Situation Awareness for Novel Epidemic Response

aka The SANER Project

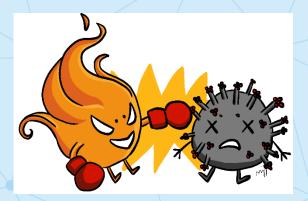
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10 Home Table of Contents SANER IO Content + Transactions + Content Profiles + Vocabulary + AtMact	t bedeer	
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Situational Awareness for Novel Epidemic Response - Local Development build (v0.1.0). See the threateny of pole	Pulled versions	
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The Situational Awareness for Novel Epidemic Response Implementation Guide enables transmission of high level repatient facilities to centralized data reposituries to support the treatment of novel influenza-like illness.	situational awareness information from About This Ge Organization	
1.1 About This Guide	This Guide	
This is a draft implementation guide to promote discussion with leaders in the Health IT industry, and very much a guide is subject to discussion and change.	a work in progress. All content in this Trigulary	lous
The goal of publishing this guide is to encourage the creation of a community interested in extremely rapid develo esourcees to Public Health in this time of orisis. Audacious Inquiry is publishing this material as follows:	opment of interfaces that can support communication Bed an	d other
This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License	(C) er er av	
We expect the licensing to be adjusted once community development commences.		
This implementation guide provides the FHIR Implementation materials associated with the SANER project.		
1.2 Organization of This Guide		
This guide is organized into four main sections:		
 Volume I: Overview - Provides an overview of the challenges this effort is trying to address. Technology Environment - Describes the technology environment for univitiated. 		
2. Architecture - Diustrates the Microservice Architecture		
3. Security Considerations - Documents security concerns and mitigations		
 Use Cases - Illustrates key use cases 		
5. Actors and Transactions - Provides an overview of technical components		
6. Using Group Resources (deprecated) - Explains the use of group in this guide		
2. Volume II: Transactions 1. Query Measure (PULL/TX)		
2. Produce Measure (PUSH-TX)		
3. Communicate Results (REPORT-TX)		
3. Volume III: Content Profiles		
1. Bed Measure Report		
2. Device Measure Report		
3. Bod Group		
4. Device Group		
5. bed-location		
6. Supporting Device		
7. Resource Location		
8. Audit Event Write		
9. Audit Event Read		
4. Volume IV: Terminology 1. SanerBedType Coding System		
2. BedLocationOperationalStatus Value Set		
3. BodProperty Value Set		
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Thick on any of the links above, head on over the table of contents, or if you are looking for a specific artifact, chec	ick out the index.	
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Fighting COVID-19 with FHIR



Problem Statement

Situational Awareness has been the focus of attention in health IT circles since the detection of potentially pandemic flu strains during the early formation of the Office of the National Coordinator.

- SARS in 2002
- H5N1 (Bird Flu) in 2006
- H1N1 (Swine Flu) in 2009

- MERS in 2012
- H7N9 (another form of Bird Flu) 2013
- SARS-Cov-2 in 2019

Key situational data needs to support awareness of:

- 1. Local, Regional and National case rates and trends
- 2. Bed availability for treatment
- 3. Other resource availability for treatment (e.g., Ventilators, Masks, Test Kits)

Past and Current Efforts

Past Efforts

- OASIS Open Hospital Availability Exchange (HAVE)
- ANSI/HITSP C47 Resource Utilization Message

• AHRQ HAvBED2





Current Efforts

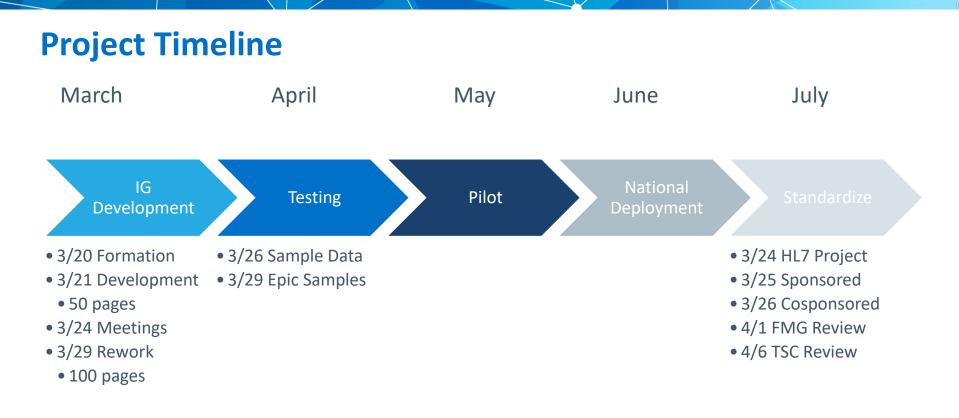
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- CDC Reporting Form
- Epic Measure Definitions
- Cerner Public Health Reporting

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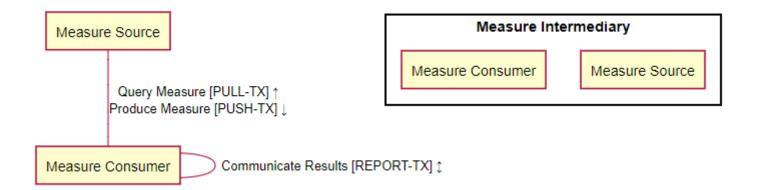


Participants

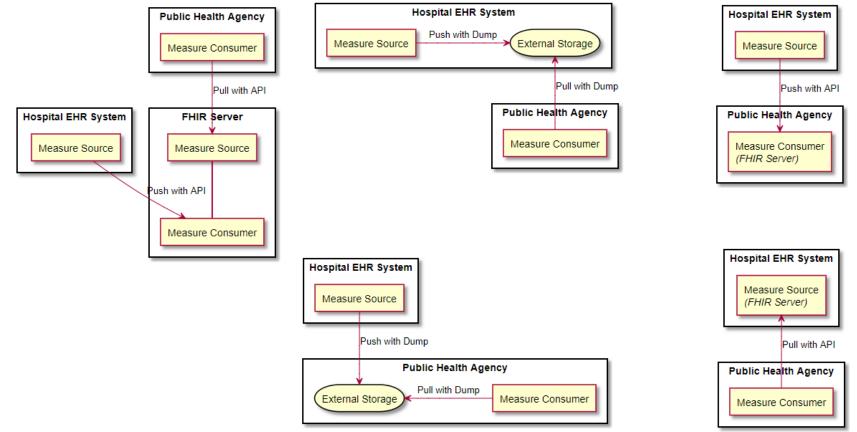
- Electronic Health Records
 - Cerner
 - Epic
 - Meditech
- Medical Equipment
 - GE Healthcare
- Health Information Exchange
 - Audacious Inquiry
 - Carequality
 - New York eHealth Collaborative
 - NextGen
 - Ready Computing

- Standards Development
 - Health Level 7
 - IHE USA
 - OASIS Open
- Gaps
 - Public Health Agencies
 - Hospitals
 - Universities
 - Geographic Information Systems (GIS)

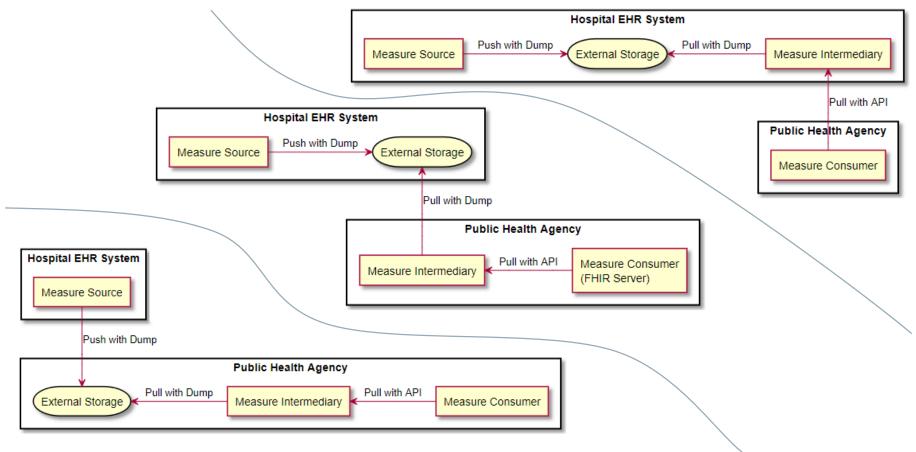
Architecture



Possible Deployment Models



Flexible Security Boundary



Accomplishments

- What we got:
 - Informed others about out project
 - Connected with Public Health Experts
 - Learned about Various Data Sources
 - Added context for non-Health IT Implementers to our Guide
 - Informed IG Architecture and Use Cases
- What we gave:
 - Informed others about HL7 FHIR[®]
 - Developed an understanding of the needs of the Innovator community
 - Shared Security Considerations with Others
 - Shared Data Sources we knew about

Thank You!

- About: <u>http://bitly.com/TheSANERProject</u>
- GitHub: <u>https://github.com/AudaciousInquiry/saner-ig</u>
 - Pages: https://audaciousinquiry.github.io/saner-ig/
- CI Build: <u>https://build.fhir.org/ig/AudaciousInquiry/saner-ig/</u>
- Meetings: <u>https://meetings.ringcentral.com/j/4801247062</u>