



المركز الوطني للمعلومات الصحية  
NATIONAL HEALTH INFORMATION CENTER



# UniPlat & eHealth Interoperability Standards

*"The Way To Collaborative Healthcare Services"*



## Introduction



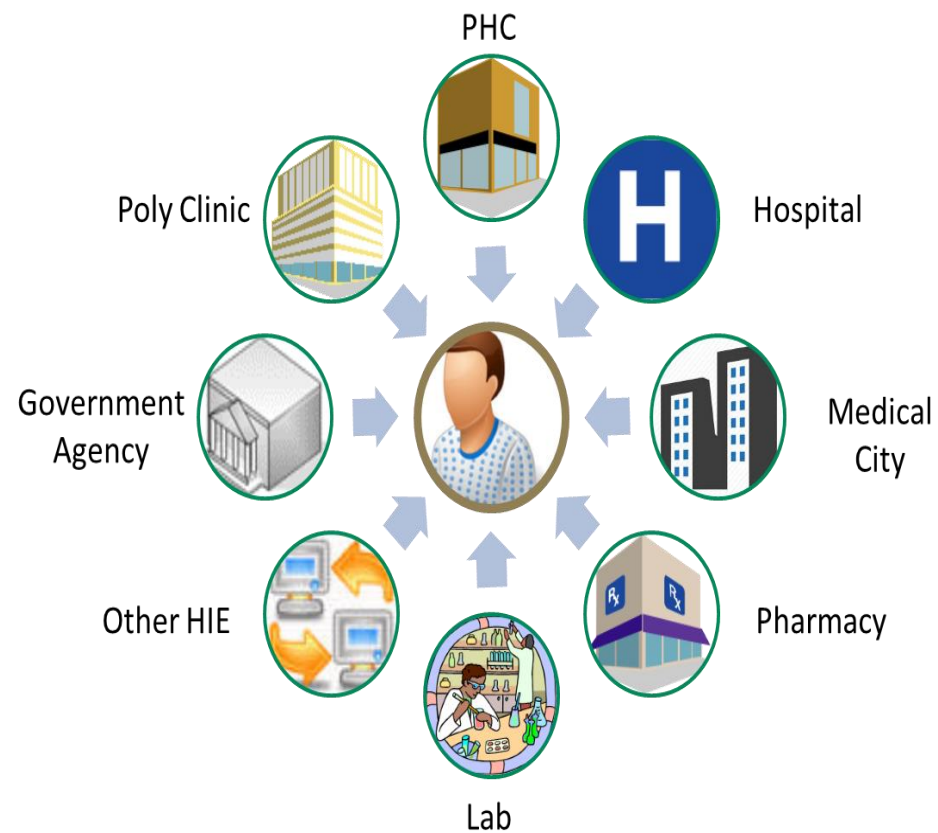
- **The National Health Information Center (NHIC) is the responsible agency for sitting health information standards, per the Council of Ministers' decree number 11 dated to 12/1/1434 H**
  - Article No. 3 of this decree reads *“Establish necessary rules and mechanisms for exchange of information among relevant parties and facilitate interlinking.”*
- **Ministry of Health (MOH) started the eHealth Interoperability project prior to the official establishment of NHIC**
  - The purpose is to standardize health information exchange for the establishment of the Electronic Health Record (EHR) - (الملف الصحي الموحد)

# SeHE Definition

**Saudi eHealth Exchange (SeHE)** is the platform that facilitates electronic **health data exchange among all healthcare facilities** in all healthcare sectors to **enable the build up of the interoperable Electronic Health Record (EHR) – (الملف الصحي الموحد)**

It is **standards-based, clinically driven, patient-centric** and based on **open architecture** to enable future expansion of the platform to respond to industry improvements and addresses future clinical/business needs


# Patient-Centric EHR Platform




# SeHe Strategic Benefits



Digitized unified health record for patients in KSA



Improve efficiency and quality of provided healthcare services



Reduce cost and time of healthcare services delivery



Establish a platform for improved healthcare decision making

*iEHR made available to the Right People, Right time, Right place*

# Main SeHE Components

## Electronic Health Record (EHR) Repository

The Electronic Health Record Repository manages standards-based, clinical data records aggregated from the various healthcare organizations. This enables the establishment of a longitudinal patient record, efficient analytics, and clinical decision support

## Client/PHR Portal

The access channel for the clients (citizens, resident, and visitors) to provide controlled access to their clinical content maintained by the EHR.

## Provider Portal Service

The provider portal adds the significant benefits of managing the access to the complete patient-specific, standardized, interoperable Electronic Health Record delivered to the right provider about the right patient, at the right time

## Administrative Registries

Client/Provider/Organization registries that manage the unique identification as well as basic demographic information of the key participants in the healthcare delivery (Patients, Providers, and Organizations). These registries constitute the cornerstone for the eHealth program

## Terminology Management

A clinical terminology capability to represent all clinical concepts (such as diagnosis, medications...etc.) and manage the various clinical terminologies (ICD10 AM, LOINC, SNOMED CT etc.). It also offers a mapping capability to common international and local codes

## Health Service Bus

The integration layer that enables standardized access to services supporting interoperable, standards-based eHealth systems at all authorized points of care.

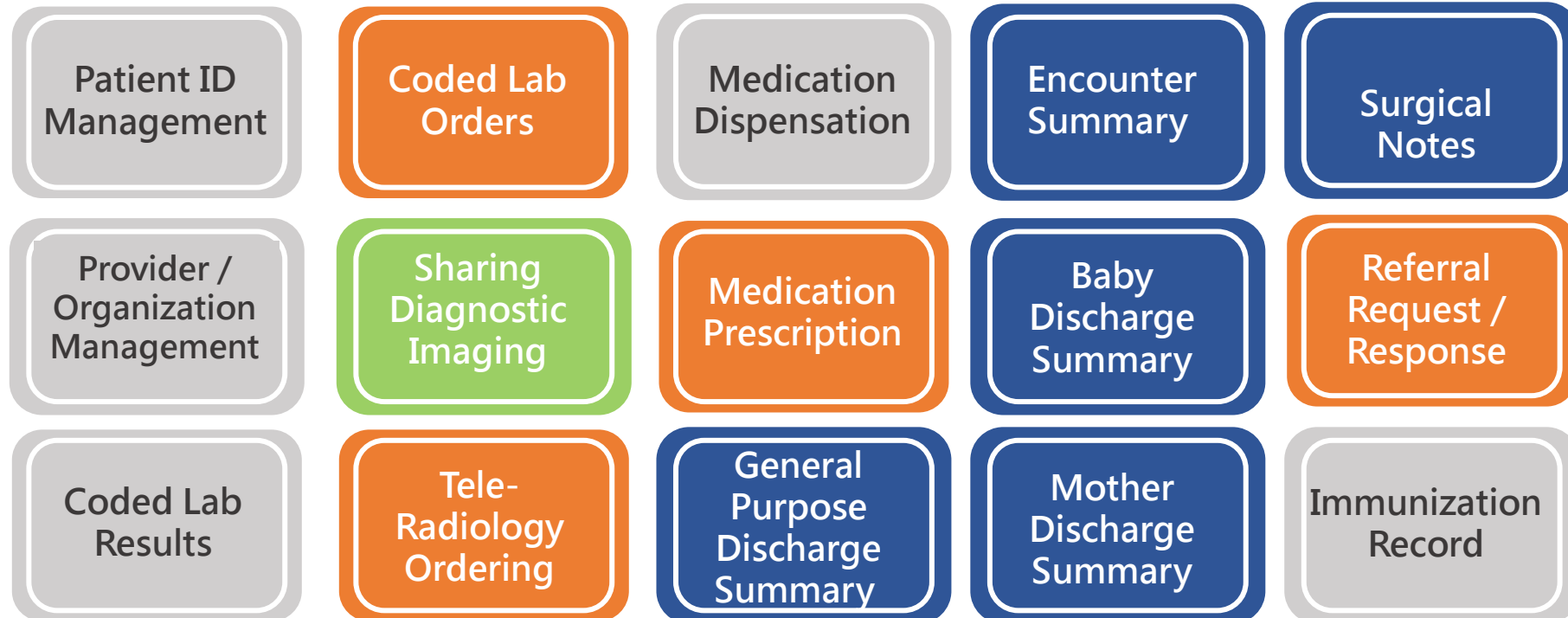
# SeHE Use Cases



SeHE project covers fifteen (15) clinical data sharing use cases

Stage 2  
Stage 4

Stage 3  
Stage 6





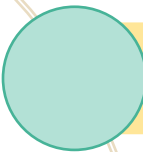
# Project SHIB Overview

Saudi Health Insurance Bus (SHIB) Is a national platform which will be used to interconnect healthcare providers with the health insurance companies to transact the business of health insurance



It Improves the role of the Council of Cooperative Health Insurance (CCHI) in regulating, controlling, and monitoring the health insurance industry in the Kingdom resulting in improved quality of service provided to the beneficiary as well as the overall improvement of the HealthCare System

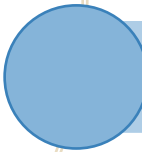
# SHIB Strategic Benefits




Improve the quality of health insurance services in the Kingdom



Protect the rights of the health insurance stakeholders



Provide a platform to conduct researches and analysis in the field of health insurance

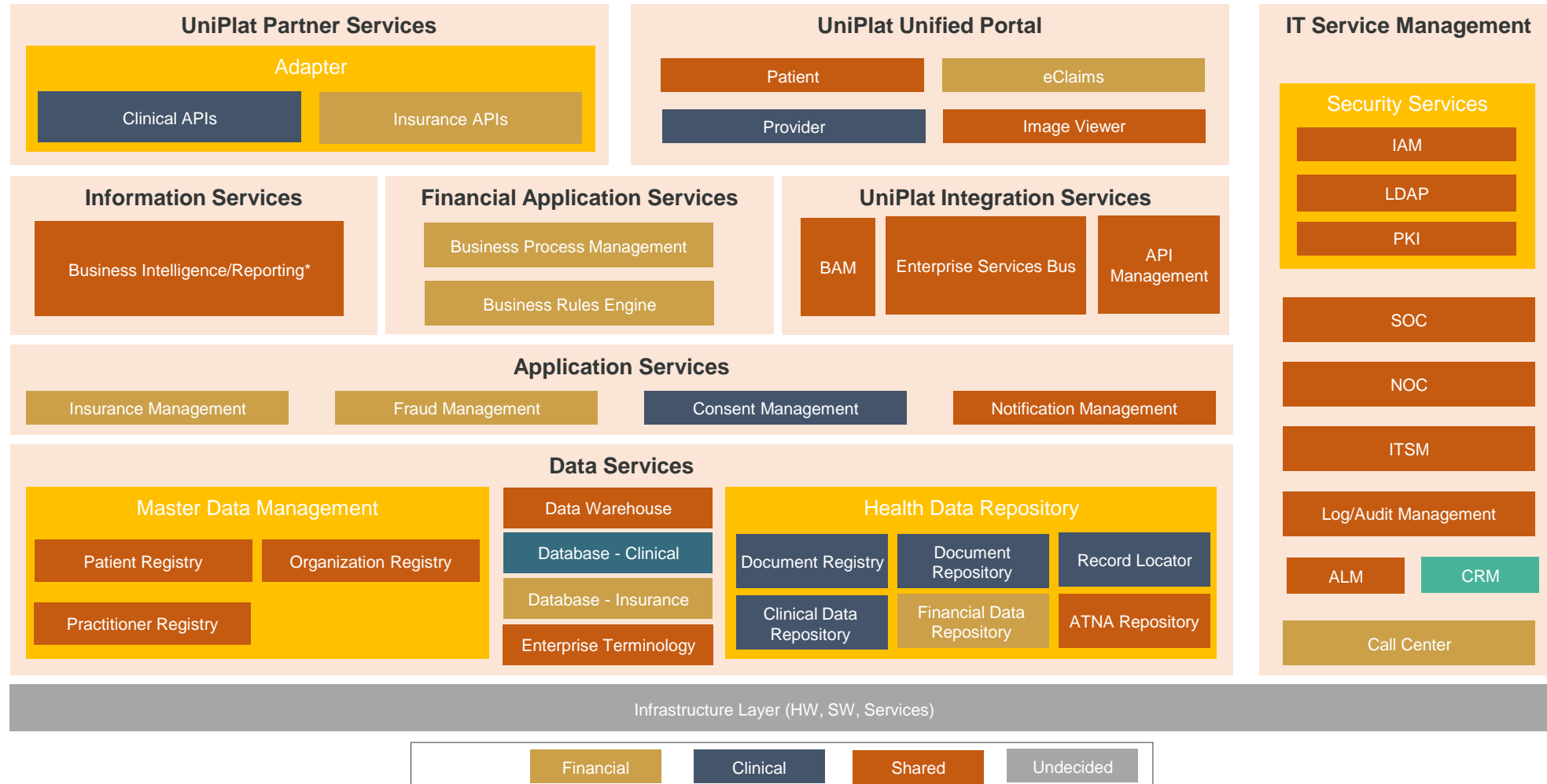


Reduce Fraud rate in the Kingdom and allow for the emergence of a mature health Insurance market

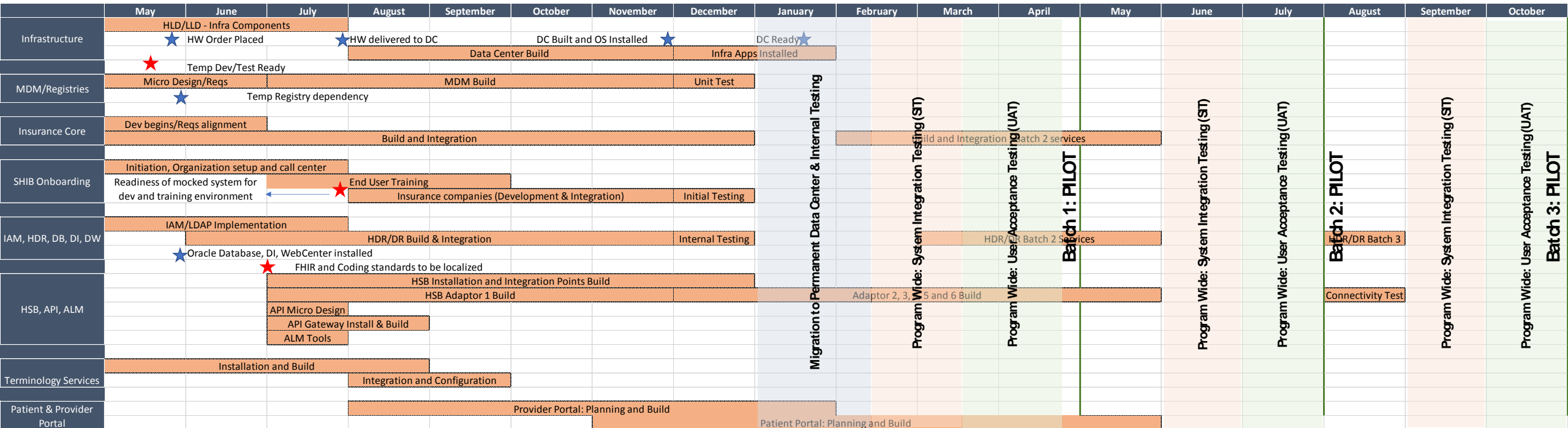
***Standardise and enhance quality in delivery of services to patients and stakeholders to positively impact the health insurance business***



## UniPlat – Conceptual Architecture – Shared Components



## High Level Roadmap



### Batch 1

- Patient Identification
- Professional Identification
- Organization Identification
- Eligibility Management
- Claims Management
- Out-Patient Encounter Summary
- 1 National Adaptor
- 1 HIS Adapter

### Batch 2

- Payment Management
- User Management
- CCHI Insurance Management
- Imaging
- Laboratory query
- eDispensation
- Immunization
- 2 National adaptor
- 2 HIS adapter

### Batch 3

- eReferral
- ePrescribing
- eLab Order
- Discharge Summary, surgical notes, baby and maternity Summary.
- 3 National adaptor
- 3 HIS adapter



# Interoperability Specifications

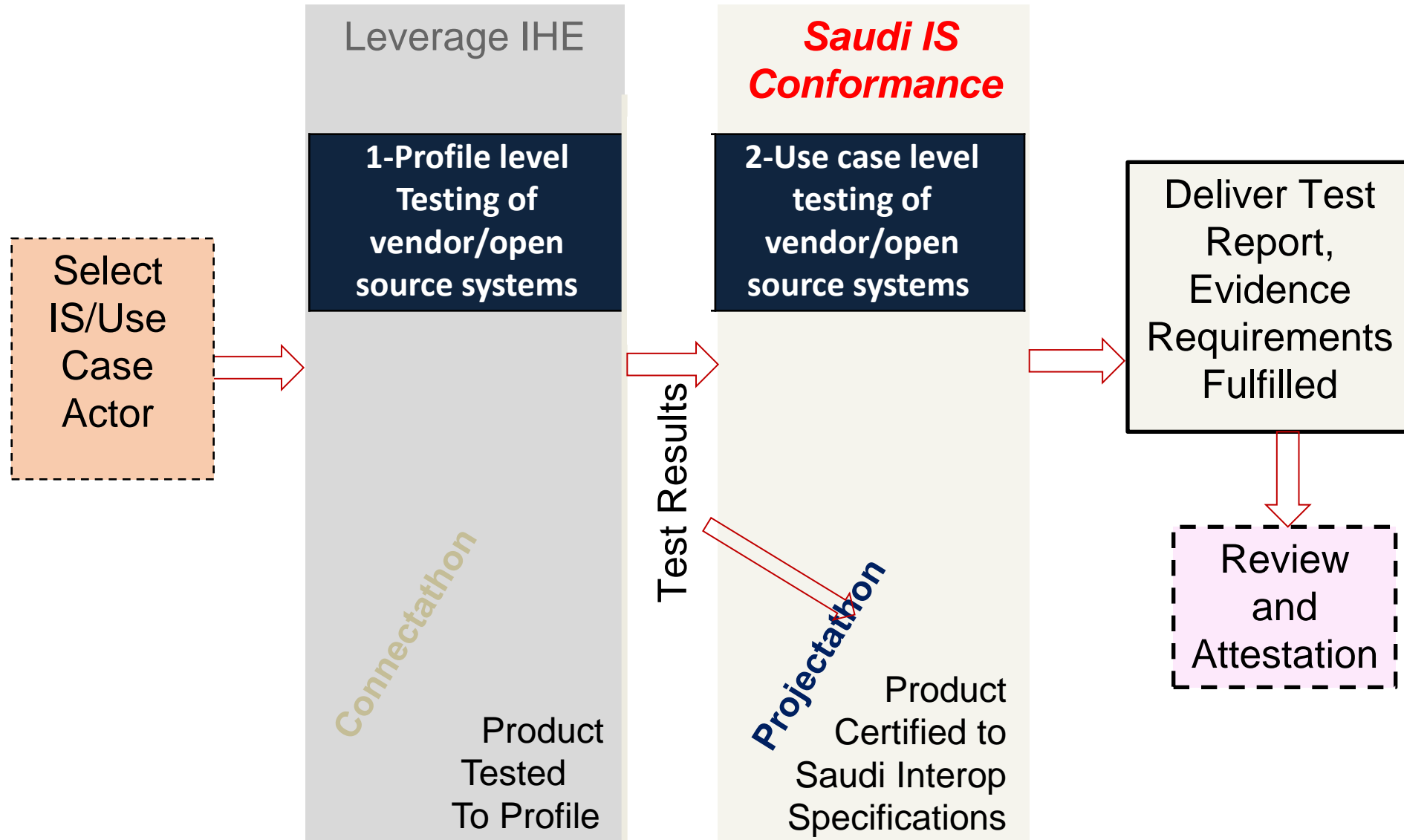


Available at:

<https://nhic.gov.sa/en/eServices/STD/Pages/default.aspx>



# Testing & Certification



# Saudi eHealth Information Exchange Policies

## Objective

- To protect and save confidentiality of **personal health information** whenever it's
  - ✓ Stored in Health Information Exchange.
  - ✓ Shared/ exchanged among healthcare providers.





# Saudi eHealth Information Exchange Policies

Authentication Policy

Purpose of Use Policy

Identity Management Policy

Consent and Access Control Policy

Information Security Policy

Breach Notification Policy

Audit Policy

Subject of Care Rights Policy

Secondary Use Policy