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Commentary

The Little State That Could

How West Virginia Became a National Model for COVID-19 Vaccination

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Commentary Overview

- West Virginia officials collaborated with the state's three large health systems to design a customized COVID vaccination plan.
- The state leveraged its network of over 250 local pharmacies to efficiently distribute COVID vaccines.
- Partnerships with the National Guard and other stakeholders have been key to the plan's success.

How did a little state of 1.8 million people manage to become a leader in the United States' COVID-19 vaccination effort? West Virginia's passionate sense of identity and open communication among state officials, health care providers, and residents have been instrumental to its success. With its rolling hills and small, tight-knit communities, West Virginia is the only state in the U.S. that lies completely within Appalachia; due to this insulation from the surrounding region, the state was the last to document a case of COVID-19.

Understanding Our Public Health Challenges

Knowing our demographics, West Virginia's local and state governmental officials collaborated with the leaders of three large health systems to devise a vaccination plan that deviated from the proposed federal plan — with permission, of course! To understand this plan and why it was implemented, it is important to know a few things about West Virginians and their health.

West Virginia leads the nation in deaths from **diabetes**, **accidents**, and **drug overdoses**; ranks third in the nation for cancer mortality; and fourth for deaths due to chronic lower respiratory

disease. The state's population also skews older: roughly 25 percent of residents are 60 years old and above. Statewide, generally poor health outcomes contribute to an increased risk of severe illness due to COVID-19. Given the demographics and health challenges, it was essential that West Virginia's vaccine rollout prioritize "getting shots in arms" — particularly for vulnerable populations.

In March 2020, the governor named a "COVID czar"—Dr. Clay Marsh, dean of the WVU School of Medicine—and engaged the National Guard, the State Department of Health and Human Resources, local health departments, and our network of health systems, hospitals, and health care providers to begin working together to help prevent the spread of COVID and to treat those who contracted the virus.

Implementing a Plan

With a vaccine on the horizon last August, our health system, WVUHS, worked with the state government and county health departments to develop a plan. Integral to this plan was understanding our population and who we wanted to prioritize to minimize the impact of the pandemic. With a relatively low population density of 77 people per square mile, and the majority living in small towns, it was clear the federal vaccine distribution program incorporating chain store pharmacies would be insufficient. Instead, the state capitalized on its network of over 250 local pharmacies. Concurrently, state officials, with the counsel of the major health care systems, prioritized those caring for COVID patients, first responders, and nursing home residents and their caregivers.

In December, the state received 236,000 vaccine doses and began to put its plan into action. We prioritized the infrastructure of our hospitals and protecting the most vulnerable residents (those who resided in extended care facilities), which not only saved lives but decreased demand on hospital services, facilities, personnel, and resources, including beds and personal protective equipment. The plan prioritized not only physicians, nurses, and other health care providers who were delivering care in COVID units, but also environmental services staff and facility workers who kept the hospitals running. By December 27—less than a month after the vaccines became available to county health departments—all nursing home residents and staff had been offered a first dose.

Partnering for Success

As more doses arrived, WVU Medicine partnered with surrounding counties for each of 15 hospitals located in the state to develop and implement a community vaccination program. A COVID-19 vaccination clinic was planned and executed in less than two weeks in a former Sears storefront in Morgantown, the home of the flagship hospital of WVUHS. Starting with residents 70 and older, the first clinics vaccinated 800 people daily.

Recognizing that up to 30 percent of the state's population lacks access to broadband internet and that elderly residents may be unable to navigate complex online portals, the clinics scheduled appointments via telephone and through the Epic electronic medical records system. At the Morgantown location we are now able to vaccinate 8,000 people a day — if the vaccines are available. Smaller efforts across the state have resulted in more than 252,000 doses being administered, thanks in large part to the heroic efforts of local pharmacists who would sometimes call nearby residents to offer the vaccine, then make house calls to deliver the shots.

West Virginia's vaccination effort also benefited from the involvement of the National Guard, which ensured a streamlined process for procuring, storing, and distributing the vaccines. The state's small size proved to be an advantage: with only three large health systems in the state, planning and execution of the vaccination strategy could take place in a single location, with key stakeholders huddling to work out process issues quickly and efficiently. This close administrative contact also benefited cancer patients, many of whom are elderly.

As part of the leadership team for the vaccination effort, WVU Cancer Institute was at the forefront of knowledge about clinic availability and access. Everyone involved in the vaccination effort understood the need to provide care to vulnerable citizens while meeting the unique needs of our communities.

Confronting Disparities

Despite leaders' best efforts, however, there are COVID-19 disparities that must be addressed. According to a [Kaiser Family Foundation study](#), in states that track the data, white people are

being vaccinated at rates two to three times higher than Black people. Earlier this year, West Virginia's [minority health task force](#) reported that distrust may be partly to blame: it is important for many Black residents to hear from people within their own communities that the vaccine is safe. Earlier in the pandemic, West Virginia's health department contracted with the Partnership of African American Churches to sponsor mobile testing sites. A similar partnership would likely improve access to vaccines in minority communities.

To date, West Virginia has administered nearly half a million doses of COVID-19 vaccines. A clear sense of who West Virginians are and an ability to communicate—and act—swiftly and efficiently has allowed our state to become a leader in COVID-19 vaccination, not only in the U.S., but worldwide: according to a recent [NPR story](#), the percentage of the state's population that is fully vaccinated ranks third internationally. With the introduction of a single-dose vaccine and improvements to production and distribution nationwide, West Virginia is well on its way to achieving community immunity.

Our Mission

The Association of American Cancer Institutes (AACI) comprises 102 premier academic and freestanding cancer centers in the United States and Canada. AACI is accelerating progress against cancer by empowering North America's leading cancer centers in their shared mission to alleviate suffering.

About AACI Commentary

To promote the work of its members, AACI publishes *Commentary*, a monthly editorial series focusing on major issues of common interest to North American cancer centers, authored by cancer center leaders and subject matter experts.

