

DDPHSS-DMI Consortium Meeting: Executive Summary January 25, 2023

Purpose

The purpose of this session was to seek individual perspectives and experiences, not group consensus advice, to inform planning, engagement, and strategies in the identification and development of sustainable and efficient solutions for interoperable and streamlined data flows, shared solutions, and health data analysis for public health purposes.

This meeting was convened as a group of multisector public health partners (government, public health, industry) to increase dialogue, prioritize goals, and vet real life solutions to achieve a desired future state PH data ecosystem that provides timely, secure, adaptable access and transfer of data and information to effectively drive public health action.

Center for Forecasting and Outbreak Analytics (CFA) Update

Presenter(s): Dylan George

CFA Functions in Detail



PREDICT

- Forecasting and scenario modeling
- Outbreak analytics
- Critical data collection



INFORM

- Decision support for federal and STLT partners
- General public risk communication
- Data visualization



INNOVATE

- Science / contract management
- Product development – applications, enterprise
- Test beds – STLT, payer/provider

Dylan George, Director of Operations at CDC’s Center for Forecasting and Outbreak Analytics (CFA), provided an overview of the process of standing up the Center and how its mission ties into CDC’s DMI goals. Dr. George outlined three primary functions of the Center, including Predict, Inform, and Innovate. Across these Divisions, CFA aims to generate forecasts and analyses, support data collection efforts, and respond to public health leadership needs while communicating appropriately and coordinating early warning efforts. The overall analytical architecture goals of CFA include providing a flexible environment for modeling and data science and enabling scalable model execution. Initial workflows and products have included forecasting and scenario models, support to analytical response teams, a cloud-first scalable virtual desktop infrastructure, and various technical reports. Dr. George emphasized the importance of strong partnerships within the Center and how DMI solutions are critical to CFA’s success.

Building Blocks Focus Groups Final Summary

Presenter(s): Jill Fromewick, Anne Millsbaugh



Desired outcomes by lifecycle stage

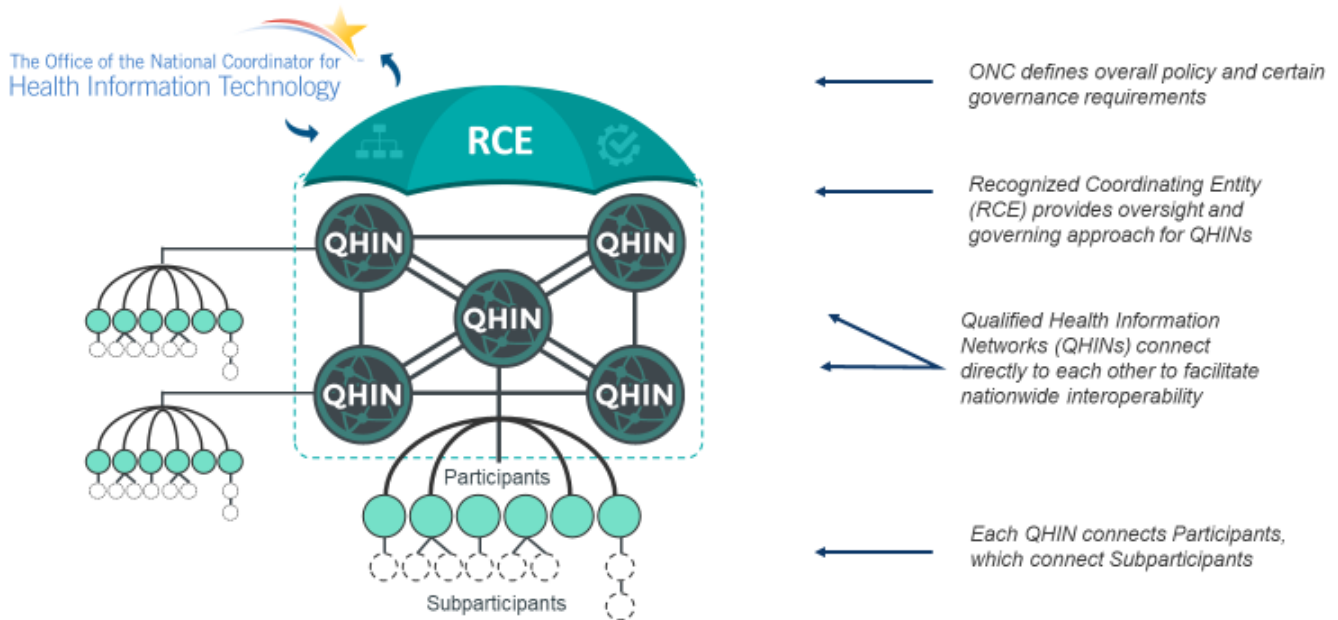
Data Access + Collection	Data Orchestration	Data Storage	Data Cleansing + Integration	Data Analysis + Visualization	Dissemination + Sharing
Access to timely data	Client-centered, customizable technology	Integrated storage platforms	Automated data cleansing	Identifying disease patterns	Improved data sharing within / between jurisdictions
Less manual data entry		Better tools to access analysis-ready data	Standardization of data across systems	Consistent case definitions	
More complete data		Flexible storage systems	Robust geocoding capabilities	Enhanced staffing, skills, and tools	
Better systems for provider screening / reporting					
Interoperable data collection and reporting systems					
Improving access to local data					
Modern data systems					

CDC and USDS representatives provided an overview of the Building Blocks Focus Groups, including a preview into the insights gained and recommendations for utilizing the Building Blocks to address resulting desired outcomes. Representatives described desired outcomes by the data lifecycle stage (data access and collection, data orchestration, data storage, data cleaning and integration, data analysis and visualization, and dissemination and sharing). Recommendations provided center around a modular, microservices approach, and encompass both architecture (e.g., high-bandwidth entry point for data ingestion, serverless cloud functions, event-driven ingestion pipeline) and building blocks (e.g., record linkage building block, case identification building blocks, location services building block). Representatives emphasized the need for user buy in to move away from legacy systems, and encouraged members to reach out to dmibuildingblocks@cdc.gov with any inquiries.

CDC, STLTs, Public Health in TEFCA

Presenter(s): Ryan Argentieri, Rachel Abbey, Heather Dennehy

TEFCA will be a Nationwide Network of Networks



77

Representatives from the Office of the National Coordinator for Health Information Technology (ONC) discussed the various priorities between ONC and CDC to improve data interoperability, including FHIR API, USDCI and USDCI+, and TEFCA. Speakers emphasized TEFCA to be a nationwide network of networks, with exchange purposes authorized under the Common Agreement to include treatment, payment, health care operations, public health, government benefits determination, and individual access services. Speakers discussed the benefits for public health authorities, including supporting public health reporting, facilitating bidirectional exchange within public health, facilitating emergency preparedness and response, and augmenting state-level information exchange initiatives. Members were encouraged to participate in TEFCA information sessions (upcoming session on February 13) and to participate in a cohort of early adopters to develop proposals for input by the broader public health community.

STLT Guidance Follow Up

Presenter(s): Mike Judd

As a follow up to the previous DMI Consortium Meeting, CDC representatives reviewed draft potential actions for STLTs to align with the North Star Architecture, accelerate “Response Readiness,” and identify forums to stay connected. Members provided feedback on the draft, high-level infographic, which outlined potential high-level actions (building the right foundation, accelerating data into action, developing a state-of-the-art workforce, supporting and extending partnerships, and managing change and governance) with corresponding timing (immediate, near-term, longer-term, relative to a STLT’s modernization journey).

For questions regarding the CDC DDPHSS-DMI Consortium, please contact DMIconsortium@cdc.gov.