The Institute

Turning Information into Insight

The Need for a Regional Covid 19 Vaccination Strategy

The Institute is a regional research, analytics and social innovation organization formed as consortium of higher education and the business community in northeastern Pennsylvania. The group is led by an advisory board consisting of the President/CEOs of 13 schools and 18 senior executives of major companies. This leadership group is dedicating itself to educate, advocate and promote regionalism across separate communities and counties to solve problems, remain an economically competitive area, and raise the quality of life and standard of living for all who live here.

The group chose COVID 19 vaccination as its first priority. Like testing for the virus over the past ten months, unfortunately, the COVID-19 vaccine rollout has been a public health implementation challenge across our country. An ideal, intentionally designed and futuristic public health strategy could generate unprecedented engagement of the American public in our primary health care system to improve the overall health and welfare of our nation, while accelerating achievement of COVID-19 herd immunity. The opportunity to implement a disciplined, risk-stratified approach leveraging unprecedented collaboration of our hospital systems, patient centered medical home essential community provider networks, both retail and locally owned pharmacies, and insurance companies could generate a highly effective, safe and affordable mass vaccination strategy that intentionally and systematically addresses undeniable health and socioeconomic disparities amongst us. Such a disciplined approach to achieve herd immunity is crucial as our national infection numbers exceed 26 million and tragic death tolls escalate towards a half a million Americans.

With a national strategy relying on states to operationalize their own vaccine distribution programs, states are variably struggling to design and implement effective plans. Variability of state and regional health information infrastructure and interoperability, as well as established functioning of statewide public health vaccine registries, have further complicated communication, reporting, monitoring, and second dose assurance. The resulting patchwork approach, along with inadequate infrastructure, resources and supplies, lack of clarified “drive-by” versus primary care visit-based distribution guidance, shifting directions on approaches to priority and highly vulnerable populations, and insufficient reporting on the schedule and delivery of vaccines to the states has led to wide-scale confusion and frustration as well as intensified glaring disparities in access to care. All of these concerns are delaying achievement of COVID-19 herd immunity. Moreover, rumored short supply of vaccines could potentially prohibit individuals from receiving their second vaccines in a timely manner.

Non-risk stratified and often reactive drive-by solutions for the adult population is obviating opportunities to engage at-risk patients in primary healthcare visits to address well-recognized silent epidemics in our country of undiagnosed hypertension, diabetes and other chronic conditions. Public health experts are also lamenting the potential lost opportunities of comprehensively recording potential adverse outcomes of these brand new technology messenger RNA-based technologies for reflective learning and future research. Most unfortunately, none of this is surprising in the historical landscape of American healthcare, where espoused theories of wide scale, tightly orchestrated collaboration and health information interoperability have not adequately progressed to actionable, concrete demonstrable outcomes.

States are innovating. For example, New York and New Jersey opted for statewide registration systems with clearly designated vaccination sites, and New York also gives residents the option to contact their own providers or pharmacies for the vaccine. This approach was effective until leaders realized they were not going to have the supply needed to deliver on the schedule they developed. The statewide health information exchange brought the visibility of emerging vaccine inadequacy to light early. Both states also have strong public health infrastructures with established regional networks of partnering providers. This type of systematic approach on established public health infrastructure will continue to work for them once supply issues are resolved.

As of this writing, Pennsylvania state leadership opted for an "honor system" meant to empower regional and local distribution strategies led by integrated health systems, community health clinics, retail and family owned pharmacies, and private physician practices. Counties reportedly receive specified numbers of vaccines based on a formula that considers population and number of positive cases. The regional/local approach has generated perceived inequities and fragmentation around the state, especially within smaller regions and counties. Private practice physicians report that they are the last entities to receive vaccines, not only for their patients, but also for themselves. Most pharmacies are only beginning to receive their vaccines. Some are setting up scheduling websites and others are taking calls. There is mass confusion and some people book multiple appointments, if they can get through leading to vaccine waste. Stakeholders that have stepped up to steward vaccine distribution have now been overwhelmed with public outreaches that tie up phone lines prohibiting easy access for established patients seeking visits for chronic disease management, preventative health needs, and acute sick care. Many community based providers have, as a result, been forced to restrict vaccine access to established patients only, communicating this restricted status on voicemails, websites, social media channels and newspapers with variable effectiveness. Despite being inspired by the vaccine potential, healthcare provider systems are weary.

As a state, 1,915,350 vaccine doses have been distributed, and 856,371 have been administered in Pennsylvania, yielding a 44.71% rate of distribution to administration. This renders our state ranking 49th amongst the states in terms of this percentile, trailed only by Alabama. However, Pennsylvania is holding its second doses for patients that have been immunized with the first. Other states are opting to deploy all vaccines, creating issues now that there are supply side challenges.

Fragmentation – on a multitude of issues – has historically plagued Northeastern Pennsylvania for decades. Now, in a public health crisis, it is delaying collective herd immunity and threatening to further delay the effective delivery of the COVID-19 vaccine to members of our regional community most at risk. The need to organize for collective brainstorming, action and learning cannot be overstated. There are so many challenges to consider in addition to vaccine supply. For example, a person securing a vaccine from a pharmacy or health system of which they are not an established patient, where their medical records are not available for review, could face significant health and safety risks. Longitudinal providers are often not in the know, yet they may receive outreaches for vaccine side effects. Providers delivering vaccines are anxious about harm potential, communication and care coordination responsibilities, and also liability. Furthermore, all distributors should be keeping careful records of individual patients vaccinated, including vaccine type and lot numbers, as well as second dose due dates, while filing distribution with the Pennsylvania statewide public health vaccine registry. However, it is unclear whether these organizations have the systems, infrastructure or human capacity to comply with these best practices of managing the logistics and the data. The lack of central control and deference to an "honor code" system unfortunately fails to guarantee compliance with the Pennsylvania Department of Health's eligibility and reporting standards. Reports of obviating access for Phase 1A expanded eligibility populations by conducting unapproved vaccination events for Phase 1B eligible populations are increasing and generating additional frustration. Finally, health systems and providers have different

electronic medical records (EMRs) and patient portals that do not necessarily connect with one another – leading to more frustrating fragmentation that precludes the level of coordination optimal to finely orchestrate a prudent and thoughtful regional vaccine distribution strategy.

In northeastern PA, Commonwealth Health Systems, Geisinger Health System, Scranton Primary Health Center, The Wright Center for Community Health, Wayne Memorial Health Systems, among other providers, along with several retail and privately owned pharmacies are distributing the vaccine. Many additional providers and local pharmacies are waiting for their shipments. Nursing homes and long-term care skilled nursing units and personal care homes are in variable stages of receiving COVID-19 vaccines for their residents. All active vaccine distribution sources have different registration, delivery, tracking and reporting processes and plans. Some are offering drive by vaccine-only visits and others are offering a visit based approach. Most report fluctuating vaccine supply access and a fear of not having second doses guaranteed. This variability has led to significant confusion among the public about where to go and how to schedule vaccinations. Older, more vulnerable and isolated populations are at a particular disadvantage, as many may be less familiar with online scheduling and/or not have the ability to access online registries. Health literacy challenges intensify care access disparities.

Additionally, there is no universal shared strategy in place to deploy vaccines that may be left over after a vaccination clinic so that they do not go to waste.

The Lackawanna and Luzerne County Area Agencies on Aging are advocating aggressively to prioritize vaccination of the vulnerable elderly populations they represent. They are reaching out to all partnering providers to secure vaccine access and helping seniors with computer use and internet registration. However, these agencies are currently disempowered because of lack of a reliable and wide-scale, collaborative vaccine access platform to ensure that all eligible people in Phase 1A of the vaccine rollout can receive even their first shots in the immediate time frame. They struggle with the lack of guarantee that first and second doses will even be available with priority for the vulnerable populations they serve. Such elderly advocates must surely be quite disheartened by the reports that some organizations have begun vaccinating populations of individuals in Phase 1B, despite the fact that not all regional residents eligible in Phase 1A have been served.

Some states are notably partnering with the private sector to improve their COVID-19 vaccine operations. North Carolina has adopted an interesting model. It involves a public-private partnership between a major health system, an information technology company, and a sports arena owner. The IT company is lending its systems expertise for scheduling, tracking, and reporting; the sports arena is devising a facilities plan to accommodate 10,000 vaccine injections per day; and the health system is providing the trained personnel to administer the doses. Reputable companies like Amazon and Starbucks are also working with local entities in communities across the country to assist in vaccine deployment. These types of cross-sector partnerships force-multiply efforts and impact, and they can help fill gaps in scheduling, communication, and delivery coordination of the vaccine in order to improve and expedite effective coordination of wide scale rollouts.

It is time for all northeastern Pennsylvania stakeholders and COVID-19 vaccine distributors to follow suit. There is an incredible opportunity for us all to come together around development of a regional strategy. From a glass half-full perspective, NEPA has valuable healthcare and public health resources. We have the Keystone Health Information Exchange (KEYHIE) through which, several years ago, Geisinger and The Wright Center for Community Health pioneered the migration of Pennsylvania's statewide vaccine registry to a public health bi-directional vaccine registry reporting platform. We have passionately engaged state and county level governmental leaders, hospital systems, ambulatory care providers including several FQHC essential community providers, and many retail as well as privately owned pharmacies. We have established cross-sector stakeholder engagement as evidenced in the

governing board of the Institute for Public Policy and Economic Development, which is crucial to effect change proximal to the issues, supporting generation and publication of this op-ed. We must urgently and inclusively convene all engaged stakeholders to establish a strong backbone for generating and coordinating a collective impact approach to our regional COVID 19 vaccination strategy. We must extend our outreach across sectors to engage vested partners including additional resource agencies and private sector businesses to assist in the co-creation and deployment of an overall actionable, regional strategy to successfully vaccinate all eligible citizens of NEPA in an efficient and equitable manner. Such a collective impact initiative can generate hope and it can change our NEPA narrative to accelerate achievement of a preferred future we have dreamed about for decades.

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