



Piloting a National Strategy for Hospital Situational Awareness Information

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February 10, 2021

Disclosures: Eric Heflin is on the IHE USA Board of Directors and participates in HL7 and IHE standards development

Health Information Technology Advisory Committee
The Office of the National Coordinator for Health Information Technology



Agenda

Texas Health Services – State-Wide Perspective (Eric Heflin)

STAR HIE Cooperative Agreement

Situational Awareness – Texas Piloting a Potential National Model

Status

Challenges

HASA Perspective on Situational Awareness (Phil Beckett, PhD)

Quadruple Aim

HASA Connectivity

STAR/SANER Technology



ONC STAR Cooperative Agreement Objectives

- On September 1, 2020, ONC announced the **Strengthening the Technical Advancement and Readiness of Public Health via Health Information Exchange Program (STAR HIE Program)**
- Awardees in the STAR HIE Program (Program) will build upon previous and existing federal investments in health information exchanges (HIEs) and will leverage work done by the industry to advance HIE services for the benefit of public health. The result of these efforts would be improved linkages between public health agencies and the services that HIEs are well situated to provide. These services include, but are not limited to, establishing or updating:
 - Services that benefit public health registries;
 - Connectivity services that benefit a public health agency; and/or
 - Data services that benefit a public health agency
- Source: <https://www.healthit.gov/topic/onc-funding-opportunities/strengthening-technical-advancement-and-readiness-public-health>



Award Announcement

- On September 30, 2020, ONC made the following Award Announcement:
 - The U.S. Department of Health and Human Services (HHS) today announced today five cooperative agreements to health information exchange organizations (HIEs) to help support state and local public health agencies in their efforts to respond to public health emergencies, including disasters and pandemics such as COVID-19...
- Texas Health Services Authority
 - The Texas Health Services Authority, in partnership with HASA, a regional HIE covering multiple regions in Texas, a local hospital partner, and Audacious Inquiry, will conduct a proof-of-concept pilot to demonstrate real-time, automated exchange of hospital capacity and other situational awareness data through APIs using HL7® Fast Healthcare Interoperability Resources (FHIR®). This improved functionality will not only simplify hospitals' public health reporting, but will also support the Texas Department of State Health Services, local health departments, emergency management agencies, and health care organizations across the state.
- Source: <https://www.hhs.gov/about/news/2020/09/30/hhs-announces-funding-for-health-information-exchanges-to-support-public-health-agencies.html>

Objectives

- Provide hospital capacity measures reporting
- Current processes can be burdensome to hospitals, and is in some cases manual
- Reduce time-lag
- Increase accuracy
- Increase automation (to full automation)
- Use industry standards (HL7® FHIR® and IHE USA)
- Create new standards where necessary (SANER)
- Build on existing Federal investments into HIEs



Texas Health Services Authority

- Recipient of program funds
- Created by the Texas State Legislature and overseen by the Governor
- Mandated to foster secure health information exchange in Texas, via a multi-pronged approach
- Focused on connectivity to benefit citizens, providers, and agencies
- Acting to coordinate efforts and minimize burden to all (HIEs, Texas DSHS/Medicaid, Texas Hospitals, Texas Physicians/Clinicians, CDC, etc.)



Highest-Level THSA Objective

Successfully pilot the SANER approach of near real-time automated hospital capacity gathering and freely share our lessons learned with the rest of the country.

Standards, Security, Content, Policy, Legal, etc.

Will share both challenges and successes!

Conceptual Architecture

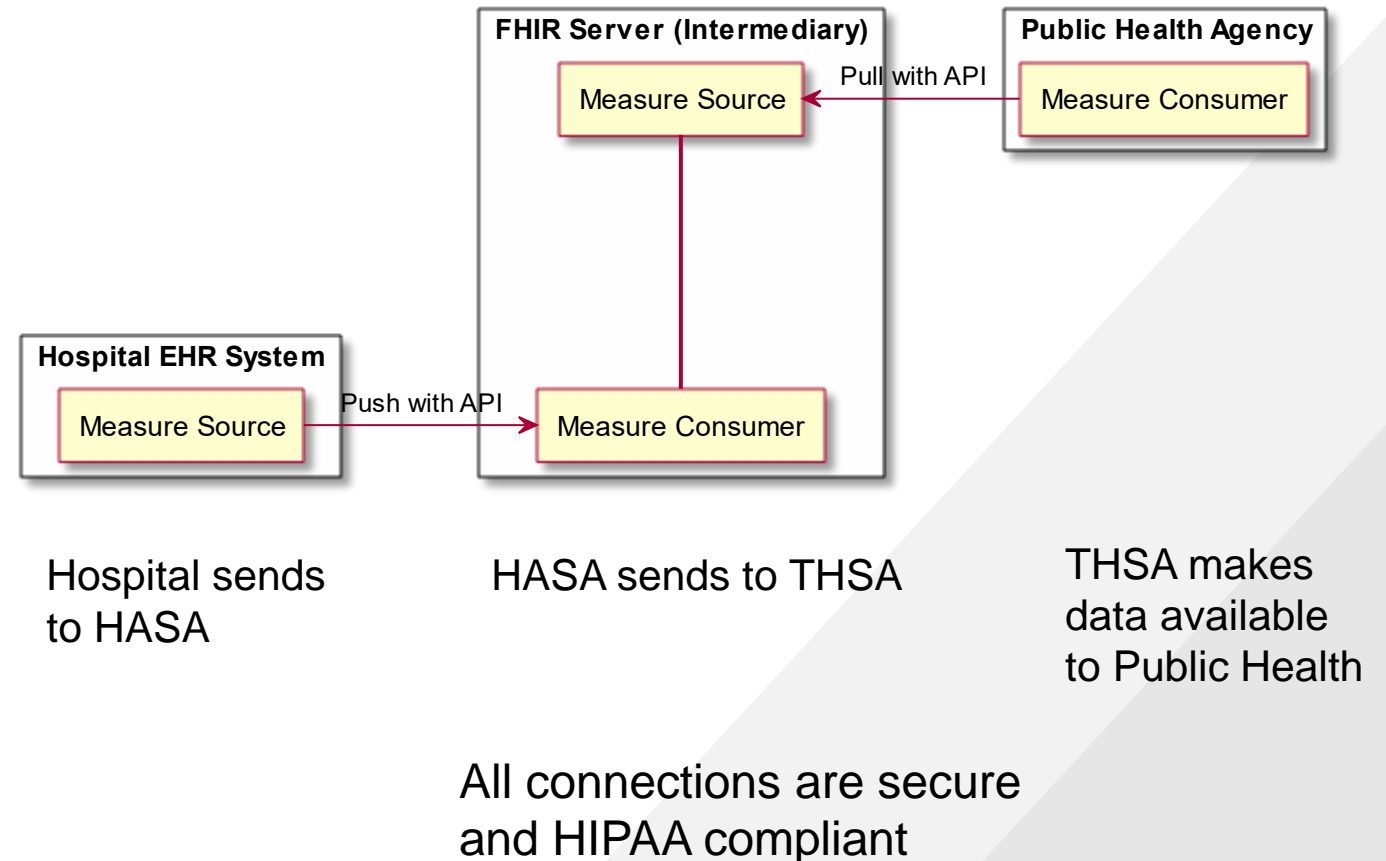
Reporting - Generates the data to be reported and make it available.

Presentation - Analyzes and display data.

Adaptation - Adapts between systems

FHIR Client & Server –Transport and content standard

External Storage - Stores data for later access



Status

- Worked with HL7 (largely Ai staff) to create the SANER FHIR draft standard
- Tested in January 2021 HL7 testing event (called a Connectathon)
- Plan to test, with the support of IHE USA, at the IHE North America Connectathon in March 2021
- Have successfully tested with hospital EMR vendor
- Seeking to test more measures with more hospital EMR vendors in March

Challenges and Next Steps

- **Challenge:**

- Texas state law constrains THSA in some areas; working with stakeholders to address appropriately

- **Next Steps:**

- Seeking to onboard pilot hospitals
- Continue testing the SANER standard in close coordination with:
 - HL7
 - IHE USA
 - Hospital EMR vendors
 - HASA (our partner!)
 - And our valued vendor partner (Ai)



HASA Perspective



HEALTH INFORMATION EXCHANGE IN SUPPORT OF THE QUADRUPLE AIM:

- Improved Health
- Lower Health Care Costs
- Improved Health Care Experience
- Improved Provider Experience



WHY HASA?

Centralized model

- Single community record
- Customized views
- Population management

Agile platform

- Multiple connection models
- Workflow integration
- Access and usability
- API and system integration

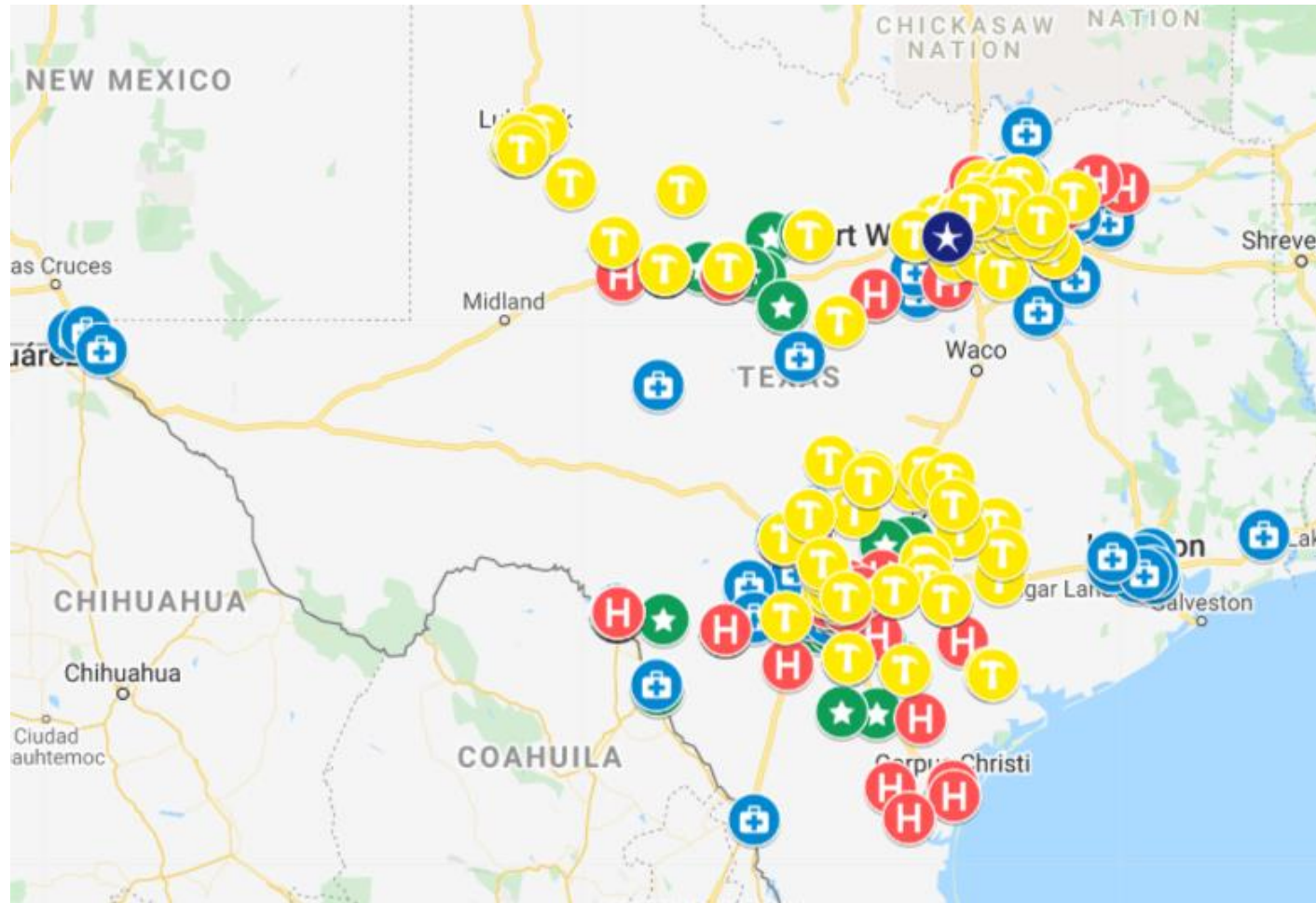
Community Partner


- Integrate with existing initiatives
- Local governance
- Complementary offering

Value Driven

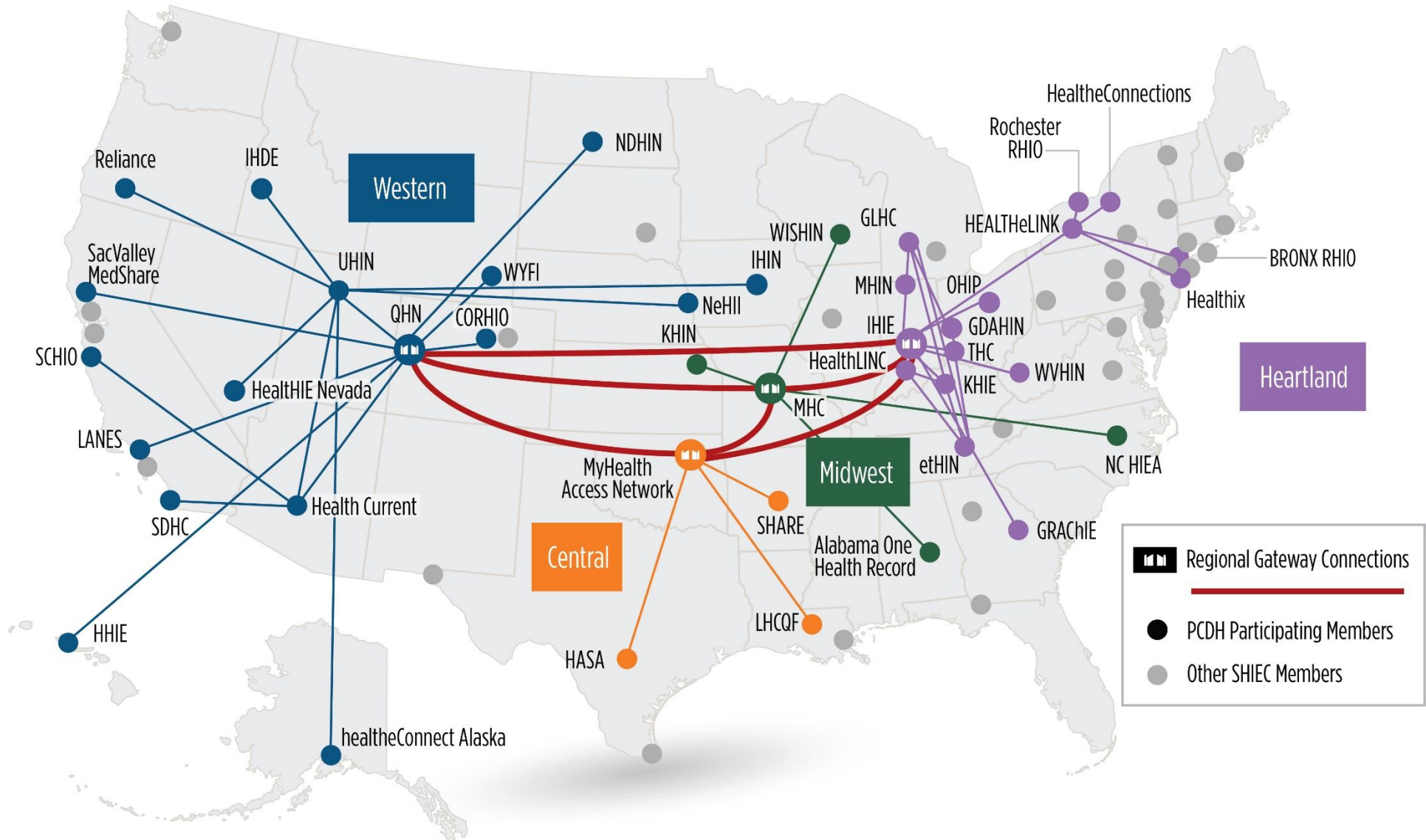
- Focus on local stakeholder business needs
- Manage utilization and ROI metrics
- One connection, all the data

HASA Data Contributors



-  Hospitals
-  Physicians
-  Implementations

9 million
unique patients



The eHealth Exchange

A rapidly growing network for securely sharing health information



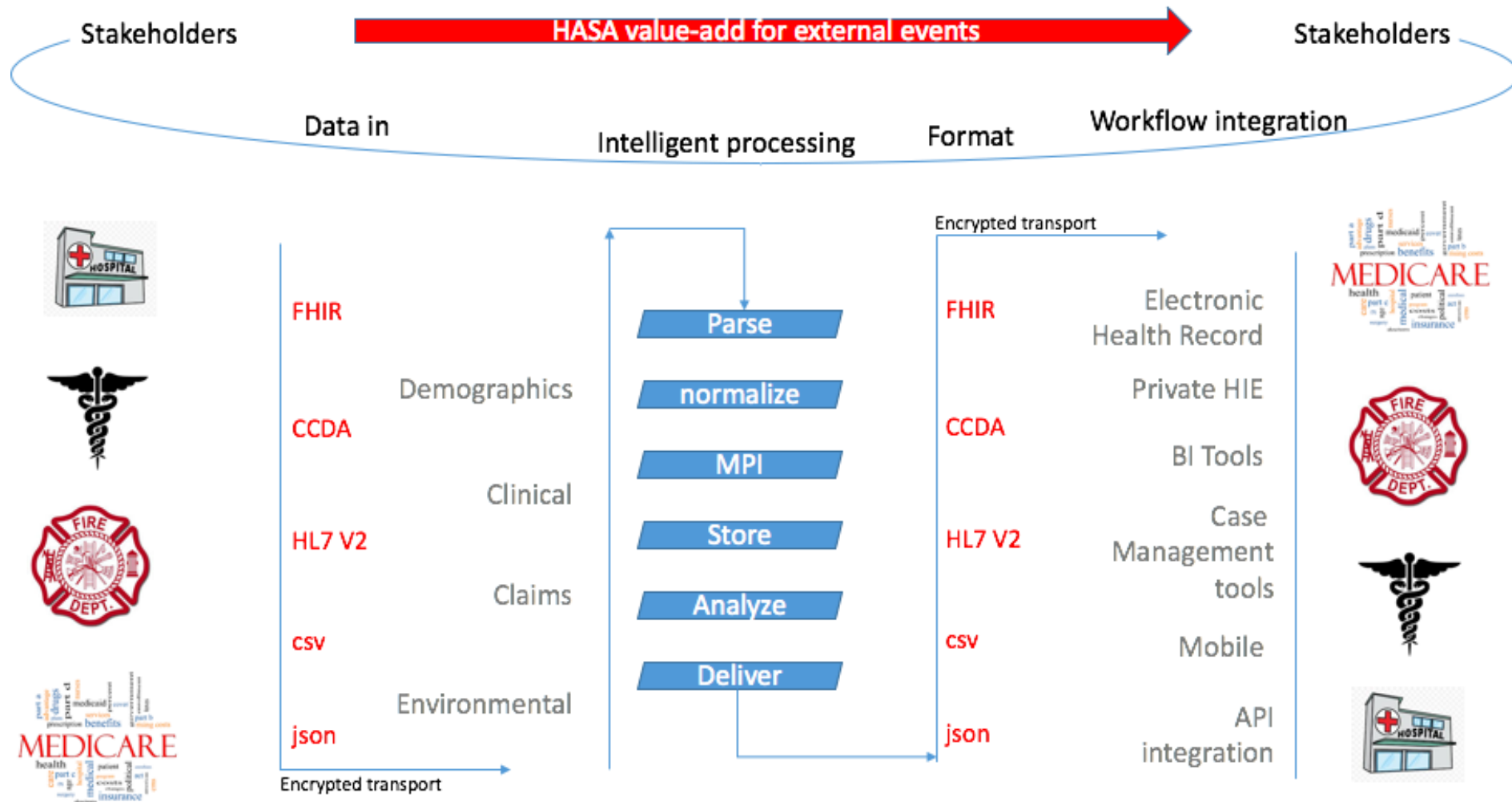
Shared Trust Framework

Common Standards, Specifications & Policies

eHealth Exchange An initiative of **the sequoia** project

DoD & VA connections

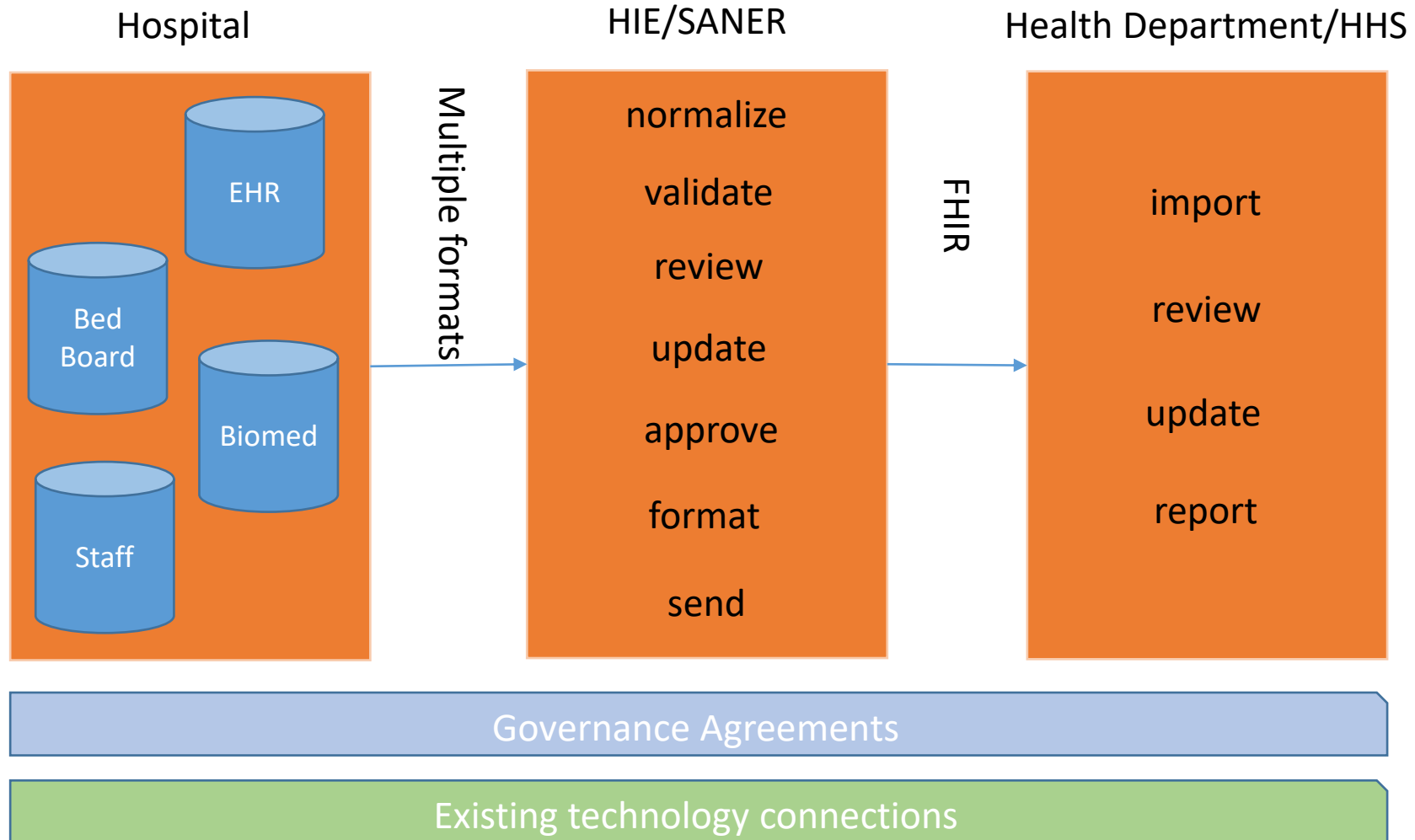
Integration Capabilities



Local Use Cases

- Reducing preventable admissions in high-risk pregnancies
- Tracking COVID-19 status on admission
- Vaccine forecasts in collaboration with UT Austin

STAR/SANER Technology Draft



Impact to Texans

- Reduce manual administrative burden of reporting
- Retain independence and control of report content
- Leverage existing infrastructure and agreements
- Faster access to data by public health informing community decision making to protect lives



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