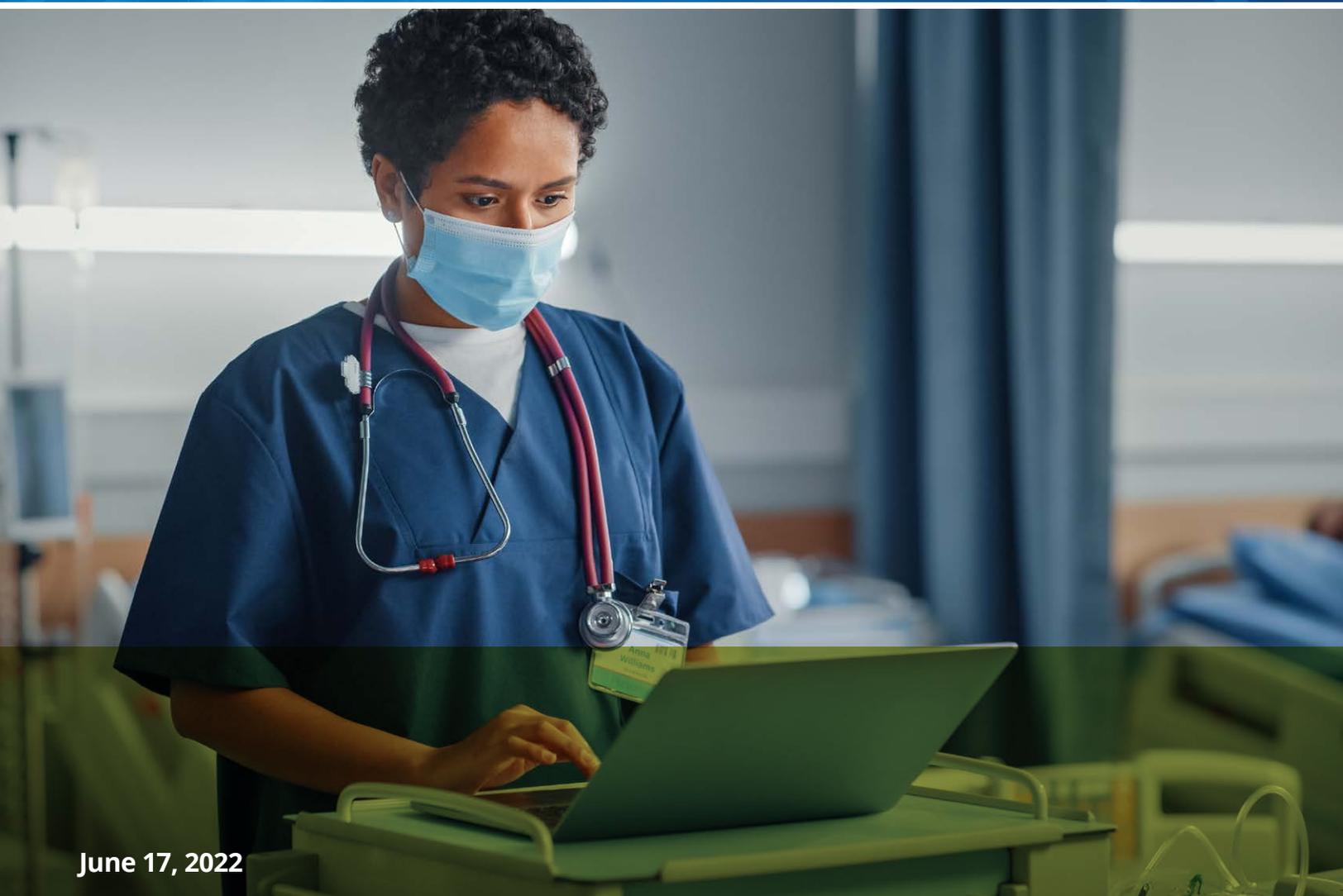


**Health Care Data Reporting Beyond
the Public Health Emergency:**
*Payment Policies to Support Public Health
Surveillance and Population Health*



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Disclosures

Mark B. McClellan, MD, PhD, is an independent director on the boards of Johnson & Johnson, Cigna, Alignment Healthcare, and PrognomiQ; co-chairs the Guiding Committee for the Health Care Payment Learning and Action Network; and receives fees for serving as an advisor for Arsenal Capital Partners, Blackstone Life Sciences, and MITRE.

Background

While SARS-CoV-2 variants continue to evolve with the potential for additional surges in cases, the availability of vaccines and boosters along with rapid testing and effective treatment enables a shift from the current COVID-19 public health emergency (PHE) to sustainable COVID-19 containment. To support and sustain recovery, timely data are needed by health care organizations, including hospitals and health centers, long-term care facilities (LTCFs), and payers, as well as federal, state, and local public health departments to detect and rapidly respond to surges in cases from new variants or declining immunity. The ability of health care and public health organizations to seamlessly share COVID-19 surveillance and case data is critical to preventing serious health impacts, particularly among Medicare beneficiaries and people experiencing high risk of severe COVID-19 illness, as well as for avoiding future economic disruptions. Moreover, similar data may also be needed for responding to seasonal outbreaks as well as future epidemics and pandemics. While such data could be very helpful for health care and public health planning and for preventing adverse outcomes for Medicare beneficiaries and other Americans, any such data collection requirements must also minimize administrative burden and assure transparency in how the data would be used effectively.

Currently, the U.S. public health system lacks a coordinated, national approach to data collection. Fifty state health departments, dozens of territorial and tribal health departments, and thousands of local health departments all have their own reporting requirements. The Centers for Disease Control and Prevention (CDC) is currently investing in additional infrastructure, common standards implementation guided by the Office of the National Coordinator for Health Information Technology (ONC), and tools and resources to support data use by state and local public health, but CDC lacks the authority to require data collection from health care providers or to coordinate consistent and efficient use of such data across the public health reporting ecosystem. Consequently, when the PHE ends, health care organizations may not have the data and situational awareness they need to respond to emerging COVID-19 trends, and the federal government may not be able

to provide timely supports to health care organizations facing new threats, placing Medicare and Medicaid beneficiaries as well as other patients at risk.

In September 2020, the Centers for Medicare and Medicaid Services (CMS) issued an [interim final rule](#) requiring hospitals and critical access hospitals (CAHs) to report [data](#) related to the incidence and impact of COVID-19 to the federal government as a new Condition of Participation (CoP) in Medicare and Medicaid programs during the COVID-19 PHE. The rule also strengthened requirements for LTCFs to report COVID-19 facility data, and laboratories to report COVID-19 test results during the PHE. A December 2020 [interim final rule](#) also established additional requirements in the hospital and CAH CoPs for tracking COVID-19 therapeutic inventory and usage as well as tracking the incidence and impact of acute respiratory illnesses during the PHE. These data from health care organizations have been critical to planning, monitoring, and allocating resources during the PHE as well as the country's broader surveillance of and response to COVID-19. With the potential end of the COVID-19 PHE, CMS regulations related to data reporting need to be updated. A clearer post-PHE strategy is needed to support resource allocation, quality improvement, and patient care, including both efficient data collection requirements and supporting incentives.

CMS payment regulations are a critical part of an efficient and effective strategy for managing COVID-19 and potential future infectious disease threats. CMS has taken additional steps to further update data reporting requirements and incentives for providers participating in Medicare. In particular, the agency recently issued a [proposed rule](#) for fiscal year 2023 that would revise the hospital infection prevention and control CoP requirements to require hospitals and CAHs to continue COVID-19 and seasonal influenza reporting after the current PHE through April 2024. It also proposes establishing new reporting requirements that would require hospitals and CAHs to report specific data elements to the CDC's National Health Safety Network or updated CDC-supported surveillance systems during future PHEs related to epidemics and pandemics. Skilled nursing facilities (SNFs) have also continued to report

data related to infections, testing, vaccination status, and treatment use. CMS has not yet released its fiscal year 2023 proposed rules for outpatient facilities, physicians, and laboratories.

The transition to post-PHE data reporting with significant payment and policy supports from CMS would play out in the context of a number of new and ongoing federal and state initiatives to strengthen public health data reporting briefly touched on above. In particular, ONC published the [Trusted Exchange Framework and Common Agreement \(TEFCA\)](#) to establish principles for nationwide health information interoperability and create an infrastructure and governance model that would allow [health care stakeholders](#), such as providers, payers, federal and public health agencies, and individual patients, to securely exchange data – including data relevant for public health and local response – across systems and networks. CDC’s [Data Modernization Initiative](#) is an effort to modernize federal and state public health data and infrastructure to support coordinated data reporting and surveillance of public health threats, building on ONC standards.

ONC and CDC are working together to facilitate public health data interoperability through the development of a “North Star” architecture, enabled by TEFCA, that would use cloud-based technologies to connect federal, state, and local health department information systems while allowing for collaborative governance. One goal

of this architecture is to enable coordinated reporting for timely information sharing to support public health activities and health care reporting needs. This architecture aims to allow for multipurpose reporting with appropriate privacy protections; at the state and local levels, some identifiable information may be made available to support patient care and local response efforts such as treatment access and contact tracing, while deidentified data with appropriate privacy constraints would be sent to federal agencies in formats that can be used by CMS and CDC for authorized quality, safety, and public health improvement purposes.

In May-June 2022, the Duke-Margolis Center for Health Policy hosted two virtual roundtables including private payers, health systems, public health experts, federal officials, and state representatives, to discuss key issues and multi-stakeholder solutions to provide more timely, reliable, and efficient data for COVID-19 and future infectious disease threats. Stakeholders discussed challenges and needs associated with COVID-19 and public health reporting as well as opportunities for improved data sharing for public health surveillance. Insights from these discussions are reflected below in our assessment of challenges and opportunities for improved public health reporting and health care response. As this was not a consensus process, findings do not necessarily reflect the views of those participants who contributed their time and expertise to roundtable discussions (a list of participating experts is in the [Appendix](#)).

Key Challenges and Needs Related to Public Health Reporting and Surveillance

Across all health care sectors, improved data sharing can enable health care organizations to plan for and contain future COVID-19 risks and other threats to the health of Medicare and Medicaid beneficiaries, and help assure the safe and reliable delivery of health care services for all Americans. While data sharing technology is improving, addressing policies and standards to assure more transparency, practical utility, and bidirectional use of reported data is critical for sustaining necessary data sharing initiatives. Key principles for addressing current challenges include:

- **Reducing duplication and administrative burden associated with reporting.** Many health care providers have to report the same data, often in slightly different required formats, to multiple public health and health care authorities that are not well connected to each other. Variation in data structures, standards, reporting regulations, and semantic and syntactic definitions across jurisdictions and settings slows the ability to form an evidence-based regional and national picture, contributing to confusion for providers, policymakers, media, and the public. Steps toward

aligning standards for data reporting across jurisdictions could help reduce reporting burden, improve regional response capabilities, and inform providers' and health plans' population health efforts. Such steps should reflect diverse state and local capabilities and allow for modification toward greater consistency over time in light of evolving data needs and capabilities.

- **Increasing communication, transparency, and utility of reported data.** Health care and public health entities value clarity about how the information they report is being used, as well as timely communication and transparency around the resulting aggregate data and analytics to inform their decision making. They also value data flows that connect health care with state and local public health. For example, data exchange including secure “batch” queries helps providers and health plans obtain timely information about vaccination and treatment needs among their patients, informing and

improving their population health initiatives. The goal is to promote a “360 degree” data sharing approach that allows contributors to trust that they will receive timely insights associated with the data they reported. Timely access to aggregated regional data is valuable for health system and public health planning, and transparency around such data can serve as an incentive for high-quality data reporting. Regional data should include data from adjacent states and countries where applicable.

- **Facilitating alignment and coordination across federal and state data reporting and modernization efforts.** Many states have developed innovative and effective solutions to collecting, reporting, and sharing data. Further steps should meet state and local public health authorities where they are while aiming for more efficiencies and standard data reporting approaches when possible, and should encourage consistent reporting on critical data across jurisdictions.

Implications for CMS Regulations Related to COVID-19 Reporting and Response

To accomplish the aims above, CMS policies and requirements should reflect the following principles:

1. CMS reporting requirements for hospitals and other health care settings, if well designed and focused on quality and safety goals, could have important benefits for beneficiaries, providers, payers, the federal government, and local/state health care preparedness for COVID-19 and future population health threats. Any reporting requirements should be designed to:
 - reduce existing data reporting burdens for CMS and other federal agencies;
 - support reporting needs for state and local public health; and
 - enable health care provider awareness and planning, and local response management.
2. Data elements involved should be based on minimum necessary use, and be re-evaluated regularly to ensure all the data being asked for is being utilized in high-impact ways. Examples of such data elements may include:
 - Case reporting, including known and suspected cases, emergency department

visits, hospitalizations, and deaths (building off of current reporting requirements)

- Laboratory results (building off of current requirements)
- Emergency department visit rates and available hospital bed and intensive care unit (ICU) capacity
- Linkages to initiatives to improve access to testing, test to treat, vaccines and boosters, and to sustain syndromic surveillance networks including private health care facilities to support health care quality and safety improvements

While maintaining a “minimum necessary” data collection standard, it is also important to ensure that these data systems do not just monitor existing public health threats like COVID-19, but can be readily adapted to respond to new threats as they arise.

3. CMS reporting requirements should be linked to clear plans for bidirectional data flow and federal strategies for improving data surveillance.
 - Any specific data reporting requirements

should be aligned with CDC's Data Modernization Initiative and related interagency efforts, including ONC priority "use cases" for more efficient and reliable data sharing. This approach will help ensure that a coordinated provider data reporting process—increasingly feasible with progress on interoperability standards and secure electronic data infrastructure including cloud capabilities—can meet federal reporting requirements from various agencies, align with state and local requirements, and yield more reliable, robust and actionable data.

- Data use agreements to share required data across agencies and qualified entities should similarly be aligned, with CDC and ONC support for the necessary data infrastructure.
 - CMS and/or CDC, as appropriate, should provide regular and timely public reports based on reported data. CMS and other federal agencies should describe the goals of these reports to facilitate feedback and improvement, including how the required data collection is used to improve federal planning and response (e.g., access to tests, treatments, boosters, other supplies in the event of surges).
 - CDC should support aligned enhancements in state and local data infrastructure, and supporting tools, to create incentives for state and local governments to align their systems with emerging national standards and best practices for data reporting, exchange, and analysis to support response.
4. In conjunction with reporting requirements, CMS should build on existing programs, like payments for lab test counseling and related reporting, that provide support for data reporting and actions based on such data to improve the quality and safety of health care for COVID-19 and provide a foundation for better managing other population health threats. The use of these data for quality measures for hospitals, accountable care organizations (ACOs), and Medicare Advantage (MA) plans should be explored. These include:
- Health care performance measures of oral/ intravenous treatment rates for patients experiencing high risk of severe COVID-19 illness (i.e., an element of CMS quality improvement activities)

- Health care performance measures on vaccination/boosting rates, with payment incentives for bidirectional exchange with their jurisdiction's Immunization Information System (IIS) using Fast Healthcare Interoperability Resources (FHIR) standards for secure bulk data sharing. Not all states have [IIS rules and capabilities](#) that enable data exchange with health care providers and health plans regarding the immunity status and adverse events involving their patients. However, aligned Medicare provider incentives could provide additional support and momentum for such state IIS modernization efforts.

- CMS could leverage the data reported by hospitals to develop quality measures assessing concepts such as staff vaccination rates and rates of COVID-19 acquired during a stay in a facility. Such measures could be used in programs like the Hospital Inpatient Quality Reporting Program and the Long-Term Care Quality Reporting Program.

The above metrics could be converted to population-based accountability measures in Medicare ACOs and MA plans (e.g., test to treat rates among positive cases and vaccination and booster rates, with race/ethnicity stratification, similar to existing ACO and MA performance measures).

5. Medicare financial incentives could encourage voluntary regional coordination based on automated reporting of local testing and case data from physician practices, covered pharmacies, and urgent care centers (in addition to hospitals, SNFs, and others with required reporting). Such coordination could provide reliable local estimates of infection risk for use in planning care for beneficiaries and further refinement of federal resource and support planning.

Table 1 shows leading "use cases" where CMS regulatory actions could support a more efficient, coordinated strategy for timely data sharing and response for ongoing containment of COVID-19, as well as better situational awareness and response capacity for future infectious disease threats.

Table 1: Examples of Key Use Cases for Data Sharing

Population Health Need	Key Health Care Reporting Entities	Key Data Elements	Bidirectional Exchange	Contributions to Timely Aggregate Reports	Supporting Medicare Incentives	Benefits to Medicare and Medicaid patients
Local/Regional and National Case Trends	<ul style="list-style-type: none"> Hospitals and health centers SNFs and other congregate care facilities Clinical laboratories Primary care providers Urgent care clinics 	<ul style="list-style-type: none"> Case demographic data Contact information per state/local requirements Genotyping of subset of cases to track variant 	Notification of patient's primary care provider and health plan to facilitate response	<ul style="list-style-type: none"> Local/regional case trends including variants National trends 	Continuation of care coordination payments for primary care providers and laboratories that provide timely reporting and counseling	<ul style="list-style-type: none"> Better-informed local planning to manage COVID-19 Improved federal support for local response Better, safer care through fewer disruptions to health care organizations
"Test to Treat" Availability And Use	<ul style="list-style-type: none"> Primary care providers Pharmacy clinics Hospitals and health centers Long-term care facilities 	<ul style="list-style-type: none"> Case demographic data Test use Referrals to and use of oral or intravenous treatment Rate of timely treatment in eligible patients per drug emergency 	Notification of patient's primary care provider and health plan to coordinate care	<ul style="list-style-type: none"> Local/regional trends National trends 	<ul style="list-style-type: none"> Incentive payments for reporting and improvement of timely testing, assessment, referrals, and treatment of eligible patients Population-based accountability measures in Medicare ACOs and MA plans 	<ul style="list-style-type: none"> Increased access to and use of effective therapies for COVID-19 Better-informed local resource planning Improved federal support for local response Improved care coordination
Vaccination and Booster Access and Use	<ul style="list-style-type: none"> Primary care providers Pharmacies Hospitals and health centers Long-term care facilities State, local, and community-based vaccination sites 	<ul style="list-style-type: none"> Patient demographic data Additional patient data per state IIS requirements Vaccination rates 	Bidirectional bulk data exchange between IISs (as supported by states), primary care providers, and health plans	<ul style="list-style-type: none"> Local/regional trends National trends 	<ul style="list-style-type: none"> Incentive payments for providers to participate timely bidirectional exchange with IIS (as available in state) Population-based accountability measures in Medicare ACOs and MA plans 	<ul style="list-style-type: none"> Improved access to vaccines and boosters More effective and targeted outreach Improved federal support for local response
Hospital Capacity	Hospitals	<ul style="list-style-type: none"> Emergency department use Inpatient bed use ICU use 	Bidirectional exchange with local and state public health entities	<ul style="list-style-type: none"> Local/regional trends National trends 		<ul style="list-style-type: none"> Improved planning for surge management Improved federal support for local response
Hospital Critical Supplies	Hospitals	Electronic reporting on critical supply use (N95 masks, PPE, ICU supplies) in PHE	Linkage to and reports from federal/state supply monitoring systems	<ul style="list-style-type: none"> Local/regional trends National trends 		<ul style="list-style-type: none"> Improved planning for surge management Improved federal support for local response

Conclusion

Coordinated efforts to support timely data exchange can facilitate improved surveillance, planning, and response to COVID-19 as well as future infectious disease threats. CMS's fiscal year 2023 proposed rules for Medicare hospitals, outpatient facilities, physicians, and laboratories offer an important opportunity to both update data reporting requirements and offer incentives to encourage timely data reporting and exchange.

Appendix: Meeting Attendees

The views expressed in this issue brief do not necessarily reflect the views of the individuals below nor their organizations.

Ethan Berke, UnitedHealth Group

Kate Berry, AHIP

Bechara Choucair, Kaiser Permanente

Michael Craig, US Centers for Disease Control and Prevention

Angela Dunn, Council of State and Territorial Epidemiologists

Francois Fressin, CVS Health

David Gifford, American Health Care Association

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