September 18, 2020

Dr. Robert Redfield  
Director  
Centers for Disease Control and Prevention  
1600 Clifton Road  
Atlanta, GA 30329

Dear Dr. Redfield:

As the founders of the Data: Elemental to Health campaign, we write to urge you to support and preserve the full goals of the public health Data Modernization Initiative (DMI) at the Centers for Disease Control and Prevention (CDC). The Data: Elemental to Health campaign aims to secure federal funding for CDC and state, local, tribal, and territorial health departments to modernize public health data and create a seamless and interoperable framework that automatically draws information from the health care system and reports it to public health agencies. As you know, it is essential that we improve our public health infrastructure to create coordinated and expanded surveillance capacity across the nation.

COVID-19 has exposed deadly gaps in our nation’s public health data infrastructure. Now, more than ever, it is critical for CDC to have a strong national public health surveillance system that detects and facilitates the immediate response to and containment of emerging health threats. There are five key pillars necessary to transform the nation’s public health surveillance system. Each of these pillars plays a key role in moving the United States from an outdated and burdensome system to a 21st Century public health data system that provides accurate, instantaneous data.

Congress has provided $550 million in foundational funding for the Data Modernization Initiative (DMI) between Fiscal Year 2020 appropriations and funding through the Coronavirus Aid, Relief, and Economic Security (CARES) Act. We urge you to spend this money optimally to fully address all components of data modernization and not focus on one piece of the system. As a start, the foundational funding should be allocated to each of the five pillars with some of it remaining at CDC for infrastructure development and upkeep, and a significant portion of funding directed to states to upgrade their systems.

The five core data systems of the U.S. public health surveillance enterprise that require modernization now to protect the health security of all Americans are:

1. The **National Notifiable Disease Surveillance System (NNDSS)** collects vital individual case investigation data at state, local, tribal, and territorial public health agencies from hospitals, physicians, and labs, then sends this data to CDC to create a national understanding of disease burden. This information is used to respond to public health outbreaks and is the first line of health security defense.

2. **Electronic case reporting (eCR)** is the automatic, seamless submission of disease reports directly from electronic health records at clinical care organizations to state, local, tribal, and territorial public health departments. eCR dramatically improves disease/condition reporting and reduces physician burden in fulfilling their legal responsibility to report, which leads to early implementation of public health interventions and limits further spread of infectious agents.
3. **Syndromic surveillance** provides near-real-time data on every hospital emergency department visit for hourly detection and continuous monitoring of community health incidents such as the impact of natural disasters (including hurricanes), flu pandemics, and opioid overdoses. It gives public health professionals the ability to monitor the pulse of the community and identify health threats as they emerge.

4. **Electronic Vital Records System** is a national system of 57 vital records jurisdictions that provide secure electronic collection of birth and death data from hospitals, funeral homes, physicians, and medical examiners. It allows for timely and accurate reporting of birth outcomes and causes of death, which serve to monitor and respond to public health crises as they arise in communities, including reducing preventable deaths and infant and maternal mortality rates.

5. **Laboratory Information Systems** are the backbone of how laboratory data is collected, managed, and shared to inform public health decision-making. The Laboratory Response Network (LRN) is comprised of specialized laboratories that can respond to biological/chemical threats and other public health emergencies with advanced testing capabilities. Electronic Laboratory Reporting (ELR) is the electronic reporting of laboratory results from private and public labs to disease detectives and investigators in state, local, tribal, and territorial public health departments.

We understand that CDC has already directed some of the funding allocated to DMI to Operation Warp Speed, including $40 million to upgrade systems necessary to track the dissemination of an eventual COVID-19 vaccine. These systems, the Vaccine Tracking System (VTrcks), Immunization Gateway, and Immunization Information Systems, are undoubtedly important, both for the COVID-19 response and for mitigating and monitoring future outbreaks. Together, these three systems will help to improve both the distribution of eventual COVID-19 vaccines as well as increase the availability and accuracy of critical vaccine data. This information is essential for public health officials working to combat COVID-19 or any future outbreak. However, while interoperability between immunization and notifiable disease surveillance is critical, we must ensure that resources are not completely diverted to immunization needs alone. If money is chipped away from the underlying five pillars of DMI, greater investment will be required, and soon.

The initial $550 million in funding for DMI is a critical, foundational investment, but will not be enough to modernize our public health surveillance system. States will not be able to adopt fully upgraded public health data systems with a one-time injection of federal funds. For the current system to truly evolve, the federal government must commit to long-term funding to complete essential system upgrades both federally and at the state and local level and to maintain these upgrades annually as technology improves. As the Data Elemental to Health campaign continues to advocate for robust, sustained funding to complete and sustain the DMI well into the future, CDC must take responsibility for allocating the funding appropriately and ensuring all five pillars are addressed. We encourage CDC to develop and enact a transparent plan to spend existing DMI funds and request the needed funds to continue to make essential investments.

COVID-19 has made it clear that our antiquated public health data systems are not up to the task. We need an integrated, high-speed, networked health system—from laboratories to health care facilities to public health authorities—with fast and reliable data in order to protect Americans from health threats. Modernization is not just network upgrades; it is a commitment to building a world-class data workforce
and data systems that are ready for the next public health emergency. Significant investments must be made to build real-time, automated, electronic, enterprise public health data systems.

CDC is at the forefront of both solving the current COVID-19 crisis and preparing our public health system to respond to future threats. The impact of COVID-19 has demonstrated that our existing archaic system was not sufficient to respond to a public health crisis of this magnitude. CDC must make immediate investments to upgrade the systems that are necessary to bring the pandemic to an end, but that will not be sufficient to protect our nation’s long-term health. As was Congress’ intent when the initial $550 million was appropriated for DMI, CDC must route the necessary funding to the five pillars to facilitate a true transformation of America’s public health data system.

Thank you for your work in combating the COVID-19 pandemic. We look forward to working with you as CDC simultaneously addresses this ongoing crisis and works to make overdue updates to our nation’s public health data infrastructure. If you have questions or wish to discuss this issue please contact Meghan Riley at mriley@dc-crd.org.

Sincerely,

Association of Public Health Laboratories
Council of State and Territorial Epidemiologists
Health Care Information and Management Systems Society
National Association for Public Health Statistics and Information Systems