# Public Health FHIR-Works:

## Multi-Jurisdictional GitHub and FHIR Collaborations

WA Health Data Innovation Summit

August 18, 2023

# Agenda

**Review of WA DOH FHIR Applications (production)**

**Review of WA Infrastructure Project**

**Review of WA FHIR Pilots**

Situational Awareness

Death Data (PHSKC)

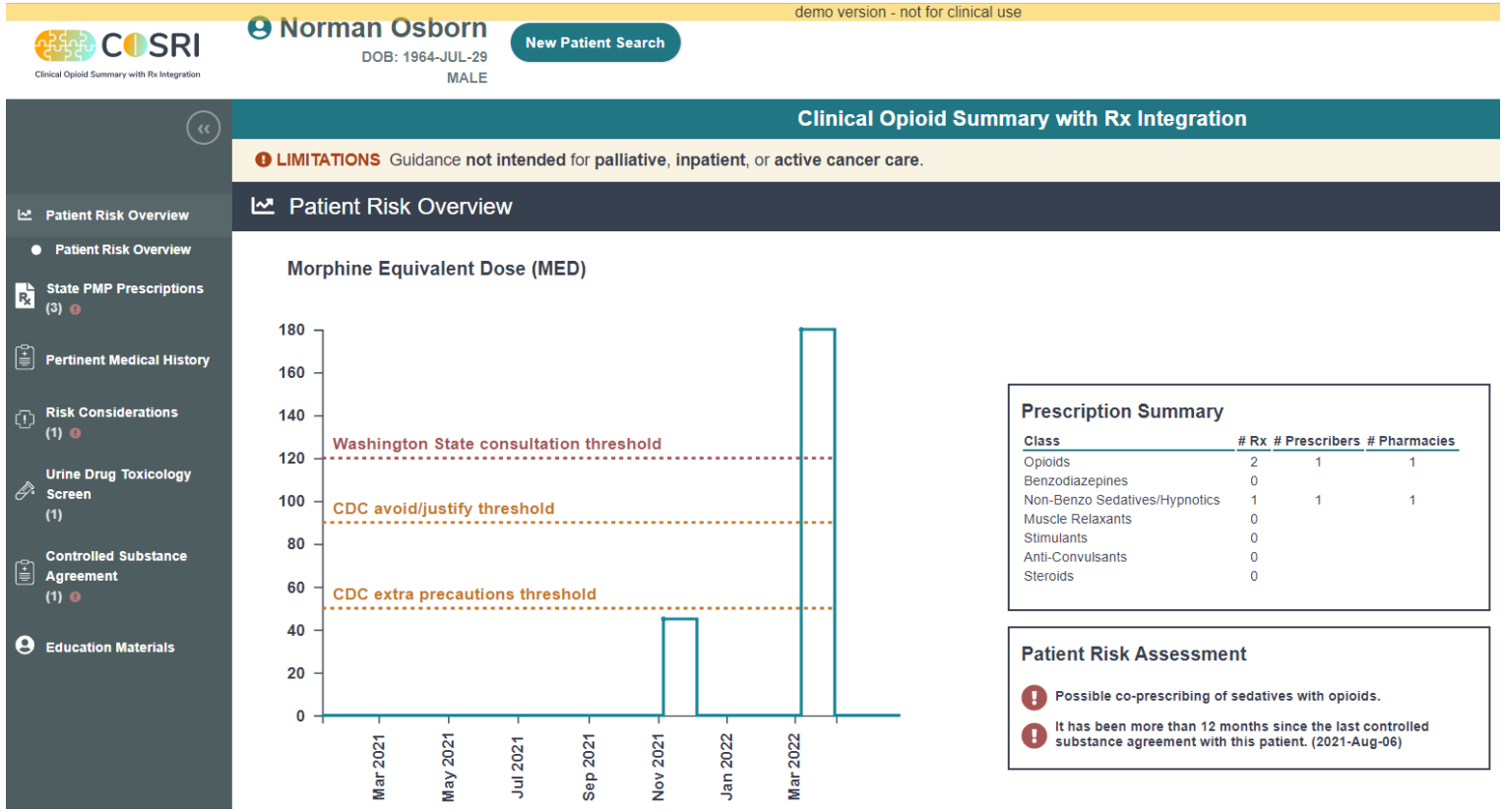
**Discussion (share FHIR)**

GitHub Demo

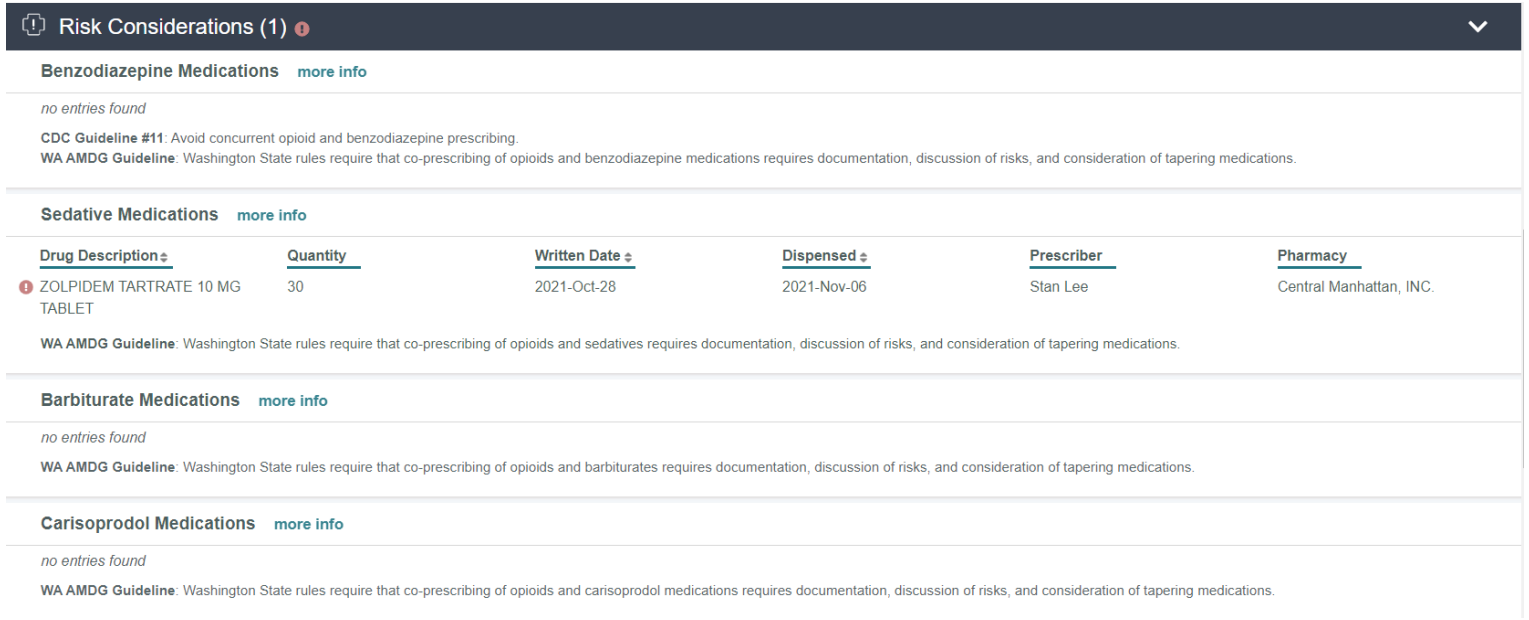
# COSRI - Clinical Opioid Summary with Rx Integration

- Prior to COVID the biggest Public Health threat was opioids.
- DOH partnered with the University of WA to develop a FHIR app to not only bring PDMP data into clinical workflow but to use clinical decision support
  - This includes the CDC Guidelines
  - It also includes state level rules for opioid Rx
- Demo: https://dashboard.cosri-demo.cirg.washington.edu/

# COSRI - Clinical Opioid Summary with Rx Integration



# COSRI - Clinical Opioid Summary with Rx Integration

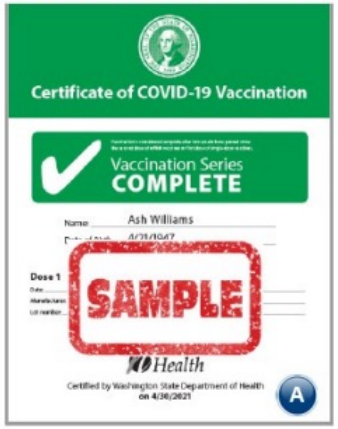


# Visual Guide to Official Washington State Proof of COVID-19 Vaccination

## CDC COVID-19 Vaccination Record Card

- Originals, copies or photographs on a mobile device are acceptable.
- Full vaccination is valid two weeks after last recorded dose:
  - Single dose for Johnson & Johnson (Janssen) vaccine.
  - Two doses of Pfizer-BioNTech/Comirnaty or Moderna vaccine.

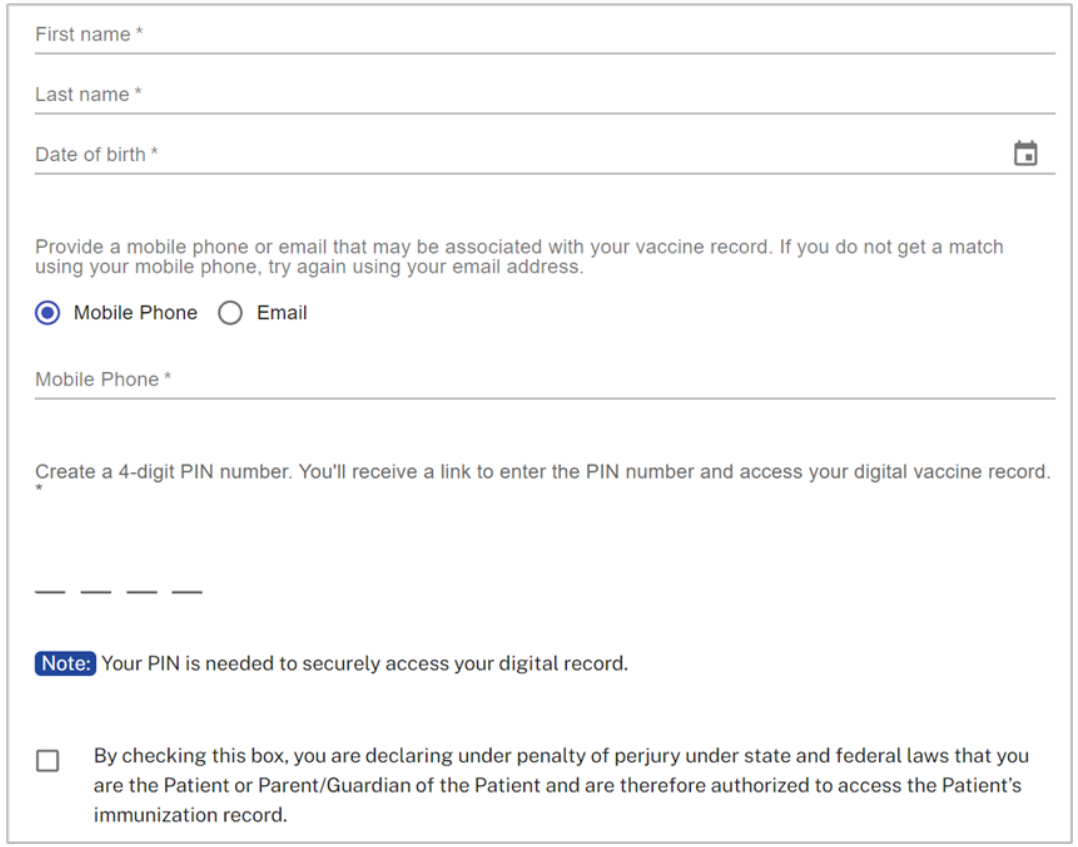
## Certificate of COVID-19 Vaccination or QR Codes



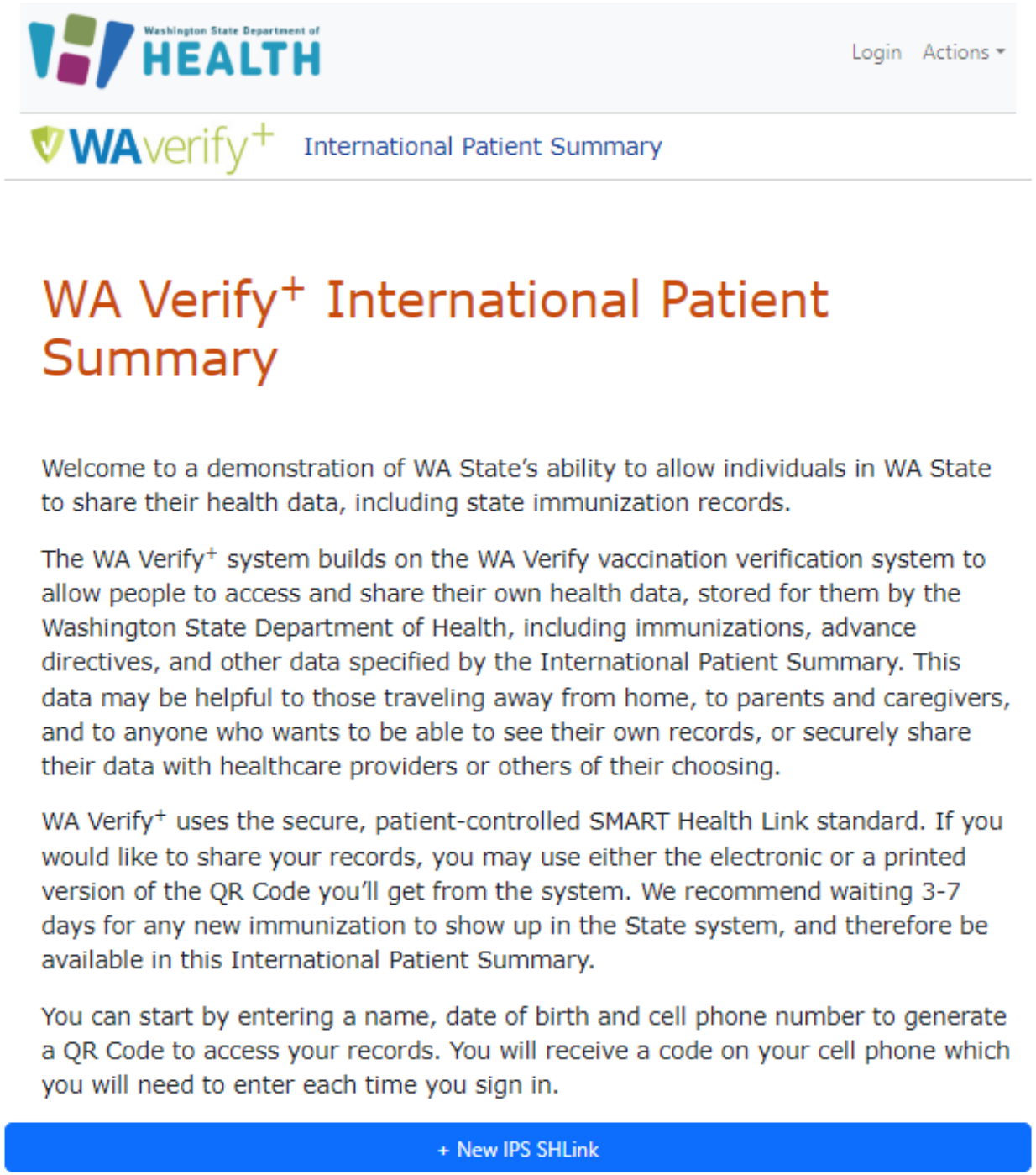

- **Sample A:** Certificate of COVID-19 Vaccination available from MyIRmobile.com.
- **Sample B:** WAverify.org SMART Health Card QR Code
- **Sample C:** QR Code displayed on an endorsed partner mobile app. (Apps may vary)

# WAverify.org

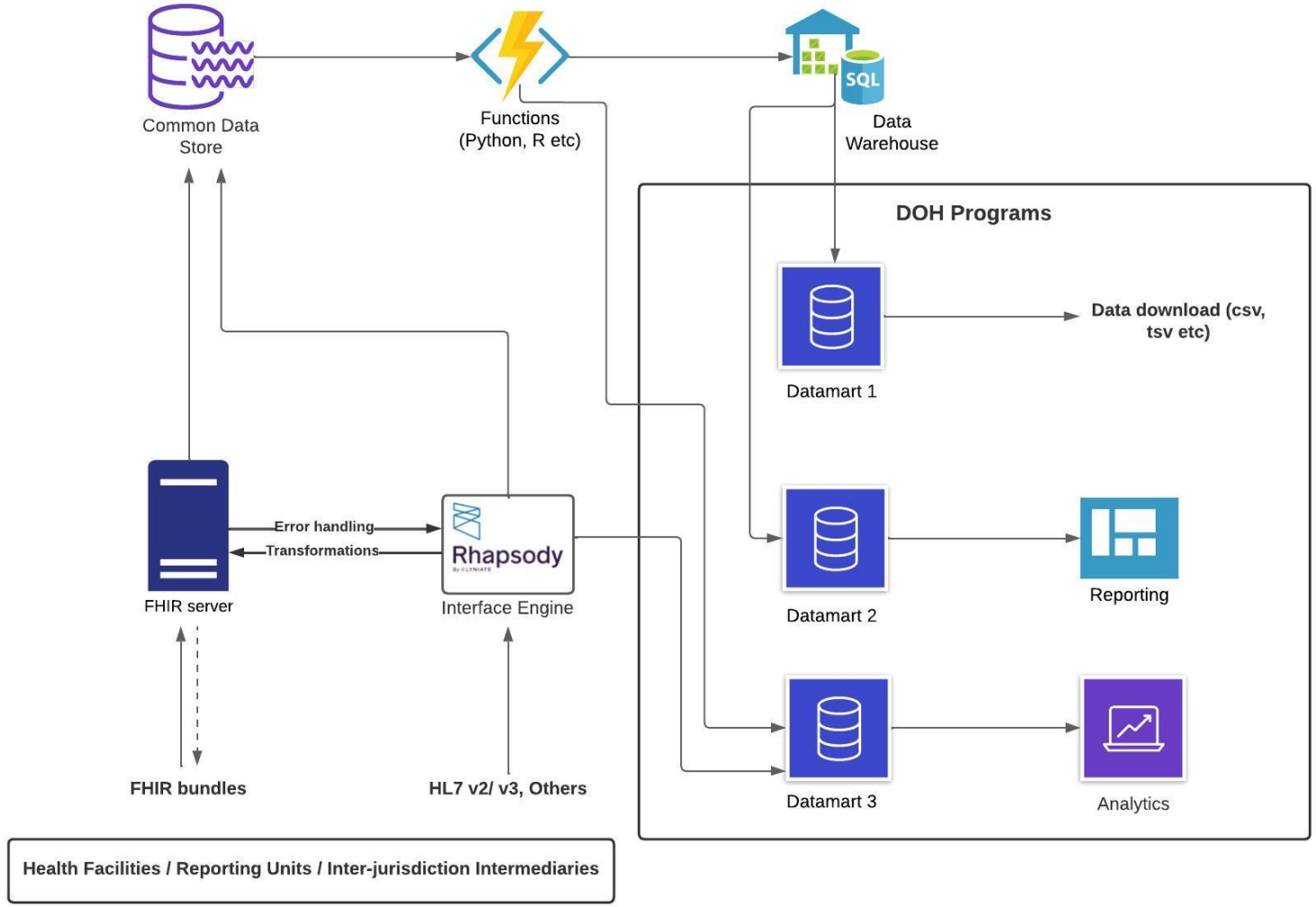
WAverify Digital COVID-19 Vaccine Record



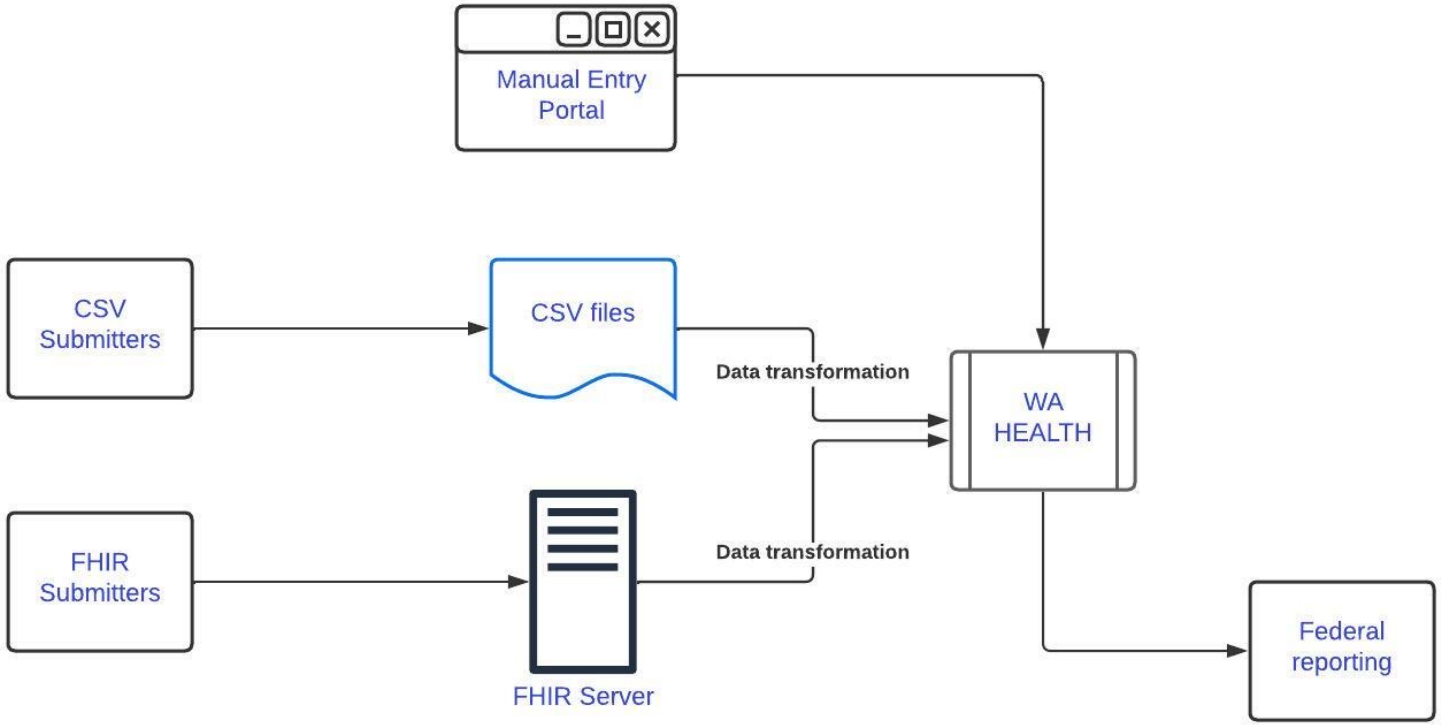
# International Patient Summary



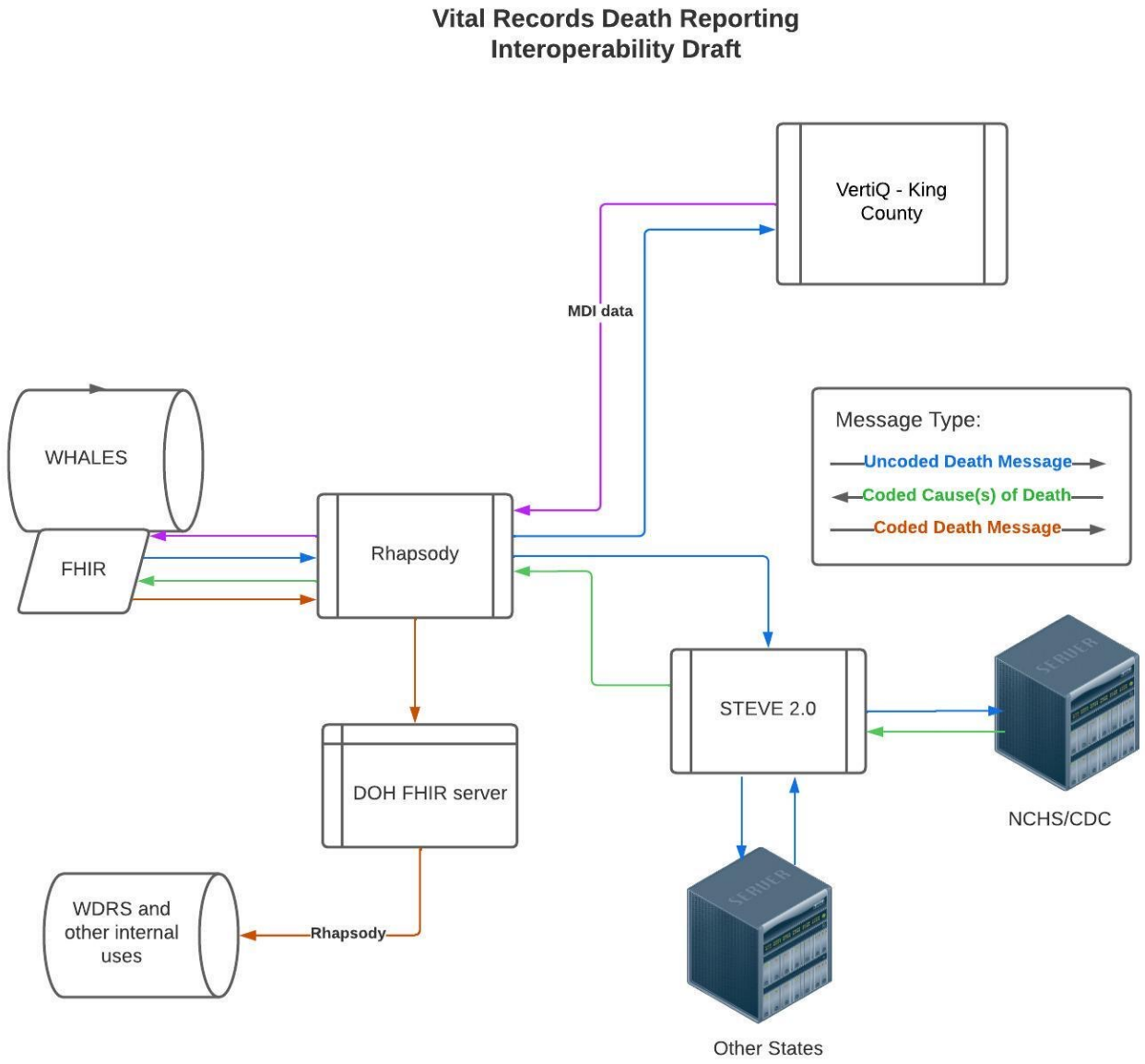
# Interoperability Infrastructure: High Level Conceptual Model



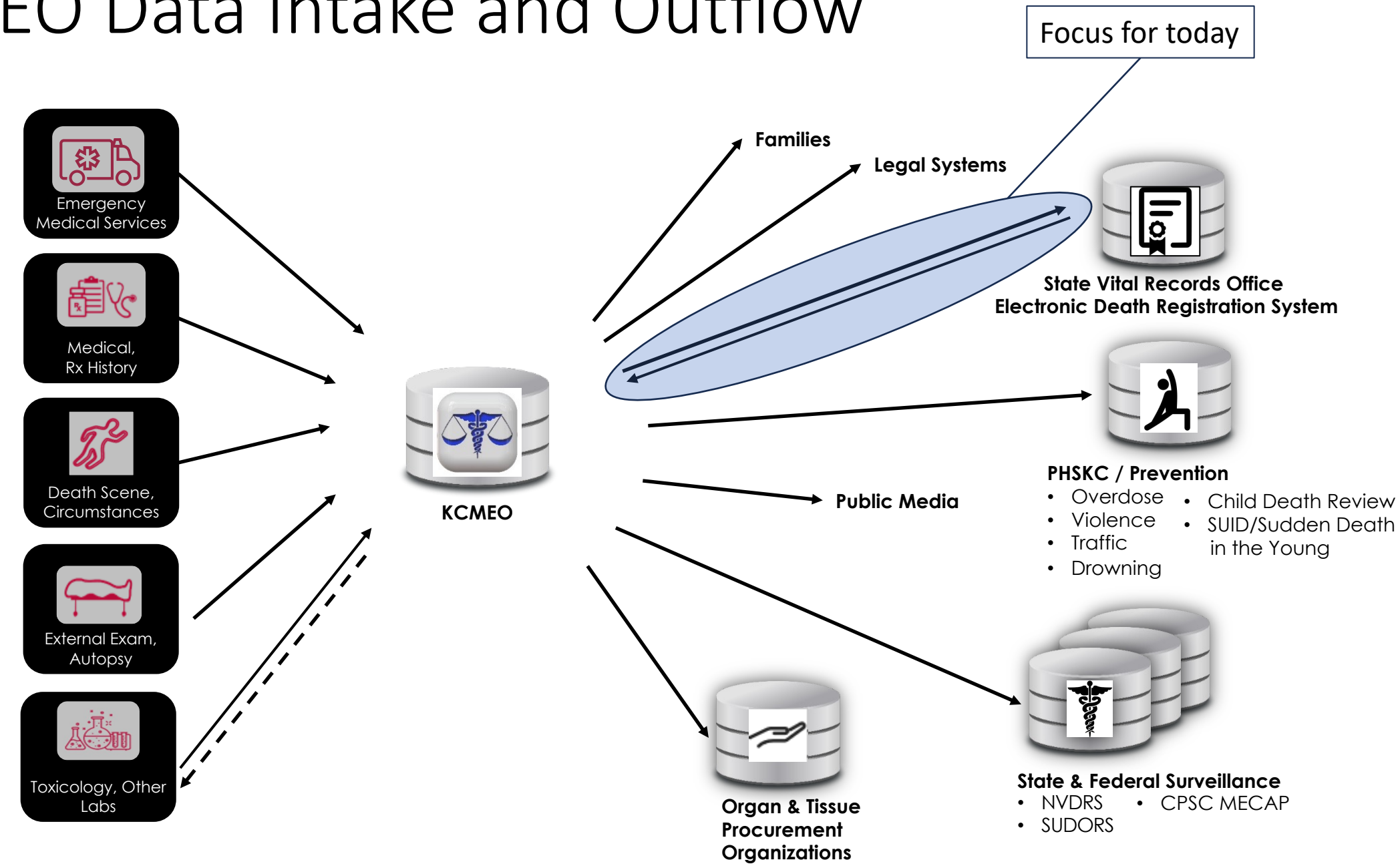
# Helios: Situational Awareness/ Aggregate Data



# VRDR Interoperability



# KCMEO Data Intake and Outflow



# Why did we say yes to this?

- Informatics team
  - Chance to build knowledge of standards in the health department
  - Lay the groundwork for more efficient data transfer

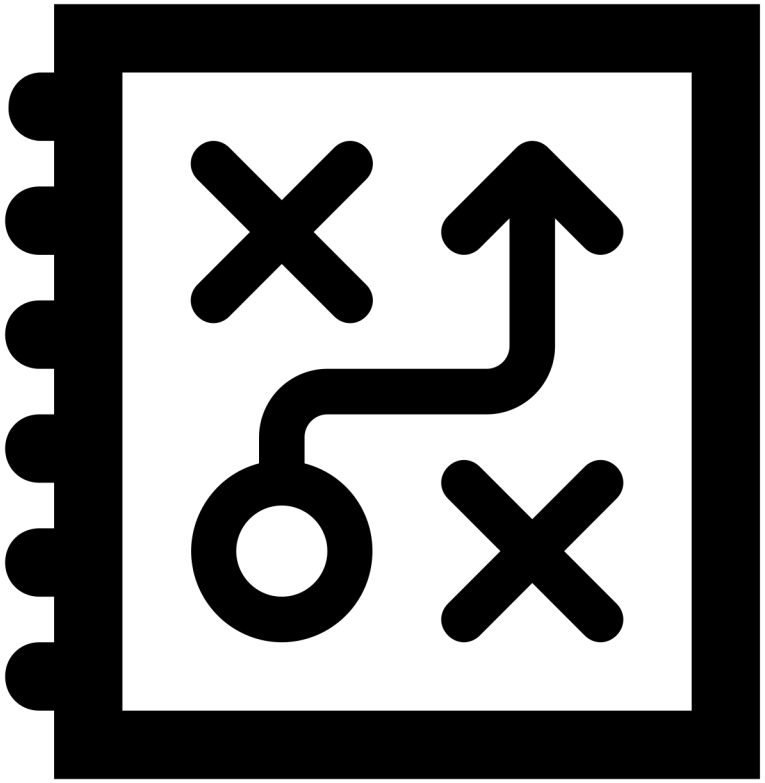
- MEO team
  - Because the existing system (EDRS) is going away
  - Will have to re-connect anyway

# Barriers to taking part

- Concern from program team about changing workflow at critical time
- Understanding what the change would entail (“What is FHIR?”)
- Finding time to work on project

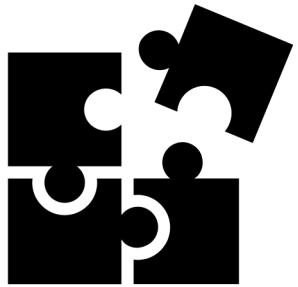
# What did we need to do?

- Work with vendor to set up FHIR API in test environment
  - Map data fields in existing connection to FHIR
- Develop test data for DOH to send
  - Create dummy records
  - Ensure that DOH can connect to API
  - Check that data come through as expected
- Communicate often with DOH team



# Experience so Far

Making good progress on moving to FHIR



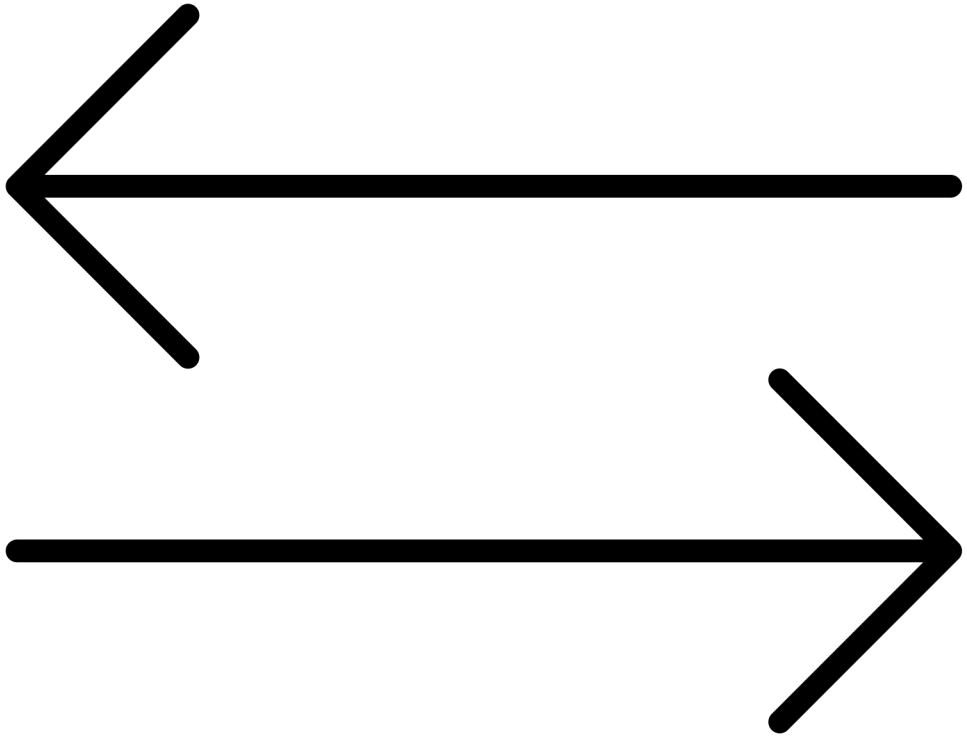
No-one holds all the pieces (MEO data and system needs, VertiQ/CME functionality, FHIR)

# What next?

- Continue testing messages from DOH Rhapsody
- Flick the switch
- Develop bidirectional transfer (phase 2)

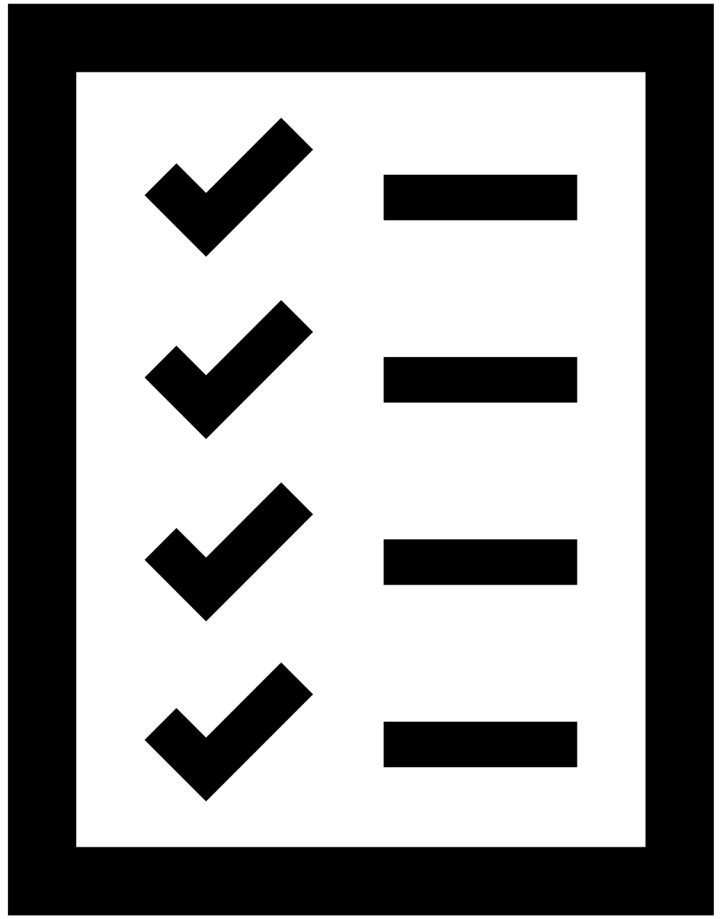
# Why do a second round?

- Build on new FHIR capacity
- Reduce duplicate entry (into KCMEO system and then DOH system)
- Make a more compelling example for other health jurisdictions



# What is needed this time?

- PHSKC with vendor to set up FHIR client to send
- DOH set up FHIR server to receive
- Map data fields to FHIR
- Develop test data to send
  - Create dummy records
  - Ensure that we can connect to DOH
  - Check that data come through as expected
- Train KCMEO staff on new workflow
- Communicate often with DOH team



# Other FHIR plans/dreams

- Use FHIR to receive toxicology lab results
- Set up a FHIR connection between DOH and PHSKC (and other LHJs) for vital records
- Send/receive data from healthcare providers

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# Acknowledgements


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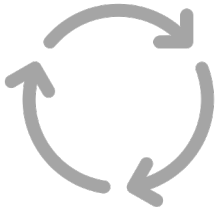
- Cole Deming
- Eric Kruger
- ASTHO
- UW CIRG & SOPH
- Altarum

# Sharing the FHIR

How do we collaborate on projects to be more efficient?



How can we share enhancements?

What systems/code could we share?

# Thank You

Washington State Department of HEALTH

Public Health
Seattle & King County

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