OVERVIEW:
Where are we now?

As of September 28, 75 percent of the US population eligible to be vaccinated (ages 12+) has received at least one dose of the COVID-19 vaccine, and 65 percent are fully vaccinated. Despite this progress, states continue to grapple with surges in COVID-19 cases, hospitalizations, and deaths (primarily among unvaccinated populations) due to the spread of the highly contagious Delta variant, which represents more than 99 percent of new infections. Following a peak in early September 2021, the seven-day moving average of daily new cases has decreased to below 110,000, with transmission decreasing or leveling off in a number of hard-hit areas. Pediatric hospitalizations reached a new peak in August and cases have increased as children who are not yet eligible for vaccination return to school, where implementation of mitigation measures, such as masking, varies across school districts.

States are continuing to try new strategies to engage individuals who have not yet been vaccinated. The Food and Drug Administration (FDA) recently granted full authorization for the Pfizer-BioNTech vaccine for individuals 16+ and amended the emergency use authorization of the Pfizer-BioNTech vaccine to allow for an additional third dose in certain populations. In partnership with providers, health plans, employers, schools and others, state leaders will continue efforts to improve vaccination rates within their borders.
The COVID-19 pandemic has magnified political tensions around the public health response. On September 9, the White House announced a new COVID-19 Action Plan, which included new mandates for vaccination for Federal employees, contractors, and health care workers in Medicare and Medicaid-participating health care settings, as well as requirements that employers with more than 100 employees require vaccination or regular testing. The plan also calls on states to adopt vaccine requirements for all school employees. Although state leaders are strongly encouraging vaccinations, states differ regarding implementation, such as whether to mandate vaccines for employment or require proof of vaccination for access to various venues and services.

While these differences in policy play out publicly, children are returning to school, plans for booster shots proliferate, and health system capacity is once again stretched in hard hit areas; together these realities all contribute to a further challenged and charged policy and public health environment. Attention has turned to locally driven solutions to reach unvaccinated people as mass vaccination sites close, presenting a new policy landscape for state officials.

As part of a comprehensive effort to support state leaders as they navigate the COVID-19 response, the Duke-Margolis Center for Health Policy and the National Academy for State Health Policy (NASHP) convened a meeting in July 2021 with a geographically diverse set of state officials and national experts to share best practices and innovative approaches to increase COVID-19 vaccinations. Though the landscape continues to evolve rapidly, the participants discussed several themes that remain relevant given the current state of the pandemic. Participating state officials discussed strategies to reach unvaccinated individuals and policy and operational shifts to living with COVID-19 as a constant rather than a crisis. Below is a summary of the meeting discussion with additional details on specific state approaches.

**Strategies to Reach Remaining Unvaccinated Populations**

State health officials shared numerous strategies to reach unvaccinated individuals, tailoring approaches toward “the movable middle,” a heterogeneous group of nearly 55 million adults identified as potentially open to vaccination. In general, reasons for remaining unvaccinated include concerns about side effects and safety, barriers to access (e.g., concerns about missing work), misinformation about vaccines, politically motivated concerns, and historical distrust in government and medical systems. This heterogeneity requires both a thorough assessment of unvaccinated subgroups and an array of strategies.

**Identifying Reasons for Hesitancy and Identifying Effective, Culturally Responsive Messaging to Reach All Populations.** National experts shared that by using tools, such as the American COVID Vaccine Poll and COVID-19 Vaccine Monitor, state officials can identify specific reasons people have for remaining unvaccinated and implement hyperlocally-targeted strategies to build vaccine confidence. For example, the American COVID Vaccine Poll, conducted by the African American Research Collaborative, tested messaging across various subgroups oversampled Black, Latino, Asian American and Pacific Islander, and Native American populations. Findings from the poll show that the most effective message to get vaccinated is to protect the lives of family, friends and loved ones. The majority of respondents indicated that their personal doctor was the most effective messenger, followed by doctors and nurses generally, and family and friends. Accordingly, some states are using these insights in broad campaigns and supplementing providers with resources to support them as messengers. For example:
The Wyoming Immunization Unit includes a list of resources on its website to aid health care providers in their conversations with parents and families.

Vermont state officials cited their many communications and educational materials in multiple languages and dialects. State officials also highlighted their partnerships with Black, Indigenous, and people of color (BIPOC)-led organizations, though they noted there is still a need for greater outreach with Native American communities.

State officials also discussed the need to adapt vaccine communications campaigns to respond to emerging issues and concerns. For example, health officials report working to shift the tone of vaccine messaging to focus on long-term effects of the virus rather than immediate hospitalization and death, as the long-term message is more effective in persuading unvaccinated populations.

Enhancing Targeted Partnership and Outreach and Including Trusted Messengers.
Discussion included opportunities and barriers to enhancing partnerships with primary care physicians, pharmacists, and other local providers. Participants shared broader strategies to build confidence and link individuals to vaccination opportunities through tailored educational campaigns, targeted outreach in communities, campaign-style door-to-door efforts, and partnerships with religious leaders and other trusted sources for messaging and hosting vaccination clinics. Health officials stressed the need for tailoring these efforts to the specific needs and sensitivities of each community, noting—for instance—that door-to-door outreach campaigns have been better received in some areas than others. As such, it is important to consult with and incorporate community leaders into local outreach efforts.

State officials also recognize that effective messaging does not always come from the state officials, and one way to enhance targeted partnerships includes partnering with various community organizations and provider associations to craft messages. Examples state officials discussed include:

Maryland state officials reiterated the importance of conveying vaccine messaging from trusted community leaders like pastors, local providers, and local officials. In general, working with faith-based and community leaders can be highly impactful, especially in communities of color. African American faith leaders have been effective in disseminating accurate vaccination information to their congregants.

Reducing Barriers to Vaccine Access in Primary Care Settings. Given the trusted role of health care providers in promoting vaccine confidence, ensuring that vaccines are available in a wide variety of community-based primary care and pharmacy settings was a key priority for states. Vermont, Louisiana, Mississippi, Kansas, and Kentucky all discussed efforts to engage these providers and reduce barriers to vaccination in primary care settings by setting up vaccine redistribution programs to make it easier for more medical providers to have small amounts of vaccine doses available. In these states, Departments of Health or other facilities with ultra-cold freezers are able to handle larger orders and storage and can redistribute smaller orders to local providers.

Mississippi public health pharmacists are distributing smaller amounts of vaccine doses to local providers, clinics, pharmacies, and homeless shelters, supported by Centers for Disease Control and Prevention (CDC) supplemental funding.

Providers in Kansas had been hesitant to order doses due to concerns about waste, but health officials are encouraging providers – based on May 2021 guidance from the CDC— to focus on the overall benefit of administering doses and not focus on the potential for waste. Concern about “wastage” had been a major impediment to adequate vaccine supply for many physicians, especially for small practices.
Engaging Communities and Providing Easy Access. Another strategy to reach the “movable middle” is ensuring access to vaccines is as convenient as possible. Red tape, lack of time off work or childcare, and lack of availability in convenient locations were all highlighted as barriers that may prevent already hesitant or indifferent populations from taking the extra step to get vaccinated. For individuals who may not be connected to health care providers, bringing vaccine opportunities directly to communities to meet people where they are through meaningful community partnerships was viewed as central to local success. Examples state officials discussed include:

- **Vermont** is intentional in ubiquitous access to vaccines—ensuring residents “stumble” into vaccines at numerous locations and that locations are primed to receive them or engage in dialogue through widespread education efforts.

- **Louisiana** state officials discussed establishing a State Adolescent Task Force to target traditional and non-traditional vaccine sites for adolescents and is working with Vaccines for Children (VFC) providers to understand attitudes and barriers to vaccinations. Louisiana also has deployed mobile vaccination vendors to go into communities to vaccinate, and as of July 2021 these vendors administered over 100,000 doses. Vendors are working to schedule events at 1,200 schools across the state.

- **Maryland** state officials discussed integrating sites to include testing for all ages and vaccinations for individuals 12 and older to reduce transportation barriers for families. Maryland will also be organizing more pop-up events in the fall as children return to school, and the state has established an online process request for employers to request on-site vaccine clinics. The state also has a large migrant worker community and is partnering with migrant and immigration-based community-based organizations to address barriers to access and provide community members with information from trusted sources.

Using Financial Strategies to Incentivize Vaccine Uptake. Adequate funding to support local vaccination approaches and provider engagement in vaccine counseling and delivery is key. Discussion focused on effective alignment of substantial federal investments to state and local partners to build response capacity, including allowing states to strengthen their immunization infrastructure and make stronger connections with communities to ensure equitable vaccine distribution now and in the future. Participants discussed financing local efforts for community engagement, education, and vaccine provision, including resourcing local partners in communities with low vaccine uptake and developing payment approaches to reimburse and incentivize providers adequately. Examples of efforts to increase primary care and pharmacy provider participation include Mississippi’s and Kentucky’s initiatives to directly incentivize providers per shot above and beyond usual administration fees:

- **Mississippi’s COVID-19 Community Vaccination Program** reimburses providers $75 per COVID-19 vaccine administered at community vaccination events using grant funding from the CDC.

- The **Department for Public Health in Kentucky** contracts with a private vendor to host mobile vaccine clinics in communities and reimburses providers $80 per shot using Federal Emergency Management Agency (FEMA) funds.
Navigating Political and Legal Issues. Political and policy landscapes vary across the country with some states supporting strong government, school, or employer-imposed vaccine mandates while others place limits on the ability of these entities to impose mandates. This variability across states imposes multiple challenges for state health officials attempting to increase COVID-19 vaccination rates. In many states, parental consent for vaccination is required in order for minors to be vaccinated. However, requirements may vary by state or across vaccination sites. State officials reported significant concerns that political resistance to the COVID-19 vaccine was spilling over to affect other public health protection measures like routine childhood vaccinations and, in some cases, resulting in public mistrust of health officials and notably impairing response. States with established minor consent laws have experienced legal challenges or political pushback regarding allowing minors to self-consent to vaccination, and requests for religious exemptions for all routine school vaccinations have increased, requiring new approaches to ensure adequate vaccine coverage for vaccine-preventable diseases, such as measles. Participants noted that the composition of the “movable middle” varies by state with vaccine resistance hardening in certain communities. Anti-vaccination activists and political resistance to vaccines has created exceptional pressures for immunization programs across the country but especially in areas with lower vaccine rates, many of which are concentrated in southern or central regions of the U.S.

Improving the Use of Data to Increase Equitable Access to Vaccines. All strategies discussed during the meeting rely on meaningful information exchange and reliable data collection, analysis, and tracking. For example, many states report coupling targeted vaccine outreach with integrated mobile testing and vaccine units in areas of high social vulnerability to prioritize equity in the response. States are using indices like the CDC’s Social Vulnerability Index (SVI) and identifying areas with low vaccine coverage to prevent outbreaks and mitigate spread. Still, incomplete data (especially with respect to race and ethnicity) and challenges to routine data exchange among key partners continues to hamper some efforts.

Participants elaborated on the value of aligned data from multiple sources (including Medicaid, health plans, primary care providers (PCPs), pediatricians and trusted medical sources, as well as faith-based leaders and other community partners) to drive strategies, identify populations of need, and target hyperlocal strategies. For example:

- **Maryland**’s Recovery Program mantra is “Data Driven, Equity Focused.” Maryland’s Department of Health helped develop tools to aid in making local decisions and developing partnerships at the hyperlocal level.

- **Louisiana** is building equity into their hyperlocal approach to get people vaccinated and has used the SVI to identify communities experiencing greatest social vulnerability. Louisiana’s Health Department partnered with community members to engage in community outreach, including door knocking, canvassing, and phone banking to provide education and vaccines.

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With the Delta variant continuing to dominate infections and a high degree of regional variability of vaccination rates, states continue to grapple with COVID-19 infections, hospitalizations, and deaths that have strained health systems. At the time of the meeting in July 2021, unvaccinated individuals accounted for over 98% of hospitalizations, severe illness, and death due to COVID-19. Participants discussed their own, employers’, and other key partners’ efforts to build a sustained approach to recovery: continuing to respond to the immediate crisis while also proactively working to build the infrastructure, partnerships, and policies that will allow for mitigation of COVID-19-related illness and morbidity while living with the virus in the long term.

State officials discussed the critical task of identifying key partners to help mitigate the spread of COVID-19 and re-imagining a sustained pandemic response. They identified partnerships with community-based organizations and schools as critical to increasing vaccine access, spreading trusted messaging, and more seamlessly integrating vaccination opportunities with health system touchpoints, such as in primary care and pharmacy settings. For example, Vermont state officials noted that they have vaccinated over 80 percent of their eligible population and have completely transitioned out of mass vaccination sites. Community-based clinics are still operational, but the state is creating more sustainable models, including merging clinics with provider practices. The state is also looking to work with employers to make it easier for employees to get vaccinated and is ensuring that all school-based health centers provide vaccines.

State officials noted that living with COVID as a constant, rather than a crisis, implies a need for the modernization of the public health system. Moving away from a crisis public health response requires revisiting pandemic preparedness, emergency response approaches and partnerships; using lessons learned from COVID-19; and investing in community resilience to weather future public health crises. Discussion turned to leveraging recent federal funding (e.g., American Rescue Plan Act (ARPA) dollars) to make meaningful investments in vaccination infrastructure and ensure sustainable public health prevention, education, and mitigation models with tight state-to-local alignment. The critical role of data infrastructure, analytics, and actionable information was reiterated, as was the opportunity to solidify nascent approaches to addressing longstanding inequities. A previous Duke-Margolis and National Governors Association publication details current state approaches to prioritize equitable distribution of vaccines and highlights bright spots that can fuel sustainable improvements. Some state leaders noted the challenges associated with timely allocation of ARPA funds to spur sustainable local solutions. They flagged, in particular, a need for efficient procurement processes and contracts, flexible funding approaches, and strengthened federal-state-local partnerships to finance programs efficiently with an eye toward sustainability.
CONCLUSION:
Reaching the Unvaccinated and Keeping Up the Momentum

States continue to adapt to the challenges of the Delta variant and new developments in the vaccine landscape, including the FDA's full approval of the Pfizer-BioNTech vaccine for individuals 16 years and older, emergency use authorization for Pfizer-BioNTech flagging booster for certain populations at additional risk of severe illness or occupational exposure to COVID-19, and impending emergency use authorization of the vaccine in children under 12. Amidst this shifting landscape, state officials must also navigate political tensions and ensure that equity remains front and center in vaccination efforts. Using data to identify pockets of need, engaging with community partners to increase vaccine access and trusted messaging, building partnerships and infrastructure that can sustainably support vaccine delivery moving forward, and locating vaccine clinics in convenient settings to reduce inequities in vaccination rates are crucial to reaching the remaining unvaccinated populations and mitigating the challenges posed by COVID-19 in the long term.

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