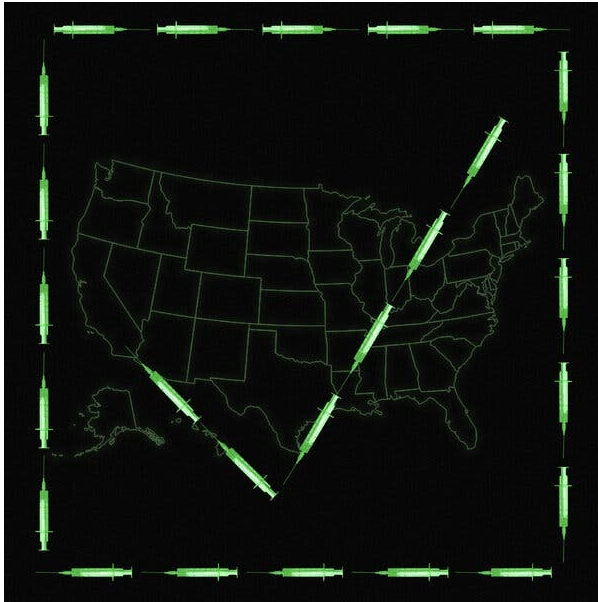Guest Essay

I Ran the C.D.C. Here's How to Prove That Americans Are Vaccinated.

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Credit...The New York Times

By Tom Frieden

Dr. Frieden was the director of the Centers for Disease Control and Prevention from 2009 to 2017.

This month, President Biden announced a comprehensive plan to reinvigorate America's fight against the Covid-19 pandemic. A big part of this plan hinges on mandating the vaccination of millions of federal workers. Employees of companies with more than 100 staff members will have to provide proof of vaccination or test negative for the coronavirus at least once a week. The businesses and other institutions that must enforce these mandates will have to verify vaccination status and test results to make this system work.

Even before the plan was announced, a number of state and local governments and school districts and more than 1,000 colleges and universities adopted at least some vaccination requirements for employees and students. But without a unified approach to verify compliance, ideally through federal leadership, verification will be inaccurate, inconsistent and potentially insecure.

[Counterfeit vaccine cards are already in circulation](#), and unvaccinated people are using them to enter spaces where they otherwise wouldn't be allowed, putting others at risk. Different systems may use different definitions of full vaccination or lack critical information such as time elapsed since vaccination. And without clear safeguards, digital verification systems could be compromised: Vaccination status could be falsified, and private health data could be shared publicly.

Unless the Biden administration quickly issues guidelines on creating an accurate, secure and universal Covid-19 vaccination verification system, these mandates will become muddled.

So far, the White House has rejected federal verification guidelines. Vaccination verification in the United States, however, is not new. [Every state has an immunization information system,](#) which consolidates vaccine records. [Every state already requires the measles vaccination](#) and other specified inoculations for school admission. Many hospitals and nursing homes require staff members to show proof they have received an annual flu shot.

But multiple Covid-19 vaccination verification systems, each with its own user interface, validation, data storage, retrieval processes and security protocols, will make it difficult to quickly and securely verify vaccination status. Without federal guidance, different vaccination verifiers are adopting different methods to confirm individuals' identity, define adequate protection, protect privacy and confirm vaccination status.

We need a system that works. Here are five requirements for such a system.

First, it needs to be accurate. Covid-19-specific vaccination data should be stored in and verified by a computerized immunization information system — essentially an online record of vaccinations people have received — that allows for sharing between systems. This approach is more accurate and would make it easier to verify vaccination status than a digitized version of a paper record. It may come to be the only version of verification accepted by international travel entities. Identity may need to be verified with a government-issued photo identification card such as a driver's license.

Second, it needs to be secure and maintain privacy. Everyone should be able to control how her or his personal data is collected, stored and used. Safeguards must ensure that data will not be sold or misused and that it will be used only for vaccination verification.

Third, there must be multiple options for people to retrieve and voluntarily present their vaccination status. People who don't wish to or cannot participate in an electronic verification system should be able to use paper vaccination records with additional verification, such as a photo ID. Verifiers could then check this information against existing databases. Opting out, however, may also mean opting out of certain venues or activities that require digital proof of vaccination.

Fourth, the system needs to be accessible in real time, such as when people are going through airport security.

Fifth, the system should be used to verify Covid vaccination alone. Bundling these verifications with past infection status, lab test results for infection or other health information would needlessly complicate the system and risk breaches of privacy of unrelated health data.

Fortunately, some existing standards and tools already meet the above criteria. The Biden administration can build on or endorse the excellent work of two existing consortia: the Vaccine Credential Initiative, a large coalition of technology, health and public health leaders that verifies both paper and digital records, and the Covid Credentials Initiative, which has established a thoughtful standard with a global, collaborative governance framework for credentialing that protects data privacy and security. The initiatives use technology already adopted by the Departments of Defense and of Veterans Affairs, state governments and major corporations.

One means of proof is the SMART Health Card framework developed by the Vaccine Credential Initiative. It uses an open-source system that is already in use in several states and could be used by many universities, corporations and the military.

Vaccination requirements are already here and will continue to expand. We need to make verification systems accurate, secure and fair. To create such systems, we need appropriate, trustworthy and consistent national standards to guide them — and we need those standards soon.

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