



# Policymakers Should Leverage Health IT Progress in Coronavirus Response

4 key priorities could advance data collection and sharing

## Overview

As the COVID-19 pandemic continues to upend daily life and put millions of Americans at risk, it is also highlighting the gaps in the nation's ability to electronically share data among health care facilities, laboratories, and public health authorities. In normal times, this can cause delays in care, medical errors, and repeated tests; in a pandemic, this gap can make it harder to track the disease's spread and give people guidance on how to stay safe.<sup>1</sup> Fortunately, some of the progress made to improve health information technology in recent years could also help during this fight.<sup>2</sup>

Recognizing the importance of this kind of data, Congress allocated hundreds of millions of dollars that could be used to strengthen America's public health technology infrastructure. The funding—including in separate laws passed by Congress as the COVID-19 pandemic accelerated—equips the Centers for Disease Control and Prevention with resources to modernize the nation's public health surveillance and analytics capabilities. Policymakers at both the federal and state levels are also expected to examine other opportunities to address these gaps.

Here are four priorities that policymakers should consider:

### **Ensure key role for federal health IT oversight agency**

The relief packages did not provide funding for the Office of the National Coordinator for Health Information Technology (ONC), the principal federal entity charged with coordinating nationwide efforts to implement health IT and expand the electronic exchange of health information. In fact, ONC's mission includes coordination across laboratories, health care providers, and other organizations as well as the development of a health IT infrastructure for "early identification and rapid response to public health threats and emergencies," including pandemics.<sup>3</sup>

Over the last decade, ONC has built a national infrastructure for health IT, including standards for documentation and exchange of data, albeit with a focus on electronic health records (EHRs). Recently, ONC issued final regulations that specify the basic health information—such as medications, immunizations, clinical notes, and demographics, which are collectively called the U.S. Core Data for Interoperability (USCDI)—that health IT vendors need to make available for exchange in a standardized manner. Policymakers should leverage ONC's work to build on this infrastructure and use existing standards in new ways, such as to assist public health registries or establish a national surveillance system for the spread of pandemics. ONC already provides limited grant funding for similar projects, and the agency's experience in evaluating these types of health IT systems may assist CDC in awarding funds appropriately.<sup>4</sup>

### **Increase use of standard data interface tools**

Currently, different health databases around the country have difficulty communicating effectively. Hospitals may have to email or fax spreadsheets to public health departments and CDC or manually enter information in a database, a highly inefficient method of sharing data.<sup>5</sup> And other facilities—such as nursing homes—may not have robust electronic medical record systems to share information effectively. Approaches that have been used in other industries could help change that.

Application programming interfaces, or APIs, are tools that can help gather information from multiple sources at once.<sup>6</sup> They have commonly been used to aid consumers do things such as compare a product's prices from different sellers, but their use in health IT has lagged behind other industries. For APIs to be most effective, they should operate on a consistent standard so that different systems that are maintained by various organizations can communicate. These tools support a diverse ecosystem, allowing many different types of technologies to pull just the information they need in a standard manner, and could be a good fit for the diffuse public health infrastructure that exists today.

Recent federal rules from ONC expanded the ways these tools can be used in health IT, including the adoption of API standards and ensuring that vendors make the USCDI available. Those rules, however, apply only to EHRs and not to other health information systems, such as those used by nursing homes, labs, or state health departments. If they did, public health officials could, for example, more easily receive specific pieces of data—such as COVID-19 test results—out of labs, nursing homes, and other systems to quickly track the spread of the pandemic. Standard APIs may also eliminate duplicative reporting, such as when a public health department has to submit the same information in different formats to various federal agencies and registries. Policymakers should consider ways to support state and local governments and the technology industry in advancing standards-based technology updates. For example, the government can advance the use of standards by making them conditions of CDC grants or establish new funding mechanisms to ensure health departments have the resources they need to adopt these approaches.

## **Use more data for patient matching**

To effectively address COVID-19, public health authorities must be able to track current infection rates, identify individuals who have tested positive, and contact them to determine if they have potentially infected other people.<sup>7</sup> When public health authorities receive incomplete information—such as records that lack phone numbers or addresses—they must spend time searching for the right person even as the virus may continue to spread. In parallel, clinicians use immunization registries to determine if an individual received a vaccine. Once one is available for COVID-19, inaccurate information could result in confusion about whether an individual received a vaccine and lead to people obtaining unnecessary doses or not getting any. Immunization registries could also track antibody tests once they are available, registering that an individual has been exposed to COVID-19.

To address patient matching problems generally, ONC's rules added more demographic data points (including current and previous addresses, phone numbers, and email addresses) to the types of data EHRs must make available. These extra data points provide more data to check during the patient matching process, increasing the likelihood of accurate matches. That same information can be used by laboratories, public health registries, and other organizations to reduce the likelihood of ambiguity of a person's identity when sharing data.

The federal government should also encourage the use of better standards for some data, particularly addresses, which research shows can boost match rates by 3%.<sup>8</sup> Although the U.S. Postal Service (USPS) makes its address standardization web tools available for free to online retailers, the same service isn't available to health care. USPS should open its services to the health care industry so that patients with positive COVID-19 test results can be more quickly contacted and have their contacts traced and registries can be better equipped with the information they need for a future immunization drive.

## **Stop information blocking during public health emergencies**

In 2016, Congress took action to stop information blocking—preventing or discouraging the access, use, or exchange of electronic health data—by providers and health IT vendors. But ONC can—and did in recent rule-making—set exceptions, such as with certain privacy concerns.

In a pandemic, public health officials need data such as information from testing centers on the number of confirmed cases and negative test results to track disease spread. However, reports have indicated that some organizations, such as labs, are not sharing the needed information. The reluctance to share data may stem from a single fact: There's little economic incentive or private return from data-sharing despite the significant public health benefits that would accrue.

The inspector general at the Department of Health and Human Services, which is enforcing the information blocking part of the law, should take appropriate action to ensure information about COVID-19 infections can go where it is needed. If necessary, to address scenarios not covered by the law or associated new regulations, the inspector general should inform Congress or ONC so they can make any needed adjustments.

## **Conclusion**

Digital medicine can allow providers to access and synthesize patient information and help clinicians deliver better care. The current pandemic is a stark reminder of the urgent need for data to inform public health interventions and be used to monitor progress. As federal and state policymakers improve their public health infrastructures, they should build on the systems and policies already in place.

## Endnotes

- 1 R. Pifer, "Public Health Agencies, Commercial Labs Warn Patchy IT Infrastructure Hobbles COVID-19 Response," Health Care Dive, accessed April 30, 2020, <https://www.healthcarediver.com/news/public-health-commercial-labs-CDC-health-it-coronavirus-covid19-test/576189/>.
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- 3 American Recovery and Reinvestment Act of 2009, 111-5, U.S. House of Representatives (2009), <https://www.congress.gov/bill/111th-congress/house-bill/1>.
- 4 The Office of the National Coordinator for Health Information Technology, "Funding Announcements," accessed May 11, 2020, <https://www.healthit.gov/topic/onc-funding-opportunities/funding-announcements>.
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- 7 D. Tahir, "Piecemeal Testing Flusters Officials Tracking Coronavirus Pandemic," Politico, April 2, 2020, <https://www.politico.com/news/2020/04/02/testing-coronavirus-gaps-162360>.
- 8 B. Moscovitch, "Standardized Demographic Data Aids Patient Matching Rates, Study Shows," The Pew Charitable Trusts, accessed May 11, 2020, <https://www.pewtrusts.org/en/research-and-analysis/articles/2019/03/22/standardized-demographic-data-aids-patient-matching-rates-study-shows>.

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