The centrality of law as a public health intervention has been undeniable during the Covid-19 pandemic. In just the first half of 2020, more than 1000 laws and orders were issued by federal, state, and local authorities in the United States in an effort to reduce disease transmission. Legal interventions include stay-at-home orders, mask mandates, and travel restrictions, as well as more particular rules for business operations, alcohol sales, curfews, and health care. Given their heavy use, importance, and obvious socioeconomic side effects, and the social and behavioral complexities of their implementation, one might have expected the National Institutes of Health (NIH), other research funders, and the research community to jump to the work of determining the right mix, intensity, and enforcement approaches of legal restrictions to control transmission with the least and most equitably distributed harms. No organized research program emerged. The NIH pumped $3.6 billion into biomedical research related to Covid-19. The Gates Foundation added $350 million. Billions more went into the development of vaccines. All reasonable investments. But funding for scientific evaluation of legal effects and public health systems research was paltry, at a time when hundreds of thousands of lives, the socioemotional development of millions of children, and billions of dollars in economic activity directly depended on questions about control measures, enforcement methods, the organization of the health system, and the many ways in which law was immediately influencing vulnerability, resilience, and social behavior. This negligence is a long-standing pattern: between 1985 and 2014, NIH funded just 510 extramural research grants on the health effects of laws or enforcement practices — less than 0.25% of all funded grants.¹

It is past time for a broad recognition in our health system that law is a ubiquitous treatment, one to which hundreds of millions of people are routinely exposed. If that simple but telling analogy is accepted, a more pressing point follows: we should devote much more health research money and talent to the scientific study of the health effects of laws and legal practices ("legal epidemiology"). To be sure, considering laws as treatments is a matter of analogy, not identity. Laws are not pills and cannot be developed, pretested, dosed, and delivered like pills. That said, the relative neglect of research on law
as a factor in the level and distribution of health is a matter of habit and culture, not the limits of scientific possibility.

The prospective, randomized, controlled trial (RCT) is an optimal research design for testing causal effects of pharmaceutical treatments. It can be used to study the effects of the behaviors that law is being used to scale up or forbid. An RCT can even sometimes be used to study, in an artificial setting, the effects of specific legal mechanisms such as deterrence. But it has never been the usual or even the best design for studying the effects of laws in vivo.

As in other domains of health research inquiry,2 methodologists have refined methods for causal inference using controlled time-series, quasi-experimental designs, including multiple comparison groups, hierarchically nested comparisons, dose–response studies, and replications across time and space.3 Taking advantage of variation in laws and target populations across time and space has allowed researchers to convincingly test the effects of legislating diverse interventions, from raising the drinking age to increasing the minimum wage. In contrast to the RCT’s protocized administration of interventions to relatively small and homogeneous groups, quasi-experiments can provide pragmatic evidence about how an intervention is working in everyday life, accounting for both social context and co-occurring conditions. By leveraging population-level data, quasi-experiments can illuminate heterogeneous treatment effects, which is especially important because laws, unlike pills, are administered at the group level and, as the past year reminds us, they produce different benefits and harms based on social position and other factors. For the same reason, social and behavioral science research that explores beliefs, attitudes, and norms is central to understanding how law works in the real world and how to make it work better.

Basic research in law has also been neglected. The rapid development of vaccines for SARS-CoV-2 was made possible by years of basic research on RNA vaccines and coronaviruses. In contrast, policymakers crafting complex, multifaceted legal interventions for Covid-19 — and researchers trying to predictively model their impact — had no stockpile of fundamental research into generic mechanisms of legal effects. Laws, like other social stimuli, work through observable social and psychological processes. Yet, notwithstanding classic instances in sociology, economics, and social psychology, there has been surprisingly little sustained research support for the systematic study of basic questions such as why people obey the law, how and to what extent penalties drive compliance, the impact of laws on norms, social modeling, and how peer attitudes shape understanding of legal rules. Lack of basic research produces both policy and scientific errors that could be substantially reduced by a better foundation of basic research on diverse mechanisms of legal effects.

We concede that governors and legislators do not have the same obligation as Food and Drug Administration staffers to follow the evidence. Politicians do not always pay attention to research evidence when they adopt policies, but sometimes they, their staffers, or the advocates behind policies do. Even in a pinch like a pandemic, insights from past research may expand or focus the list of policy options and help policymakers anticipate implementation and side-effect problems.

We knew from excellent research on the Spanish flu pandemic that control measures could face political and social resistance.4 During the height of the HIV epidemic in the United States, there was a good deal of historical and sociolegal research highlighting the “social construction” of disease and disease control.5 It was well established, in other words, that the usefulness of any control measure would depend not on its potential effectiveness under optimal conditions, but rather on its functioning and effects in the typical conditions of real life. Such insights, and evidence on the effects of specific laws, help policymakers make better choices, improve implementation, and have confidence in withholding opposition.

Past mistakes are water under the bridge, but now is the time to invest in the research and research infrastructure to learn what we need to know going forward. As we emerge from Covid-19 into the waiting room for the next pandemic, the most practically important questions about pandemic-control law remain unanswered. We need carefully controlled, retrospective research using actual data to answer essential questions: how to increase compliance with masking and other mandates, how to understand costs and benefits for closing each additional grade of school starting at prekindergarten, how to reduce in-person contact in commercial and social settings with-
An audio interview with Prof. Burris is available at NEJM.org

out disproportionately harming low-wage workers in the service industry, and whether and how to regulate travel. Failure to narrow uncertainty on these points in the aftermath of Covid will cost us dearly again in the future.

The imperative is to scale up the infrastructure for at least three kinds of research: study of the mechanisms, effects, side effects, and implementation of laws designed to influence health, such as Covid control measures; research on how the legal infrastructure of the U.S. health system — the allocation of powers and duties, as well as limits on authority — influences the effectiveness of the system; and perhaps most important for addressing health equity, studies of how laws that may appear to have no health purposes — such as the tax code, minimum wage, and labor rules — shape the social determinants of health.

Law has significant health effects. Failure to study these effects and translate that knowledge into better law reflects problems of culture, not science.

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

From the Beasley School of Law, Temple University (S.B.), and the Schools of Nursing and Medicine, University of Pennsylvania (E.D.A.) — both in Philadelphia; the University of Florida College of Medicine, Gainesville (A.C.W.); and the Rollins School of Public Health, Emory University, Atlanta (A.C.W.).

This article was published on May 22, 2021, at NEJM.org.


DOI: 10.1056/NEJMp2103380
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**A Hidden Opportunity — Medicaid’s Role in Supporting Equitable Access to Clinical Trials**

Samuel U. Takvorian, M.D., M.S.H.P., Carmen E. Guerra, M.D., M.S.C.E., and William L. Schpero, Ph.D.

Hidden deep within the $2.3 trillion omnibus spending and relief package passed by Congress in December 2020 lies a little-known but powerful provision intended to promote equitable access to clinical trials. Beginning in January 2022, coverage of the “routine costs” associated with clinical trial participation will be guaranteed for all Medicaid beneficiaries for the first time in the program’s history. The absence of federal policy in this area until now has most likely suppressed the representation of low-income and minority populations in the clinical research that underlies therapeutic advances, thereby limiting equitable access to potentially state-of-the-art therapies and compromising the generalizability of research findings.

For years, Medicare and private payers have covered the so-called routine costs that accompany clinical trial participation, such as the fees associated with physician visits, hospital stays, diagnostic tests, and other standard clinical services that would have been covered absent the patient’s participation in a trial. A national coverage determination in 2000 mandated coverage of these costs for Medicare beneficiaries. Later, the Affordable Care Act (ACA) extended this mandate to include commercially insured patients (with the exception of those enrolled in grandfathered plans, which were exempted from the requirement). Medicaid beneficiaries, however, were excluded from these federal measures, an omission that left states to legislate their own coverage policies. Consequently, state Medicaid programs vary in the degree to which they cover the routine costs associated with trial participation; only 16 states explicitly mandate coverage (see map), and a small number of others have less formal or less comprehensive arrangements.

Meanwhile, rates of participation in clinical trials remain low for racial and ethnic minority groups, which results in study samples that don’t accurately reflect the populations that could benefit from the products being...