



Advancing Data Modernization in Washington State



Michelle Campbell,
MSHI

Director
Data Modernization and Informatics
Washington State Department of
Health



Janet Baseman,
PhD, MPH

Professor
Department of Epidemiology
University of Washington School
of Public Health

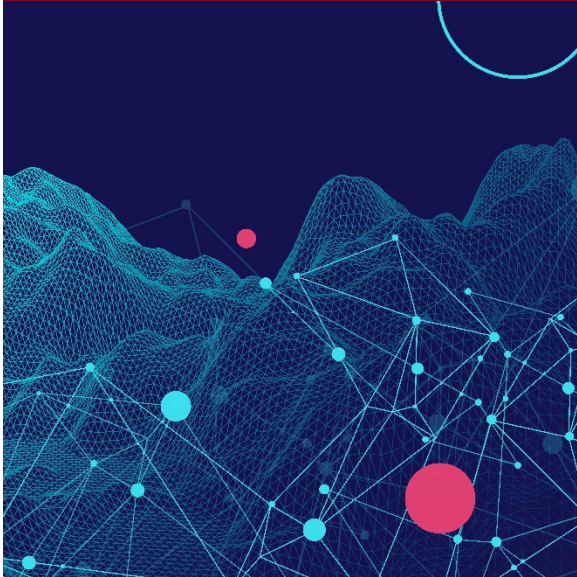
Question for the Viewers



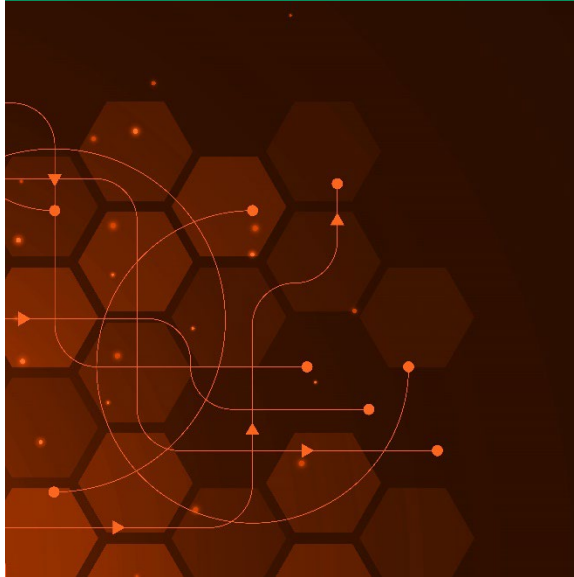
How would you describe your familiarity with the CDC's data modernization initiative?

- A. Very familiar
- B. Somewhat familiar
- C. Not familiar
- D. Other (type in chat)

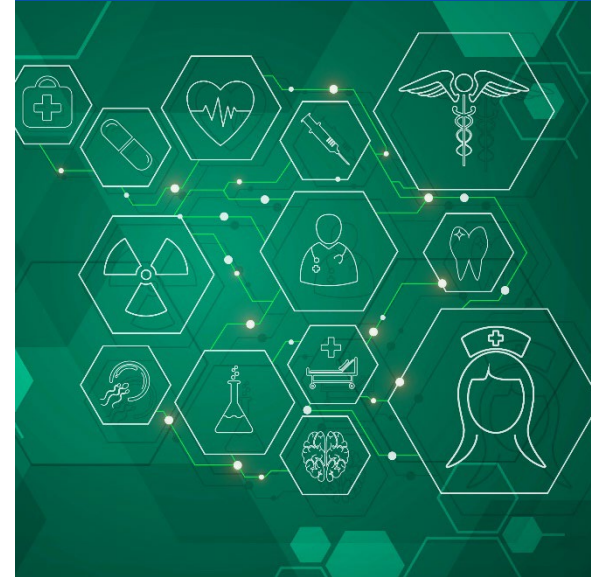
Data Modernization Initiative: An Overview



Findings and Recommendations



Where to Begin: Actions and Next Steps



Data Modernization Initiative: An Overview

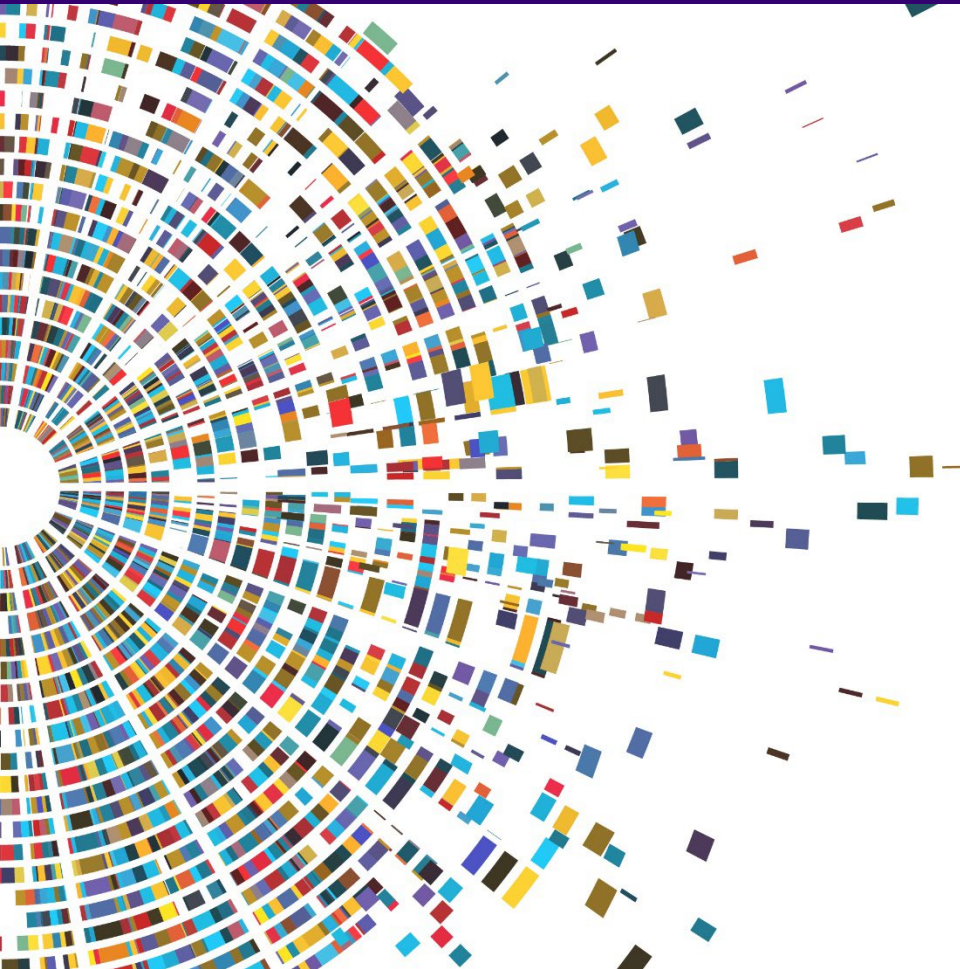


A close-up photograph of a silver stethoscope resting on a white document. The document features a blue bar chart in the upper left and a blue line graph with circular markers in the lower left. The word "June" is partially visible at the bottom of the page. The stethoscope's chest piece is prominent in the foreground, and its tubing loops across the top of the frame.

Introduction and Background

- **CDC's Data Modernization Initiative (DMI)**
To accelerate data and health information system modernization efforts and improve public health outcomes by increasing the timeliness of public health response.
- **WADOH's Data@Health Initiative:**
Modernize disease surveillance systems and the overall health information system infrastructure with improved data management, governance, and analytics capabilities.

DMI Priority Areas



- ✓ Build the right foundation
- ✓ Accelerate data into action
- ✓ Develop a state-of-the-art workforce
- ✓ Support and extend partnerships
- ✓ Manage change and governance

How it Started



- WADOH Completed **Public Health DMI Assessment in Fall 2021**
- CDC requested additional/clarifying information
- WADOH asked University of Washington/Northwest Center for Public Health Practice to assist with CDC request

The Expanded DMI Assessment

- UW expanded on the original DMI assessment survey to focus on data infrastructure, systems, and workforce
- UW conducted a comprehensive assessment across WA including a sample of LHJs
 - **Purpose: to learn more about workforce training needs as they relate to DMI goals and objectives**
 - Developed semi-structured interview guide
 - Perceptions on interactions with DOH systems
 - Workforce needs and capacity-building
 - Training priorities to support data modernizations
- 30 staff at DOH and 38 staff from 13 LHJs participated in interviews



Findings and Recommendations

Gap Analysis

Gaps were identified as instances where state and local key respondents identified resources, infrastructure, or processes that did not align with or support the CDC DMI priority objectives

Gap Analysis Protocol:

- Understand the current state of surveillance systems
- Capture insights and recommendations from users to define the desired end state
- Conduct gap analysis to reveal differences between the current and desired states
- Develop recommendations to close identified gaps & prioritize next steps

Gap Analysis – Overall Findings

To progress toward DMI goals we need:

- Improved interoperability and break down of unnecessary data silos
- Reduced burden on end users to move data into action
- Adequate staffing, training, and workforce support to tackle burnout
- Meaningful engagement between DOH and LHJs
- To prioritize communication, change management, and governance

Priorities

URGENT

TO DO

EVI

- DMI strategy and governance
- Laboratory data exchange
- Cloud analytics
- Data visualization
- Partner engagement
- Data governance and data democratization

Workforce Development and Training Recommendations



- Develop a workforce development plan
- Establish business processes and organizational structure to support workforce development plan.
- Identify a DMI workforce development lead.
- Implement a robust data science training program
- Prioritize existing training resources to fill well-known training gaps
- Develop a DMI training and workforce development communications strategy.

Question for the Viewers



Which of the following would you consider the highest priority for you/your organization?

- A. Improved interoperability and break down of unnecessary data silos
- B. Reduced burden on end users to move data into action
- C. Adequate staffing, training, and workforce support to tackle burnout
- D. Meaningful engagement between DOH and LHJs
- E. To prioritize communication, change management, and governance
- F. Not sure
- G. Other (type in chat)

Where to Begin: Actions and Next Steps





Key Competencies Considered

- de Beaumont Foundation's Public Health Strategic Skills
- CDC DMI Competencies
- Proposed UW Curriculum for Applied Data Science in Public Health

Learning Framework and Plan

- Public Health Learning Agenda Framework
- Focused on Impact Level 1 (learning for knowledge change)



Three-part Webinar Series Pilot:

- **Part 1:** Introductory overview of data science and its application in public health practice
- **Part 2:** LHJ data science case study
- **Part 3:** DOH data science case study

Curate Existing Training Materials

Introduction to Data Science for Public Health



Public Health
DATA LEARNING CENTER

- 3-part webinar series pilot
- Topic areas determined via discussion with DOH
- Sessions included topic presentation and Q&A session
- Post-session and post-series evaluations

Curated Training Resources



Justice, Equity, Diversity, and Inclusion



Strategic Communications



Change Management



Public Health Basics



Systems Thinking



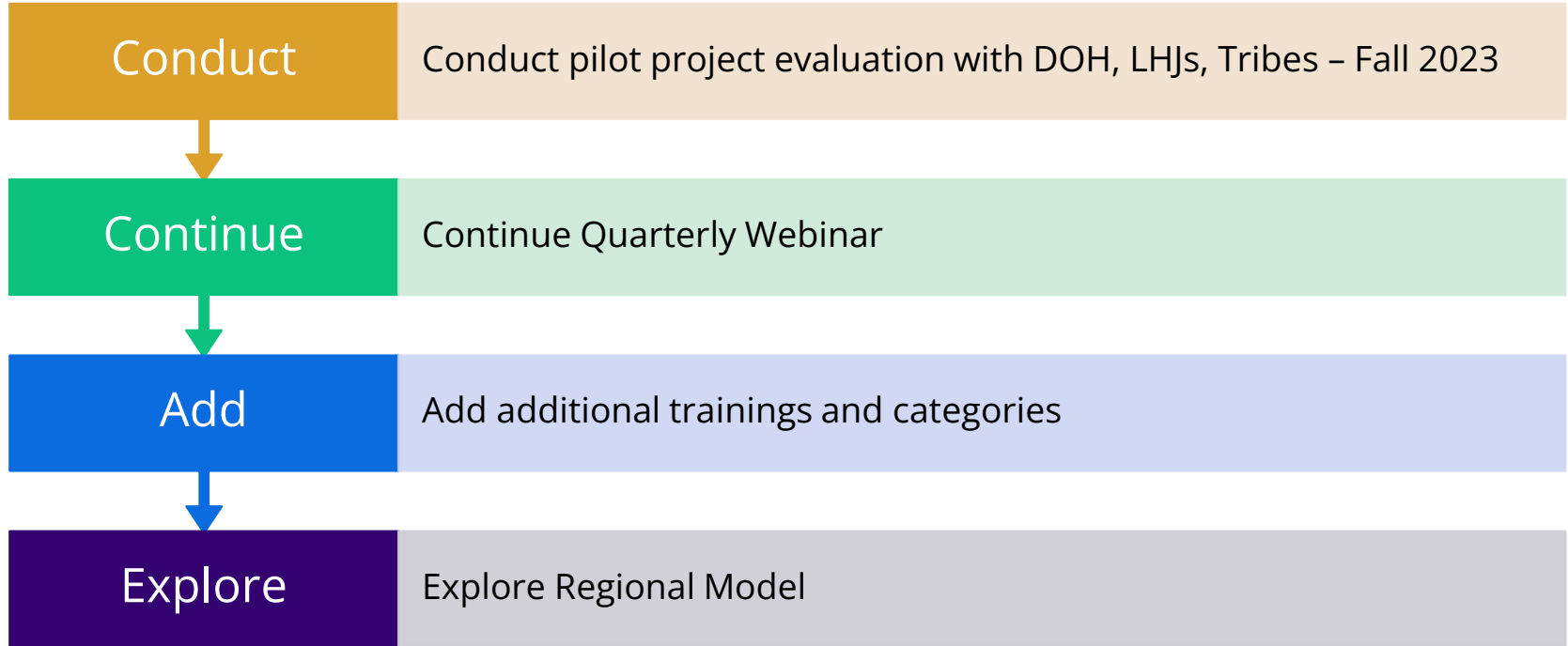
Technical Data Skills

Public Health Data Learning Center Website



- Design and build a public-facing website for the Public Health Data Learning Center
- Determine website requirements → Build and launch website → Evaluation

Next Steps



Key Takeaways

- To successfully implement data modernization, we must invest in people, processes, and technology.
- Communication and collaboration between DOH and LHJs and other partners are critical to identifying priorities for data modernization.
- Workforce development priorities identified by DOH and LHJ participants include effective communications, systems thinking, leadership skills, and improving policy knowledge.

A Chat with Janet Baseman and Michelle Campbell



Sue
Grinnell



Janet
Baseman



Michelle
Campbell

QUESTIONS?

To ask a question, please click the



icon in the Zoom toolbar to open your Q&A Pod.

CDC Data Modernization Initiative

<https://www.cdc.gov/surveillance/data-modernization/index.html>

WA DOH Data Modernization Initiative Project Planning

<https://doh.wa.gov/data-modernization-initiative-project-planning>

Public Health Data Learning Center Website

www.phdatalearn.uw.edu