



medicine services to rural areas, allowing the use of telemedicine services for all beneficiaries of fee-for-service Medicare.<sup>4</sup> To enhance the technology infrastructure available to clinicians to support these visits, the Office of Civil Rights (OCR) at the Department of Health and Human Services (HHS) has announced that it is using its enforcement discretion and will not impose penalties for using HIPAA-noncompliant private communications technologies to provide telehealth services during this public health emergency.<sup>5</sup> These are important initial responses, but the crisis demands a broader strategy to address three specific areas: reimbursement for new digital services, expanded regulatory relief, and evaluation of clinical care provided by means of these technologies.

The menu of new remote service options that health systems are rapidly attempting to adopt requires payment structures to support its growth. Beyond video visits, these services include text, email, and mobile-phone applications and can expand to include uses of wearable devices and “chatbots.” These services could be deployed to provide synchronous and asynchronous support both for patients with Covid-19 and for those requiring other routine clinical services. Reimbursement could be structured around time-based models or fixed fee-for-service payments. Evaluation and management (E&M) billing codes can be expanded beyond the existing telemedicine modifiers to reflect a more expansive conceptualization of digital service provision. For example, the Centers for Medicare and Medicaid Services (CMS) could remove requirements for in-person physical ex-

ams as part of E&M services, leaving determinations about the need for, and mode of, such exams to the discretion of the clinician.

Technical fees to support the required technology infrastructure can be developed on the basis of existing software-as-a-service models. Any relevant payment rules should allow for creative applications of emerging digital technologies, such as voice-interface systems (Amazon Alexa, Google Voice, Apple Siri) or mobile sensors such as smartwatches, oxygen monitors, or thermometers. Concurrently, the federal government could move to classify and regulate these digital services as activities of interstate commerce subject to federal rather than state jurisdiction, in order to provide a single set of rules for this emerging market.

A second set of services is needed to expand our capacity for caring for patients who are acutely ill. Hospital-at-home models for infected patients have been well described, and payment approaches for these models have been proposed but never widely adopted. Hospital-at-home care will be an important option for otherwise stable patients with newly diagnosed SARS-CoV-2 infections and for early discharge of patients admitted to hospitals.

Another new category of service is oversight of persons under investigation in home quarantine. Physicians and health systems may need to track large populations of patients on a daily basis. Again, digital technology can support this service under new payment models — existing models for remote-monitoring services are personnel-intensive rather than technology-intensive and require approval of monitoring devices by the Food

and Drug Administration; they could not be applied to patient surveys conducted by digital assistant. The HHS secretary and the Center for Medicare and Medicaid Innovation (CMMI) have authority to enact such changes in the payment structure. CMS can ensure that the private market also adopts these provisions by, for example, leveraging participation requirements for Medicare Advantage.

An emergency update of privacy and communication regulation would have to accompany implementation of the payment models for these new digital services. Stringent and outdated technological requirements under HIPAA, coupled with confusing or vague regulatory guidance, have greatly slowed adoption of digital solutions in health care. Allowing for the use of secure technologies, such as commercial videoconferencing solutions that offer 256-bit end-to-end encryption — technologies that surpass anything that existed in 1996, when HIPAA was passed — will ensure security while expanding services. HHS's announced enforcement discretion recognizes the importance and timeliness of this issue.

HHS could expand the impact of its approach by defining telehealth broadly to include digital tools beyond audio and video. To ensure that health care systems are aggressive in adopting these solutions, the agency could expand its enforcement discretion to any provider adopting a digital solution for patient care. Providers could document their technical solution in a memo to the OCR to allow HHS to build a record of these new approaches. When such a notice was filed, the implemented solution could be considered compliant for 24 months, the du-

ration of the emergency, or until the provider receives further updates from HHS. Over the next several months, HHS can change HIPAA to allow the use of commercial encrypted technologies for telehealth services as a permanent solution.

The final part of this policy response should include a provision for evaluating these emergency measures. There has long been a debate in the United States about the risk of fraud resulting from adoption of digital services in health care. Obviously, it will be important for us to understand whether these new authorizations were used appropriately by providers and patients, and to assess the quality of care provided. At the same time, there has been an ongoing quest to adopt digital technologies to improve the quality

and reduce the cost of health care services. It will also be important to understand whether these new approaches help to increase clinical productivity during the Covid-19 pandemic. Such information will be critical to understanding whether these emergency authorizations should be made permanent once the immediate crisis has resolved.

Fortunately, the world is a different place than it was in 1918. We have the technology to strengthen our health care system for our patients. It's time we put these tools into practice.

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

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