

The Path to Zero: Utilizing Interstate Compacts to Unleash Testing Capacity

Severe testing shortages and processing delays are hampering the COVID-19 response. Here is how to rapidly build the arsenal of timely tests we need to suppress and defeat the coronavirus

As coronavirus cases soar across the United States, viral testing has become a bottleneck. People are standing in line for hours in some hotspot states to get tested, and many wait over a week or longer for their results. Containment of the virus is impossible in such conditions – we cannot break the chain of transmission if the virus outpaces us at every step.

This is the second time the nation faces severe testing shortages as case counts rise. Yet this time, innovators and labs are ready to unleash millions more tests. What these entrepreneurs and state leaders need is a framework to do so at scale. In this briefing, we explain how interstate compacts can unleash the much needed yet un-activated testing capacity in this country.

WHAT IS AN INTERSTATE COMPACT?

Interstate compacts are legally binding agreements between states, territories, and/or tribal nations that allow them to take collective action to solve shared problems or enact a common agenda. **The Compacts Clause of the U.S. Constitution grants states the right to create interstate compacts for their common benefit.** The text of the Compacts Clause requires congressional consent to these agreements. Compacts that receive congressional approval have the force of federal law and therefore supersede state laws.

WHAT COMPACTS EXIST TODAY?

Today, over two hundred interstate compacts are in operation. Many compacts are regional, and roughly two dozen are national. The average state is a party to twenty-five of these interstate agreements. All fifty state and federal territories have entered into the congressionally approved Emergency Management Assistance Compact (EMAC).

Interstate compacts simultaneously activate the flexibility of federalism by supporting state-led policy development and implementation while also empowering states with the tools they need to address complex problems, where the solutions depend on scale.

WHY WOULD A STATE WANT TO JOIN A COMPACT TO BUY TESTS?

States are still facing a massive **scarcity in tests**, with **5+ day turn-around times**. This is worse for smaller or rural states, like Alaska, that have to compete with more population dense states for tests. Moreover, despite the demand for test, the **price of a test** is not going down, but is still on average \$100.

Yet, there remains **un-activated latent capacity**, such as hospital labs, commercial non-clinical labs, academic labs, and veterinary labs. And there's also **innovation capacity** that could be a game-changer for a state's pandemic response. For example, one next generation sequencing (NGS) lab could turn 1,000,000 tests for \$25 per test. However, no state individually has enough demand for 1 million tests, nor sufficient funds to enable such diversification in testing.

INDICATOR	GOAL	CURRENT
Volume	3.5 – 5 million daily tests	500,000-800,000
Price	\$25 or lower per test	\$100+ per tests
Speed	24- hour turn around	5+ days
Lab Activation & Diversification	state public health labs, commercial clinical labs, hospital labs, commercial non-clinical labs, academic labs, and veterinary labs	state public health labs, commercial clinical labs, & partial activation of hospital labs
Access	Abundant access across all states	Big states win, small and rural states lose
Innovation	NGS & CRISPR rapid results	Limited progress beyond PCR

For example, low-population density areas will require more point-of-care testing such as Abbott machines, whereas **high population density areas** require more centralized labs. Compacts will be able to diversify capacity appropriately and to **load-balance** tests across its region to ensure its smaller, rural member states have sufficient access to tests for suppression.

Moreover, compacts can make unprecedented bulk orders on a scale test suppliers have yet to see, transforming test suppliers from **price-makers to price-takers**. High volume bulk-orders would give compacts significant bargaining power to negotiate **lower cost and faster tests** with existing test suppliers, who currently enjoy unfettered demand and monopoly-like powers. Test suppliers will be accountable and responsive to compacts which supply them business, rather than cherry-picking or prioritizing state relationships based on contract sizes.

Compacts will also have the **market power to give firms a market incentive to accelerate ramping up testing capacity**. In particular, because compacts can load-balance excess tests across states as the virus moves and spikes, compacts will be in a unique position to make massive guaranteed off-take contracts which guarantees future purchases of 1M+ tests from suppliers. These offtake contracts would serve an important **market-making function**. They would **eliminate uncertainty** for current firms who hesitate to build capacity out of fear of market volatility, and the worst-case scenario of showing up to market without sufficient buyers. Guaranteed bulk orders (even at a lower price point) would give firms the certainty to enter the marketplace and **compete on price**.

The metaphor of real estate is useful. We need a developer not to make contracts for existing housing stock but to develop a new neighborhood. The interstate compacts would be developers of the remaining as of yet un-activated testing capacity in this country. The compacts would have the mandate to contract for *new testing capacity* without disrupting existing contracts. In the long run, this should reduce price, and increase volume and speed.

WHY DO THESE TARGETS FOR TESTING MATTER FOR SUPPRESSION?

To suppress COVID-19 to less than 1 daily new case per 100,000 people (.001% case incidence), we need between 3.5 to 5 million daily viral tests with a 24-hour turnaround time at a less than \$25 price point equally accessible to all states.

VOLUME: We need to expand capacity to 3.5 to 5 million daily tests. To root the virus out of circulation, we need to test **symptomatic people and targeted hotspots** as starting points, but then funnel the bulk of testing to contact tracing, where all a positive’s contacts are tested down the chain of transmission (on average 12- 25 further tests per covid-positive individual, depending on the degree of social distancing practices in place in the jurisdiction). In addition, we need tests for **routine surveillance testing** in critical contexts, such as health care settings, eldercare facilities, correctional facilities, schools, colleges, universities and in the national security context.

PRICE: The current price for a COVID testing is roughly \$100 per test. However, this price needs to decline 4X to \$25 per test to avoid any further spending bills for testing. While some have thought that a test price point of \$100—which is well above actual cost—would incentivize more providers to join the market, the uncertainty in market size and orders has discouraged more firms from entering a market that may be short-lived. High price, low volume orders in an uncertain, fragmented market are a risky gamble for firms. Higher risk carries a higher cost of capital, likely financed only by venture capital firms, not traditional banks. To reduce risk, more important than a short-lived high price tag is guaranteed volume. Guaranteed bulk orders at a lower price point would give firms the certainty to enter the marketplace and compete on price.

SPEED: We need **viral tests with a 24-hour turnaround time**. Slower than 48 hours makes contact tracing ineffective in breaking the chain of transmission. The current spike of cases has already overloaded the clinical commercial labs. Last week, Quest announced that results take an average of 4 to 6 days whereas in June they were producing results in 2 to 3 days..

ACCESS: States need equal access to the testing market to achieve suppression. However, today smaller, less populous states (e.g. Alaska) are being crowded out of the testing market by larger states, resulting in excessively long turnaround times for a state to achieve suppression.

LAB ACTIVATION & DIVERSIFICATION: We need to activate capacity that is still latent. The nation has six categories of lab that could be used to fight COVID-19: state public health labs, commercial clinical labs, hospital labs, commercial non-clinical labs, academic labs, and veterinary labs (the last were very important to Germany’s response). To date, only the first two categories of lab have been fully activated.

HOW WOULD A COMPACT BE FORMED?

Congress adopts legislation authorizing the creation of compacts between states with the single mandate to spend \$25B in total on procuring tests. The compact takes effect upon three states’ passing legislation to join the compact. The compact’s authorities should expire on December 31, 2021, unless extended by Congress.

HOW WOULD TESTS FROM COMPACTS BE REIMBURSED?

The scale of surveillance testing needed is unprecedented. We do not have streamlined funding and payment processes in place. Insurance companies have streamlined payment processes for testing done for therapeutic purposes with doctor’s orders. Most surveillance testing, however, whether from contact tracing or critical context and congregate setting testing, does not enter the pipeline through doctor’s orders and payments cannot be processed through existing insurance billing procedures.

Two tools might possibly address this. **Medicare payment processes** might be used to cover surveillance testing or payment processes might be facilitated by the **use of reimbursement vouchers**. Such vouchers could be delivered both by contact tracing programs and by those managing hot spot, critical context or congregate setting testing programs.

WHO WOULD RUN THE COMPACT?

The compact is run by a board of qualified members who are selected by the majority of governors of the participating states.

HOW WOULD COMPACTS IMPACT EXISTING STATE CONTRACTS?

Compacts will not supplant existing contracts or obligations. Because they will take time to form and come online, states should not worry about them taking priority to existing orders. By law, it should be stipulated that test suppliers are obligated to fulfill pre-existing states contracts before any new contracts issued by compacts. Suppliers that prioritize compact contracts over prior state contracts will risk losing eligibility for compact contracts.

For future contracts, states will have the incentive to join compacts to enjoy the benefits of lower unit test prices, a diversified testing portfolio, regional load balancing, as well as access to advanced testing technologies that would otherwise be unavailable or difficult to access.

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