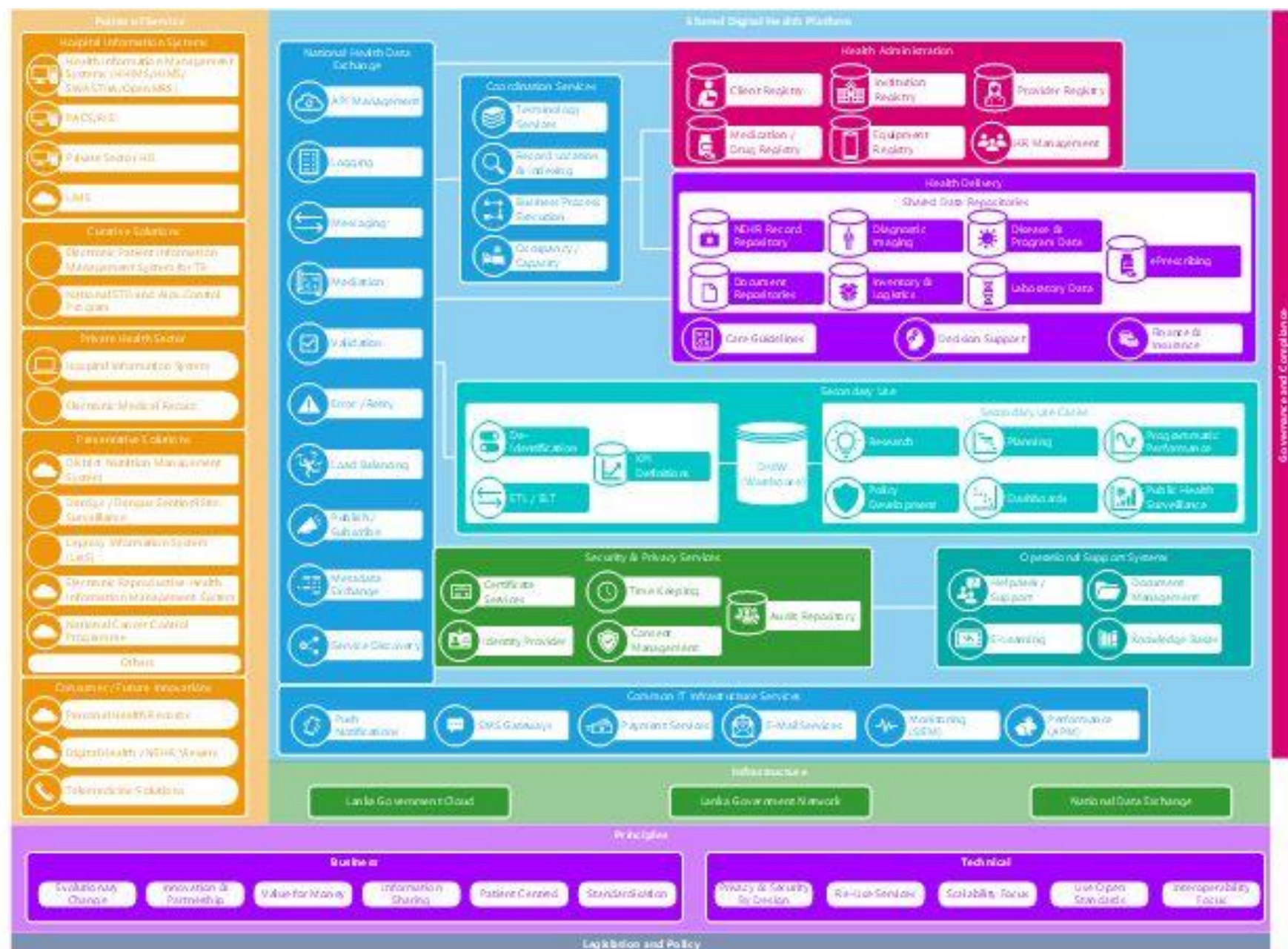


Outline

- Digital Health Blueprint
- National Electronic Health Record
- Connectathons
- Collaborations
- Future Directions



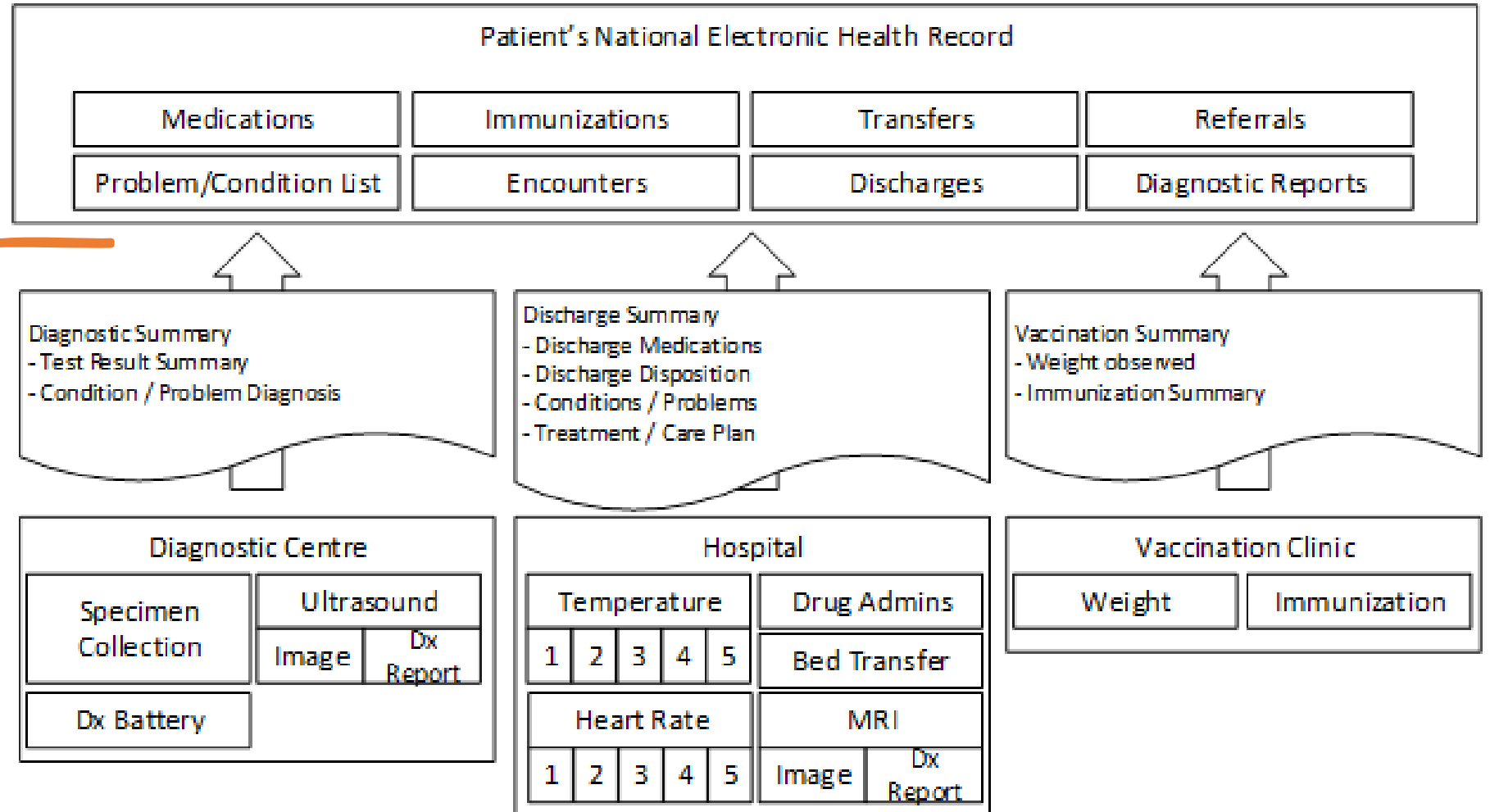
Digital Health Blueprint



National Electronic Health Record (NEHR)

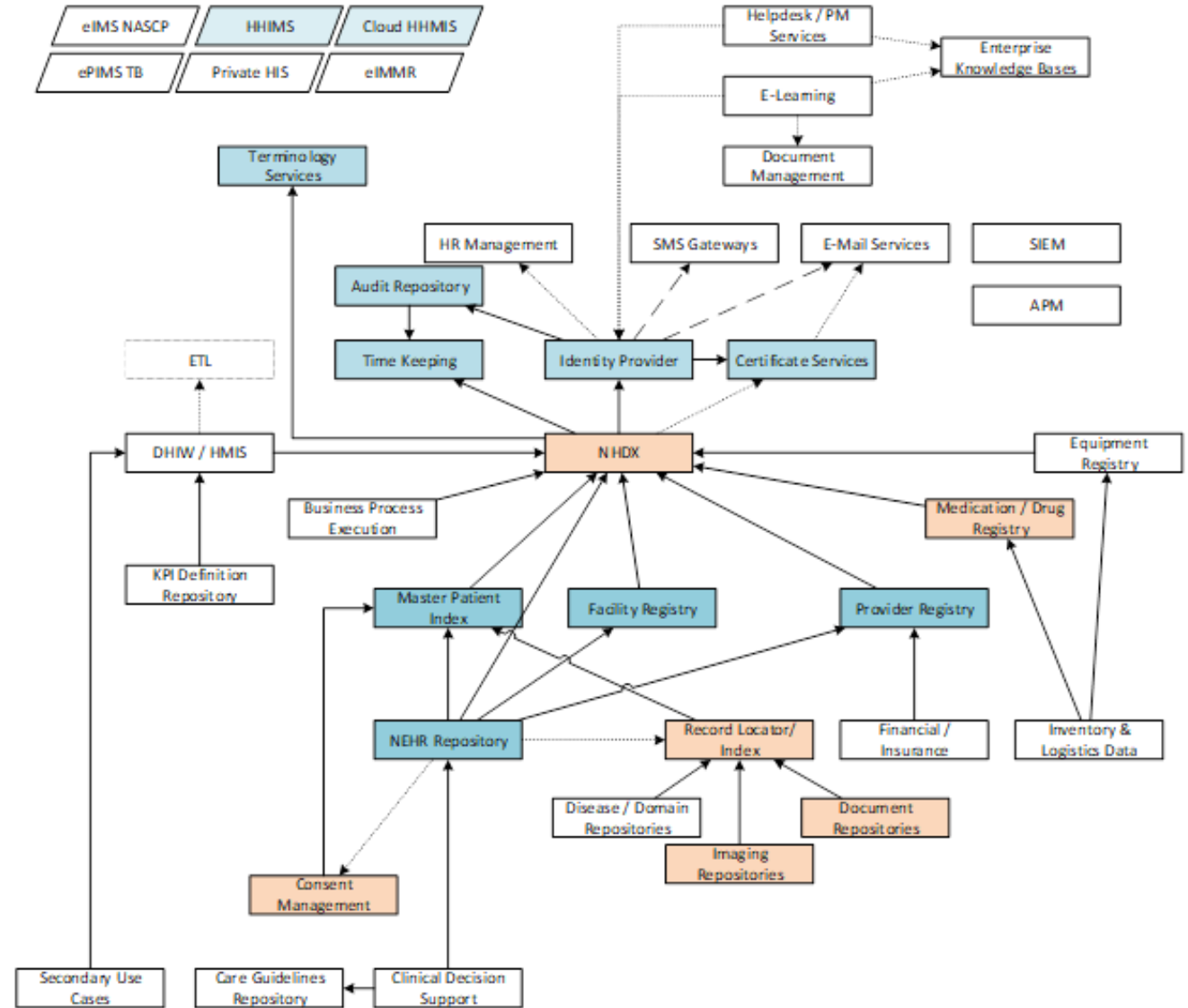
A prioritized digital health capability based on 2 patient journeys

- Chronic NCD
- Tuberculosis



Thin-slice components

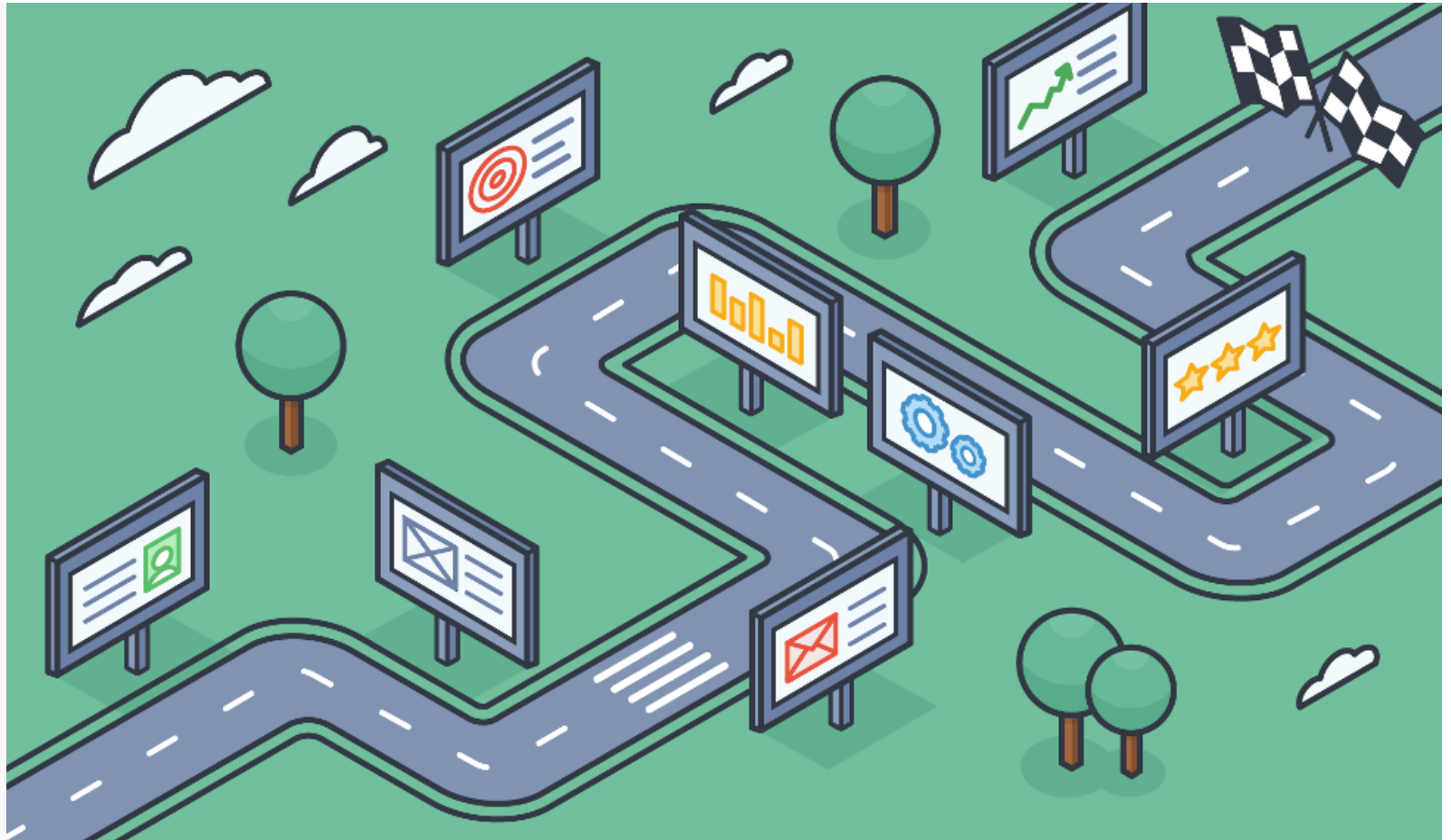
- A prioritized interim Digital Health Platform state
- Prioritized on the basis of two patient journeys on;
 - Chronic NCDs
 - Tuberculosis



Blueprint to Implementation

- No single straight path from Blueprint to implementation
- Many aspects need to mature to deliver the blueprint vision

Interoperability
Infrastructure
Applications
Governance
Capacity / workforce
.....



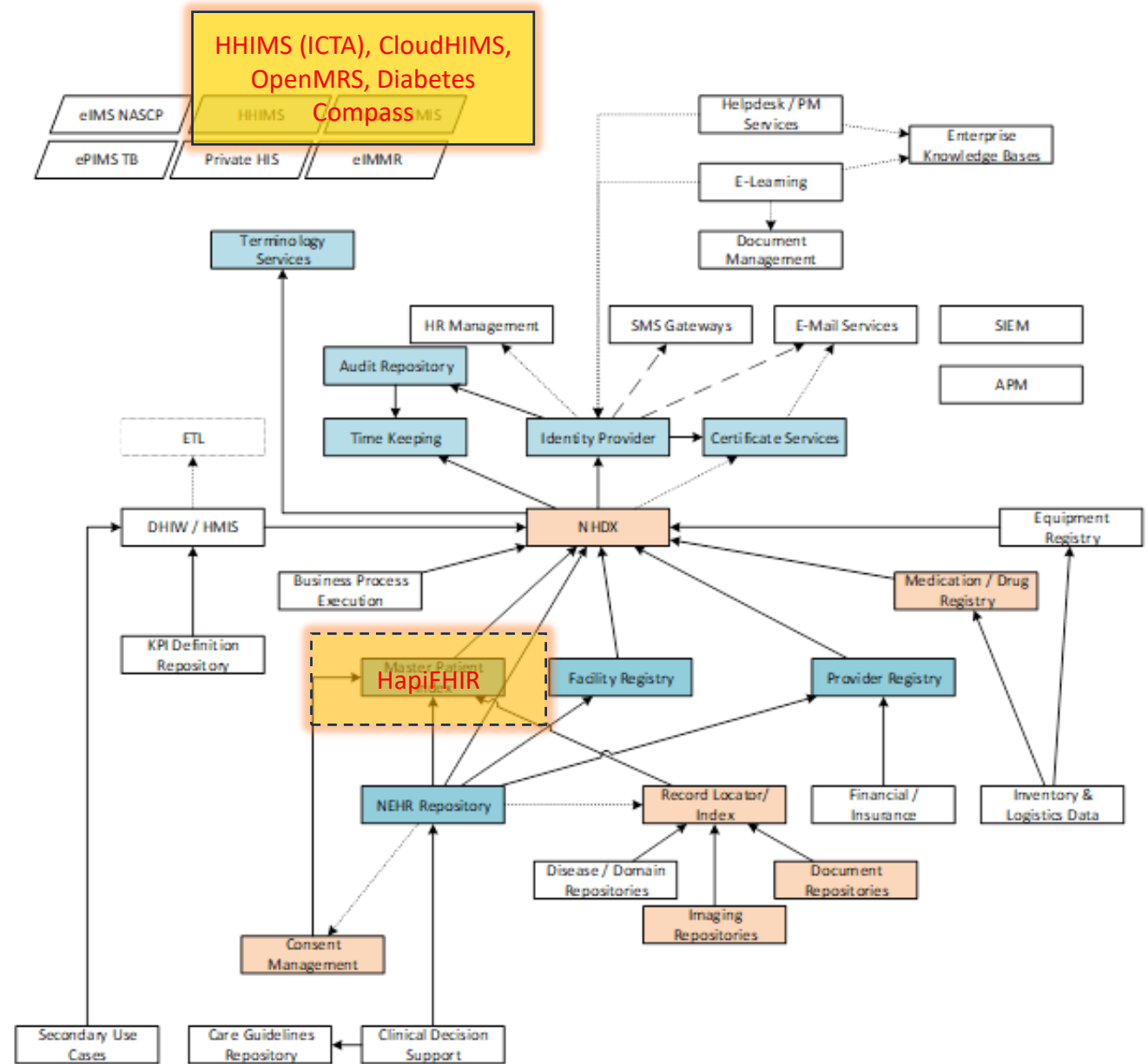
Connectathons

- The Connectathon is a Connectivity Test Marathon
- Connectathons provide a detailed implementation and testing process to enable the adoption of standards-based interoperability by vendors and users of healthcare information systems.
- Objectives
 - Prove that the specification is complete.
 - Prove that implementations written to that specification can 'connect'.



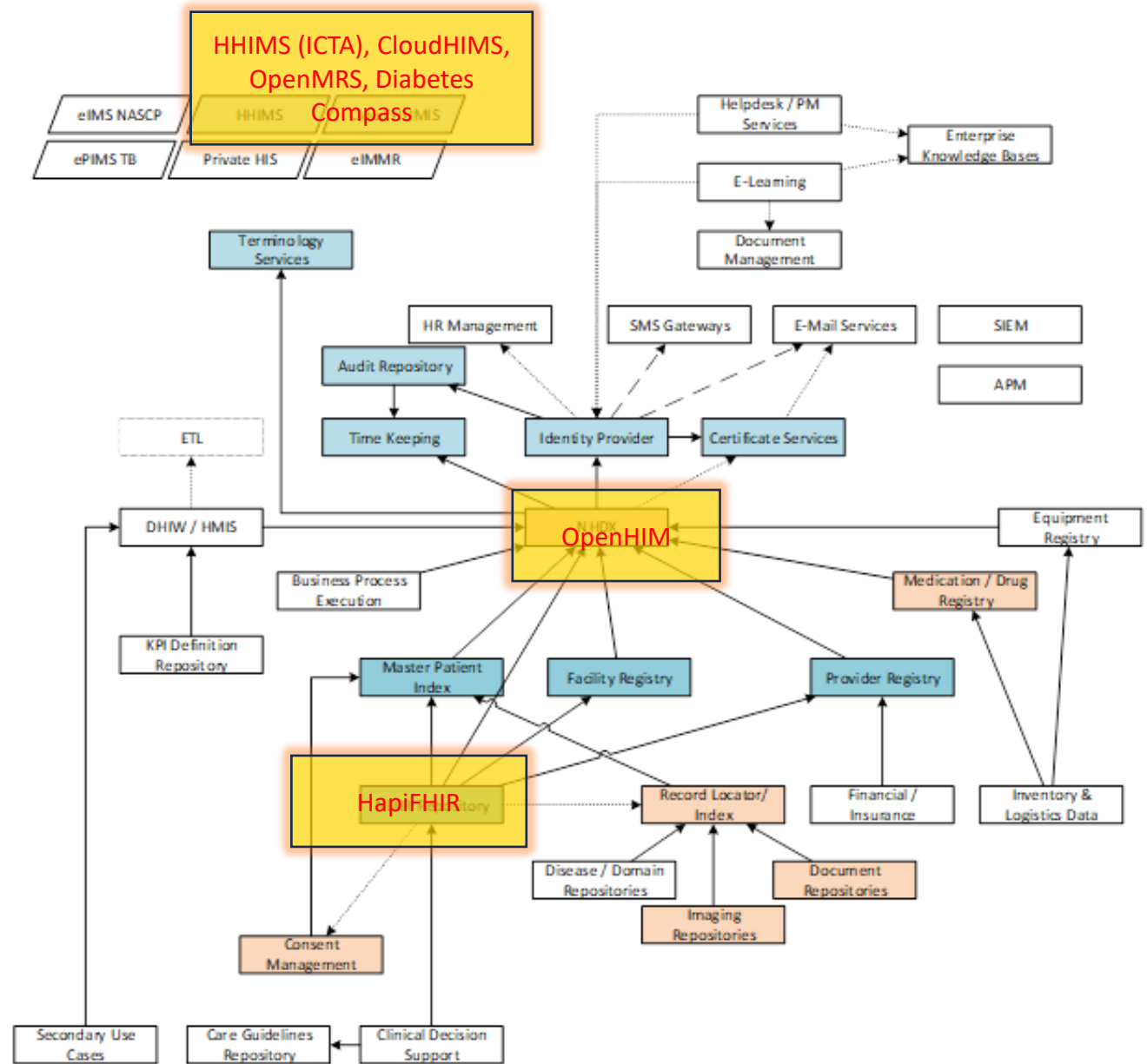
Connectathon #1

- Exchange of Patient Demographics
- Participated by HHIMS (ICTA), CloudHIMS, OpenMRS, Diabetes Compass teams
- Profiling, workflows, data exchange validated for 'Patient Resource'
- Financially supported by the WDF



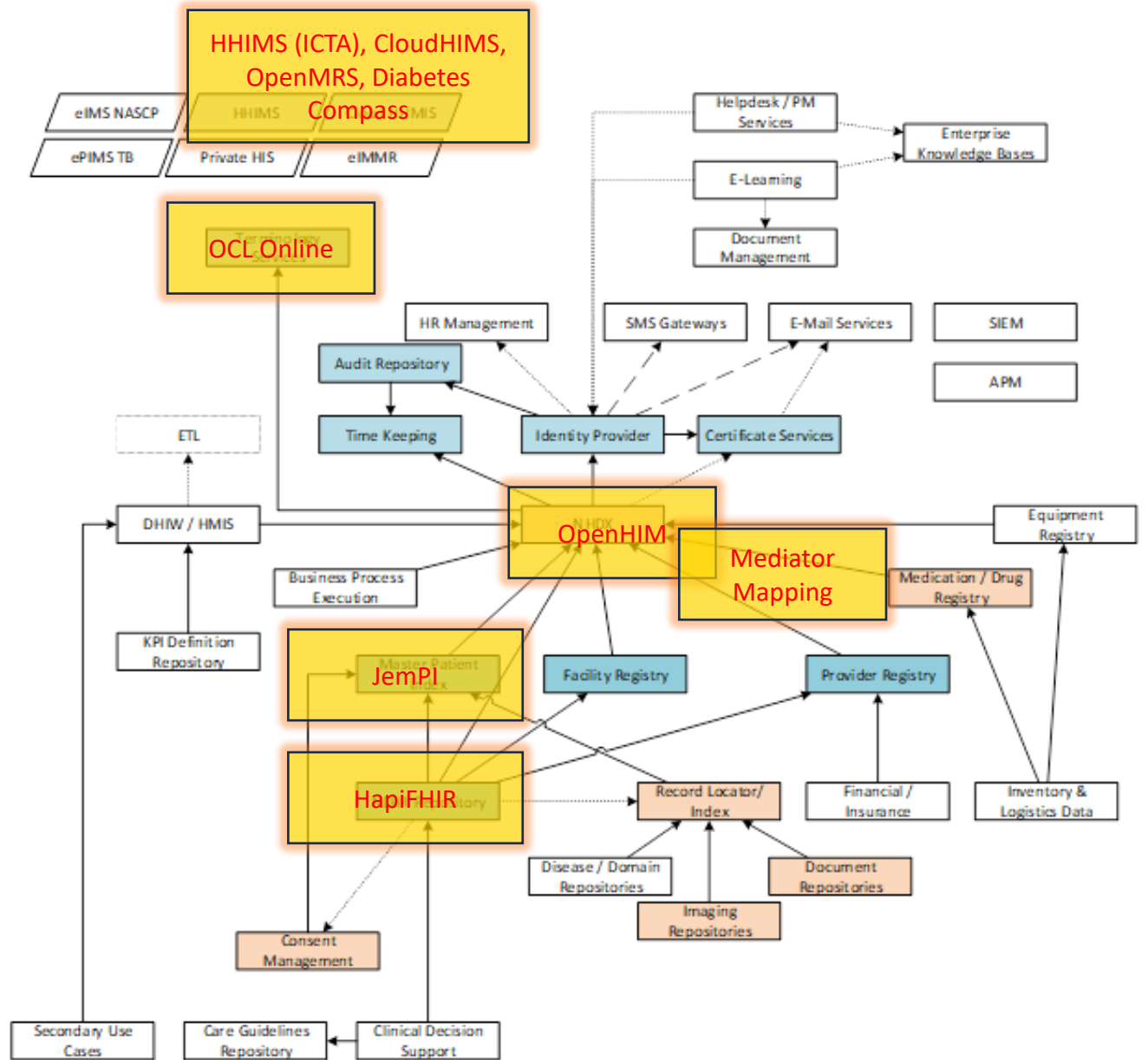
Connectathon #2

- Exchange of for OPD and HLC clinic encounters using local codes
- Participated by HHIMS (ICTA), HHIMS (LRH), CloudHIMS, OpenMRS, Diabetes Compass teams
- Profiling, workflows, data exchange validated for many resources
- Implementation Guides generated
- Technically supported by Jembi Health Systems



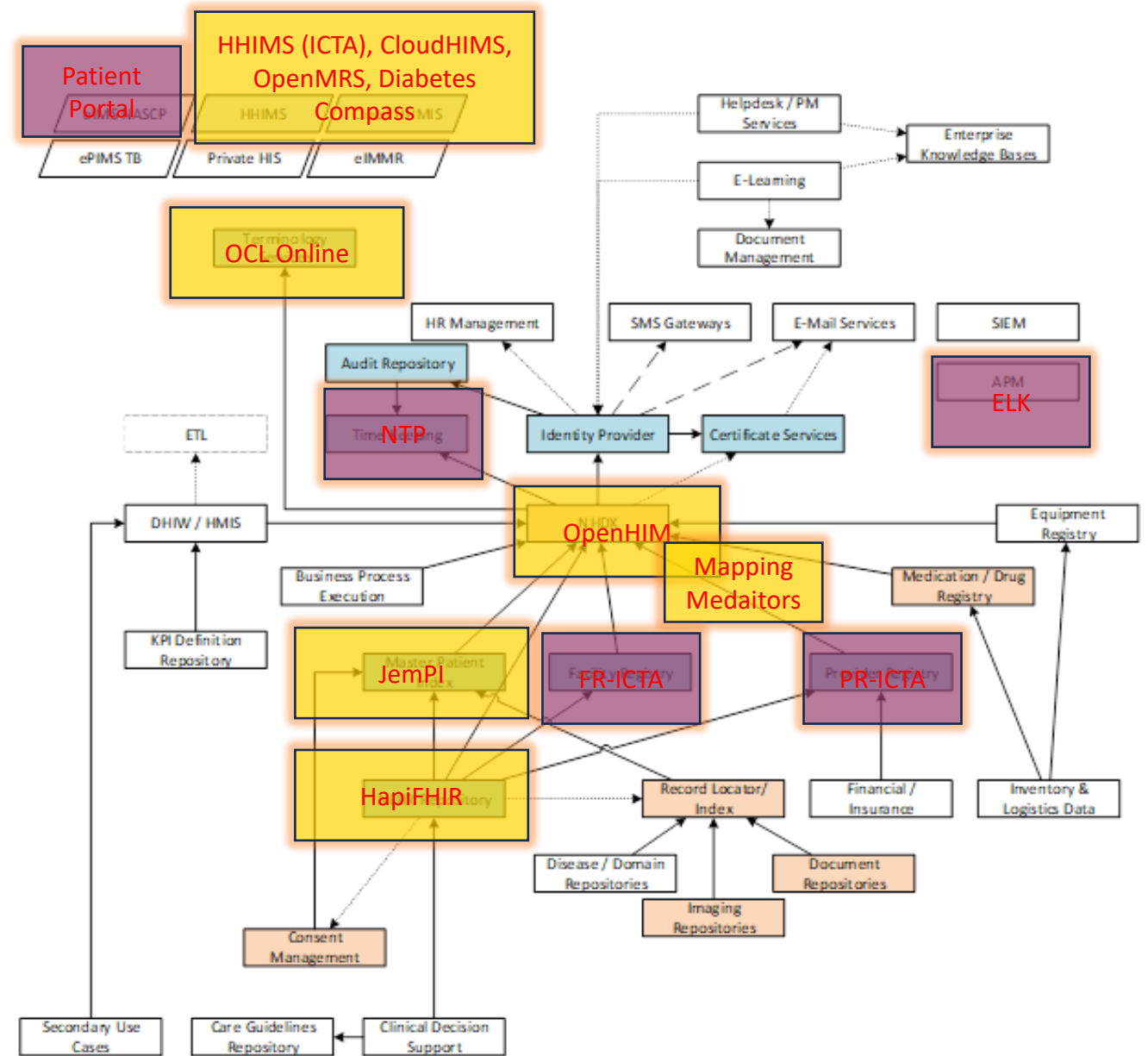
Connectathon #3

- Exchange of for OPD and HLC clinic encounters using IPS based structure and codesystems
- Participated by HHIMS (ICTA), HHIMS (LRH), CloudHIMS, OpenMRS, Diabetes Compass teams
- Profiling, workflows, data exchange validated for many resources
- Implementation Guides generated
- Technically supported by Jembi Health Systems



Overall Progress

- IPS (structure and data standards) based data exchange
- Participated by HHIMS (ICTA), HHIMS (LRH), CloudHIMS, OpenMRS teams
- Profiling, workflows, data exchange validated for many resources
- Implementation Guides generated
- Technically supported by Jembi Health Systems
- Blocks coloured in purple are currently being developed to various extent



DHP Components in place /development

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The screenshot displays two web interfaces. The top interface is the 'LK NEHR Sri Lanka Patient Summary (IPS based) Implementation Guide' website, version 0.1.0 - STU1. It features a navigation bar with 'IG Home', 'Table of Contents', and 'FHIR Artifacts'. The main content area includes a 'Table of Contents' section with a 'Home' link, a 'Note' stating that the documentation is still under development, and a 'Contents' list with links to 'Content', 'Download', 'Cross Version Analysis', 'Dependency Table', 'Globals Table', 'IP Statements', 'Intellectual Property Considerations', and 'Disclaimer'. The bottom interface is the 'OpenHIE Admin Console', showing a dashboard with a 'Welcome to NEHR' message, a 'Your PHN is generated' section with a barcode, and a table of transactions. The table has columns for HTTP Method, Host, Port, Path, Request Params, Channel, Client, Status, and Request Time, and lists several successful POST transactions to 'nahr.health.gov.lk'.

Home - LK NEHR Sri Lanka Pati... x +

k-gov-health-hiu.github.io/lk-nehr-fhir-ips/

LK NEHR Sri Lanka Patient Summary (IPS based) Implementation Guide
0.1.0 - STU1

OpenHIE

IG Home Table of Contents FHIR Artifacts

Table of Contents > Home

LK NEHR Sri Lanka Patient Summary (IPS based) Implementation Guide, published by Ministry of Health, Sri Lanka. This guide is not an authorized publication; it is the continuous build for version 0.1.0 built by the FHIR (HL7® FHIR® Standard) CI Build. This version is based on the current content of <https://github.com/lk-gov-health-hiu/lk-nehr-fhir-ips> and changes regularly. See the [Directory of published versions](#) for details.

1 Home

Official URL: <http://fhir.health.gov.lk/ips/ImplementationGuide/lk-nehr-fhir-ips> Version: 0.1.0

Active as of 2024-03-01 Computable Name: SriLankaIPS

This is our FHIR Implementation Guide. It contains the specifications developed by our community.

Note
This documentation and set of artefacts are still undergoing development. This content is only for demonstrative purposes.

Contents:

- Content
- Download
- Cross Version Analysis
- Dependency Table
- Globals Table
- IP Statements
- Intellectual Property Considerations
- Disclaimer

1.1 Content

This publication contains the full set of specifications...

25° Search 07:33 21/03/2024

NEHR

Welcome to NEHR

Your PHN is generated

PHN: 1234-56

Print the barcode

Go to dashboard

OpenHIE Admin Console

Auto-Update Transaction List

Enabled Disabled

Apply Defaults Set As Default Clear Filters

Re-run Selected Transactions Re-run all transactions that match current filters

	HTTP Method	Host	Port	Path	Request Params	Channel	Client	Status	Request Time
<input type="checkbox"/>	POST	nahr.health.gov.lk		/fhir		FHIR Orchestrator	HHMS	Successful	2024-03-20 12:00:36 +0530
<input type="checkbox"/>	POST	nahr.health.gov.lk		/fhir		FHIR Orchestrator	HHMS	Successful	2024-03-20 12:02:33 +0530
<input type="checkbox"/>	POST	nahr.health.gov.lk		/fhir		FHIR Orchestrator	HHMS	Successful	2024-03-20 12:02:32 +0530
<input type="checkbox"/>	POST	nahr.health.gov.lk		/fhir		FHIR Orchestrator	HHMS	Successful	2024-03-20 12:02:30 +0530
<input type="checkbox"/>	POST	nahr.health.gov.lk		/fhir		FHIR Orchestrator	HHMS	Successful	2024-03-20 12:02:29 +0530
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<input type="checkbox"/>	POST	nahr.health.gov.lk		/fhir		FHIR Orchestrator	HHMS	Successful	2024-03-20 12:02:22 +0530

Realization in Phases



Digitize

Capture
Information
Digitally

Acquire
Hardware &
Software
Solutions

Harmonize data
formats and
codes



Connect

Establish
Network
Connectivity

Connect to
Shared, baseline
resources



Share

Integrate Digital
Health Solution
Information
Flows

Harmonize
Clinical /
Business Flows



Inform

Data Insights for
Providers (CDSS)

Data Insights for
Planning,
Research,
Reporting (KPI)



Innovate

Incorporate New
Health Domains
(Genomics,
Pathology, etc.)

New
technologies
(VR, ML/AI)



Transform

Continual
Process
Improvement
Evidence-Based
Care
Improvement
Patient-Driven
Care (PHR)

Many collaborations & partnerships



Ministry of Health
Sri Lanka



The
Federal Government



Future Directions

- Improve Platform Infrastructure
 - Requirement estimation
 - Development, Staging and Production Environments
 - High availability and scalable production environment
- CI/CD pipeline to automate build, test and deploy critical DHP components
- Expand the FHIR IGs – new use cases
- Improve terminology adoption
- Setup regulatory environment
 - Data protection
 - Privacy controls
 - Anonymisation
- Training and Support
- DHP procurements and Maintenance agreements
- Improve data analytics



Thank you

