HHS Public Access

Author manuscript

N Engl J Med. Author manuscript; available in PMC 2024 August 13.

Published in final edited form as:

N Engl J Med. 2022 February 17; 386(7): 609–611. doi:10.1056/NEJMp2118285.

Health Care Safety during the Pandemic and Beyond — Building a System That Ensures Resilience

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For about two decades, the U.S. health care system was making strides in improving patient safety, as demonstrated by the reduction of health care–associated infections and other complications of care.[1] Though there was still room for improvement, the trends were certainly in the right direction. Since the Covid-19 pandemic began, however, many indicators make it clear that health care safety has declined. The public health emergency has put enormous stress on the health care system and disrupted many normal activities in hospitals and other facilities. Unfortunately, these stressors have caused safety problems for both patients and staff. Managing the competing priorities of providing care for large numbers of patients with Covid, as well as for the patients without Covid who need care every day, and of maintaining safety efforts such as robust infection-control practices is both difficult and essential.

The fact that the pandemic degraded patient safety so quickly and severely suggests that our health care system lacks a sufficiently resilient safety culture and infrastructure. We believe the pandemic and the breakdown it has caused present an opportunity and an obligation to reevaluate health care safety with an eye toward building a more resilient health care delivery system, capable not only of achieving safer routine care but also of maintaining high safety levels in times of crisis.

We have observed substantial deterioration on multiple patient-safety metrics since the beginning of the pandemic, despite decades of attention to complications of care.[2–4] Central-line–associated bloodstream infections in U.S. hospitals had decreased by 31% in the 5 years preceding the pandemic; this promising trend was almost totally reversed by a 28% increase in the second quarter of 2020 (as compared with the second quarter of 2019).[3] There were also increases in catheter-associated urinary tract infections, ventilator-associated events, and methicillin-resistant *Staphylococcus aureus* bacteremia. Safety has also worsened for

Disclosure forms provided by the authors are available at NEJM.org.

patients receiving postacute care, according to data submitted to the Centers for Medicare and Medicaid Services (CMS) Quality Reporting Programs: during the second quarter of 2020, skilled nursing facilities saw rates of falls causing major injury increase by 17.4% and rates of pressure ulcers increase by 41.8%. The surges of the delta and omicron variants of SARS-CoV-2 in late 2021 and early 2022 do not bode well for a return to prepandemic levels for any of these indicators.

There are multiple potential explanations for these increases in adverse events. The health care system has been challenged by repeated influxes of vast numbers of very ill patients, which have stretched staff and supplies. Health care personnel have responded with extraordinary effort and dedication, adapting with unprecedented speed and developing and modifying treatment protocols on the basis of data that have evolved by the week. They have done all these things while battling workforce-safety problems such as exhaustion and a dearth of personal protective equipment, at great risk to themselves and their loved ones. We have seen an increasing number of media reports about the rising incidence of staff burnout, which is causing health care workers to leave practice, retire, or move into other industries.

The strains on the system have also affected routine safety practices. Overworked clinicians have often had no time for safety rounds, safety audits, or error reporting. Supply-chain disruptions reduced access to personal protective equipment, putting both patients and health care workers at risk. Standard safeguards, such as checklists, quickly became inadequate. Moreover, the pandemic starkly highlighted health disparities, including inequities in the safety of patients and health care personnel.[5]

As Mary Dixon-Woods and colleagues argued in a 2011 article entitled “Explaining Michigan,” contextual influences are important in solving safety problems. We therefore need to reevaluate whether the health care system has sufficiently invested in ensuring a deeply embedded safety culture and maintaining an unflagging commitment to safety. It is abundantly clear that the health care ecosystem cannot ask clinicians and staff to work harder, but must instead provide them with more tools and an environment built on a strong foundation of wellness and on instilling and rewarding a culture of safety. CMS must also use our oversight functions to ensure that emergency-preparedness and quality-improvement programs are more than plans on a shelf. Such a culture would ensure that patients and staff are protected from harm while rendering the system more resilient, especially during a crisis. So how do we bolster the health care ecosystem to avoid future threats to patient safety?

As we emerge from this public health emergency, we at CMS and the Centers for Disease Control and Prevention (CDC) are committed to a renewed focus on patient safety. We seek to join leaders from throughout the health care ecosystem in reviewing safety practices and seeking better and more deeply embedded solutions that also help to close health disparities, since there is no true health care quality and safety without equity. We are already working together to expand the collection and use of data on safety indicators in our programs, including data in such key areas as maternal health and mental health, and we will work with other government and non-governmental organizations to further enhance patient safety. We are also developing safety metrics that draw on the rich clinical data captured digitally in electronic medical records, which incorporate information from all health care payers.

Some electronic clinical quality measures are already being considered for inclusion in patient-safety monitoring in the CMS Quality Payment Program.

Over time, the U.S. health care sector has implemented various pieces of the safety-assessment-and-improvement puzzle, but it has not instituted a thorough system of safety that reaches from the boardroom to the front lines and that can be maintained during times of crisis. For example, it is important to have sufficient resources such as staff and personal protective equipment for times of stress. The United States deserves breakthrough thinking about systems built on foundational principles of safety, akin to those used in other industries in which safety is embedded in every step of a process, with clear metrics that are aggregated, assessed, and acted on. We also need renewed national goals of harm elimination throughout the health care system and a core safety strategy that includes promoting radical transparency, addressing workforce shortages, and continuing to strive for safety while being sensitive to such trade-offs as reporting burden and costs. This effort should extend across the continuum of care, beyond the traditional hospital-based safety indicators, and include attention to diagnostic errors and outpatient care.

The health care sector owes it to both patients and its own workforce to respond now to the pandemic-induced falloff in safety by redesigning our current processes and developing new approaches that will permit the delivery of safe and equitable care across the health care continuum during both normal and extraordinary times. We cannot afford to wait until the pandemic ends.

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