Building Data Infrastructure Capacity in Local Jurisdictions

Office of Public Health Data, Surveillance and Technology (OPHDST)

Centers for Disease Control and Prevention (CDC)

Our **vision** expands on **modernization** efforts and focuses on *critical* components to advance data for public health action to *equitably* protect health, safety and security.

Robust Infrastructure Enables the Vision

From Pain Points	To Solutions

Disconnect between public health and health IT…

Robust Early Warning Systems that almost immediately tell you who in the exposed cohort is susceptible

Siloed systems…

Integrated Platforms and Networks to identify patterns across jurisdictions, alerting you to look a littler deeper

Manual processes, **outdated** technology, and **lagging** skills…

Response Ready Ecosystem to pinpoint subpopulations at highest risk for morbidity and mortality, driving health equity into early public health actions

Hypothesized future: data exchange architecture
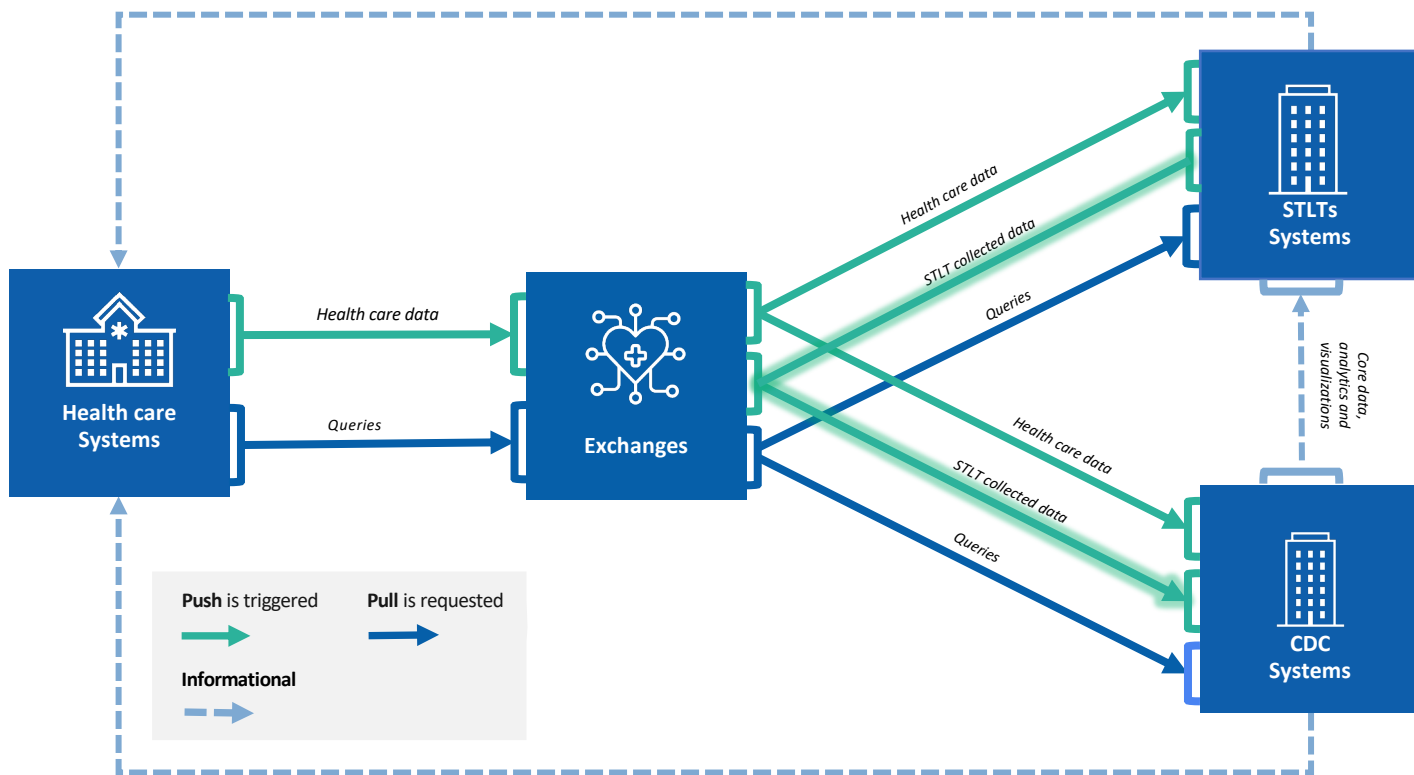
Connecting the Key Components of Data Interoperability

2024 Targets

eCR and query via TEFCA for near real-time reporting & investigations

2024 Target: 75% of reportable conditions reported by eCR; 40% CAH coverage

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Increase coverage of syndromic surveillance to ~100% of ED visits

2024 Target: 95% ED visit coverage; continued improved visualization

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~75% state & big city public health jurisdictions and CDC using TEFCA

2024 Target: Two public health use cases live

Broad adoption of FHIR® for most core data sources and across jurisdictions

2024 Target: FHIR® adoption for NVSS and health care measures

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Broad adoption of USCDI and USCDI+ across public health

2024 Target: USCDI/+ adoption for case and lab data

Leading to:

- Near real-time reporting and investigation of novel and serious health threats.

- Faster detection of common public health threats and outbreaks.

- Better insights into chronic disease conditions and trends.

- Nationwide real-time monitoring of public health threats.

- Faster sharing of information back to HC, improving clinical decision-making and patient safety.

Cross-Cutting Infrastructure Capabilities

Collection of data about your community and individuals in your community

Ability to use those data to generate insights and direct public health action

Sharing data to contribute public health knowledge across jurisdictions and identify threats

Tools and Options for Local Jurisdictions

Leverage Existing Resources

- Opt in to products and solutions provided at the federal and state levels
- Take advantage of pre-tested, widely supported infrastructure
- Reduce need for specialized resources
- Ensure compliance and interoperability with broader systems by using established platforms and tools

Supplement with Tailored Solutions (as needed)
- Pursue tailored functionality with sufficient financial and human resources
- Maintain connection and compatibility with general infrastructure

Existing Programs Support Infrastructure Development

Data Integration Building Blocks (DIBBs) team

DIBBs provides an interdisciplinary team to work with your jurisdiction on data challenges and to integrate with modern infrastructure

National Electronic Disease Surveillance System Base System (NBS)

CDC-developed system to help local, state, and territorial public health departments manage reportable disease data and send notifiable disease data to CDC

SimpleReport

Free service that automatically converts your data into required format for public health reporting

# Invest in Building Healthier Cities

Enhance Preparedness and Response

Effective public health infrastructure allows for rapid response to health threats, preventing the spread of disease and reducing mortality

Promote Equity and Accessibility

Strong public health infrastructure helps bridge disparities between populations and ensure that services reach those most at risk

Avoid System Overload

In densely populated areas diseases spread quickly, and health services can be overwhelmed without robust infrastructure

Deliver Long-Term Sustainability of Public Health Data Systems

Regular updates and maintenance of health databases and systems allows for better tracking of trends and more informed policy
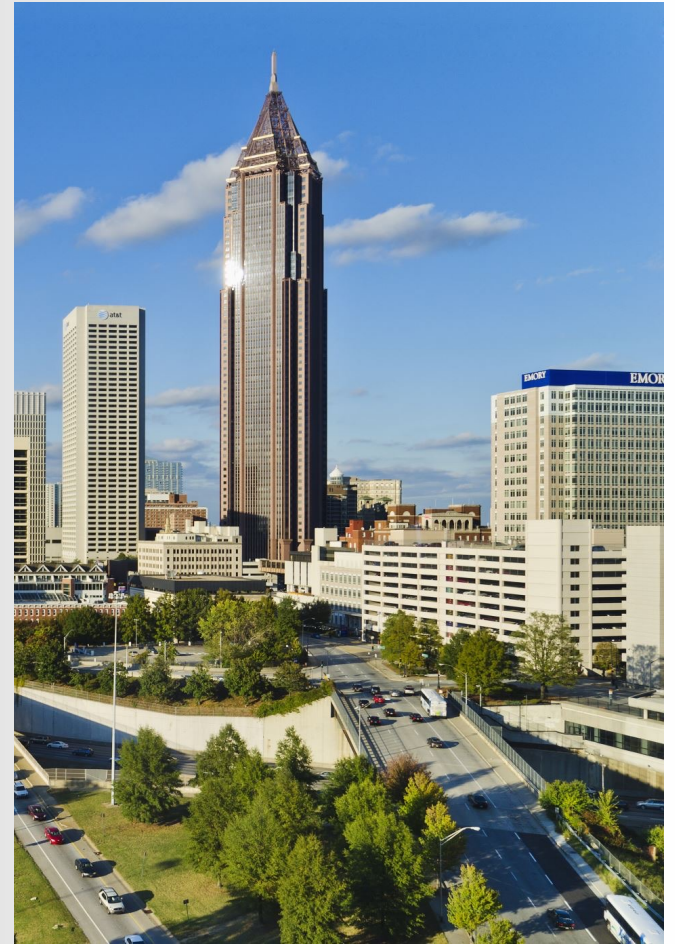
Managing Change Along the Way

Identify Key Participants
Figure out who might be early adopters, influencers or nay sayers

Communicate Clearly and Often
Linking the improvements in data infrastructure directly to enhanced outcomes and streamlined workflows

Empower Through Training
Offer comprehensive training and support to ensure all staff are equipped to utilize new systems and processes effectively

Build a Feedback Loop
Establish continuous feedback mechanisms that involve all levels of staff, enabling adjustments and fostering a sense of ownership over the changes

*For additional information about managing change explore the Prosci Change Management Resource Center online.

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348   www.cdc.gov