September 8, 2020

The Honorable Alex Azar  
Secretary  
U.S. Department of Health and Human Services  
200 Independence Ave., S.W.  
Washington, D.C. 20201

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

Dear Secretary Azar and Director Redfield:

While the Administration and states take important steps to reopen communities across the country as safely as possible, in part by increasing COVID-19 testing capacity, we ask that you also prioritize the real-time collection and distribution of infectious disease data across federal, state, and local governments. As demand for COVID-19 testing increases, healthcare workers and administrators are increasingly burdened with manual, antiquated, and often inaccurate data entry and management for patient health conditions, patient registration, sample collection, and testing operations. Thus, we urge that you work more closely with states, health care providers, and private sector stakeholders to modernize, automate, and streamline COVID-19 and other infectious disease and symptom data collection and management as quickly as possible.

An analysis in Health Affairs suggests lab reporting networks will have to scale up electronic reporting at least three-fold to capture the millions of COVID-19 tests per week as recommended by epidemiologists. To meet this demand, data collection and management platforms must be simple and efficient to use while minimizing errors. However, as many facilities continue to resort to hand-written labeling and recordkeeping, manual data entry can lead to serious concerns such as transcription errors, compliance risks, and delayed turnaround. For example, a 2019 study on point-of-care results found clinically significant errors in 3.7 percent of manual data entries, of which 14.2 percent included potentially dangerous transcription errors. Manually entered result flags deviated from the laboratory information management system (LIMS) in 73.9 percent of tested pairs, underlining the importance of automated tools.

Fortunately, software-based systems providing data management for state public health entities and major testing laboratories already exist, and they are more efficient and accurate while reducing the burden of excess paperwork. For example, North Carolina and Florida have taken steps to modernize and improve patients’ COVID-19 test results and other infectious disease symptoms. In Florida, nurses can register patients for COVID-19 testing in the field using tablet
computers that are connected to a HIPAA compliant cloud. By managing the patient and order requisition information electronically, lab processing time is reduced and transcription errors are eliminated.

Automating the tedious task of data entry and management improves health care facility workflow and frees up providers to focus on patients. In addition, new software and technology systems are helping to improve data collection and patient engagement. Therefore, we urge CDC to move forward with the deployment of coordinated, interoperable real-time, nationwide public health surveillance systems. Ideally, these systems would be searchable at a zip code level as well as by symptoms and co-morbidities.

During an emergency such as the current pandemic, scaling up and using existing systems to the greatest extent possible can improve data collection and contact tracing efforts. We therefore ask that you and your colleagues utilize and build on existing data sources, such as EHR and LIMS systems, claims databases, and other automated systems to provide government leaders, public health officials, community leaders, and others with actionable, easy-to-interpret data from a wide-ranging set of sources. Data generated by contact tracing, syndromic surveillance, and large-scale testing can help inform decisions on how to safely reopen communities and bring economies back online. Modernizing and automating data collection should augment detection, testing, and contact tracing plans, while also helping to prevent and improve the management of new outbreaks. We look forward to discussing strategies to improve COVID-19 data collection and disease management with you.

Lastly, it is important to work to improve the quality of data collected to include race, age, gender and location. Higher data quality would allow for improved tracking of disease progression and better data collection on more vulnerable populations, such as those living in dense populations, older populations, and gender or other distinct population groups.

Sincerely,

Thomas R. Carper  
United States Senator

Bill Cassidy, M.D.  
United States Senator

Richard Blumenthal  
United States Senator

Susan M. Collins  
United States Senator
/s/ Robert P. Casey, Jr.
Robert P. Casey, Jr.
United States Senator

/s/ Mark R. Warner
Mark R. Warner
United States Senator

/s/ Michael F. Bennet
Michael F. Bennet
United States Senator

/s/ Thom Tillis
Thom Tillis
United States Senator

/s/ Chris Coons
Christopher A. Coons
United States Senator

/s/ Tina Smith
Tina Smith
United States Senator