Surveillance Data Platform Shared Services - A CDC Surveillance Strategy Initiative

The Public Health Need for Surveillance

CDC's mission to protect and support American population health requires vigilant, effective, and responsive surveillance of public health data. Collaborative agility is needed throughout the surveillance process, to ensure that both CDC and its public health partners at local, regional, state, territorial, tribal, national, and international levels can track and respond to critical health trends and threats swiftly, accurately, and efficiently.



The Surveillance

Data Platform and Shared Services Initiative

In 2014, CDC initiated a Surveillance Strategy to improve its public health data surveillance capabilities, and by extension those of the public health system at large. In early 2016, CDC launched the Surveillance Data Platform (SDP) Initiative as part of these capability-building efforts to provide shared services to CDC programs and public health partners. Currently in phase 1 of a multi-phase development process, SDP will operate as a virtual platform of shared services to

Shared Service

is defined as people, process, or technology that fulfills a common need that is used by more than one CDC program or partner, enabled to be sharable, scalable, and standardized.

Platform

is defined as a virtual environment making measurable and reusable services available to users.

- Enhance CDC and partner abilities to securely parse, prepare and share data;
- Reduce reporting burdens on internal CDC programs and external partners;
- Improve data surveillance efficiency in public health efforts; and
- Optimize local, regional, national and international public health response time.

The Multi-Phased and User-Centered Process

To launch the SDP initiative, the Surveillance Leadership Board (SLB) engaged CDC program experts in public health, surveillance, informatics, information technology (IT) and security. These experts were asked to serve on platform leadership workgroups, to ensure that crossfunctional perspectives are addressed in the SDP's agile development process. CDC also initiated a dedicated project team, supported by The MITRE Corporation – a not-for-profit organization that operates the CAMH federally funded research and development center (FFRDC) for HHS. In August 2017, the end of Phase 1, vocabulary and transformation services will be modernized and shared. Additional services will be shared in future phases.

How Can CDC Programs and Partner Organizations Get Involved?

To learn more about the SDP, and how you can become involved in the development process please contact Teresa Kinley at surveillanceplatform@cdc.gov.

Exchange Data. Share Tools. Drive Public Health Action.

Surveillance Data Platform and Shared Services A CDC Surveillance Strategy Initiative: FAQs

- 1. Why is the SDP being developed? What are the critical needs? CDC needs an updated informatics environment and efficient informatics processes that support surveillance requirements of timely and accurate data for CDC's public health activities in the United States and globally. The SDP builds the foundation for a future in which CDC scientists could assemble services to create new capabilities in near real time, allowing a nimble response to public health emergencies.
- 2. What functions will the SDP perform? The SDP will provide a platform and set of shared services as well as the ability to deploy and share existing services. A shared service is defined as people, process, or technology that fulfills a common need or request that is used by more than one CDC program or partner, enabled to be sharable, scalable, and standardized. The categories of services include:

Core Services, like security, vocabulary, and repository;

Data Collection-related Services, like enterprise licensing, scrubbing personal data and identifiers, secure data exchange, and structured data capture;

Preparation-related Services, like routing, geocoding, transformation, message testing and validation; **Data Analysis-related Services**, like data analysis and visualization tools, common metrics, indicators and reference data; and

Data Sharing-related Services, like a metadata portal, partner and public access to data.

- 3. What is the proposed value? SDP is expected to enhance population health and well-being by providing a common platform and shared services for the CDC and its public health partners, enabling the agency to leverage the opportunities and efficiencies of a shared, common platform and services. By developing a secure, cloud-based platform, CDC will be able to reduce the reporting burden on external stakeholders and improve the efficiency and agility of surveillance programs.
- 4. What will happen to existing surveillance systems or systems that are already undergoing change? Will the SDP replace those systems? No. In many areas of the agency, CDC is already modernizing its internal public health surveillance systems. The SDP will offer a platform to share and deploy existing system capabilities, as well as capability that is in development. The new SDP will provide an environment for modular shared services that increase efficiency by allowing for greater reuse of public health informatics techniques, by multiple programs in both infectious and non-infectious public health.
- 5. When did work on the SDP begin? Workgroup 1 served from January to May, 2016, and delivered its recommendations report to the Surveillance Leadership Board on May 19, 2016. A second workgroup was formed in June 2016 and now oversees the SDP project team's work on Phase 1 (June 2016–August 2017). The SDP project team is focused on the construction of the SDP, and the launch of the two services selected for Phase 1 completion: vocabulary and transformation.
- 6. What are the next steps for implementation?

Phase I: The goal is to implement the initial platform and several core services from now through August 2017. The initial services selected (i.e., vocabulary and transformation) solve basic yet critical data flow issues between CDC and its public health partners.

Phase II: This phase will enable end users. The selected services will make data analysis and visualization easier including master data management, visualization, metrics and indicators, and access to reference data. **Future Phases** will allow programs to build end-to-end systems using shared services and create opportunities for transformative technologies to improve public health surveillance.

To learn more about how you can become involved in the SDP agile development process, please contact Teresa Kinley at surveillanceplatform@cdc.gov. For more information on the SDP, please visit: www.cdc.gov/sdp.