On October 29, the U.S. Food and Drug Administration (FDA) authorized the emergency use of the Pfizer/BioNTech vaccine for the prevention of COVID-19 for children 5–11 years old. Recommendations for use of this vaccine by the Centers for Disease Control and Prevention’s (CDC) Advisory Committee on Immunization Practices (ACIP) are expected by November 3rd. States are rapidly preparing for the rollout of the vaccine for younger children, addressing both familiar and novel issues around equitable access, education, and partnerships. Current COVID-19 vaccination rates among adolescents ages 12–17 across the United States average around 50%, but vaccination rates for this population vary widely state-by-state — from more than 70% fully vaccinated in some states compared to less than 30% fully vaccinated in others.
The recent slowing in uptake for the adolescent age group signals challenges as eligibility extends to the 28 million children who are ages 5–11 across the country. According to data from the American Academy of Pediatrics’ Pediatrician Life and Career Experience Study (PLACES), one in four primary care pediatricians responding to the survey estimated that 50% or more of parents in their practice community would be “extremely unlikely” to vaccinate their 12-to-17-year-old children. A recent Kaiser Family Foundation survey of parents also found that only one out of three parents plan to immediately vaccinate their 5-to-11-year-old children, and that one quarter of surveyed parents said that they “definitely will not” vaccinate their children, echoing a previous survey.

The findings are notable given the increase in COVID-19 cases, hospitalizations, and deaths for 5-to-11-year-old children. Nearly 40% of new COVID-19 cases among individuals younger than age 18 in the United States occur in this age group. While children are not at elevated risk of death and severe complications from COVID-19, September 2021 marked the country’s worst month for new COVID-19 cases and deaths among children. As of October 21, 2021, nearly 6.3 million U.S. children tested positive for COVID-19, and children have represented more than a quarter of all new COVID-19 cases. As of October 17, 2021, 4,300 hospitalizations and 691 deaths from COVID-19 in the U.S. had been reported in individuals younger than 18 years, and over 20% of those deaths were among children ages 5–11 years. As with adults, American Indian/Alaskan Native and Black children are at significantly greater risk of death from COVID-19 than their white peers, and children with special health care needs, those from communities of color, and lower-income families have been disproportionately impacted by the pandemic.

The impact of COVID-19 upon children extends beyond illness and death. A recent analysis by McKinsey & Company showed the pandemic had left K-12 students with significant learning loss. Additionally, there is a collective impact on parental loss of wages due to preventable illness and quarantine in unvaccinated children. In October, the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the Children’s Hospital Association issued a joint declaration of a national emergency in child and adolescent mental health that is “inextricably tied to the stress brought on by COVID-19 and the ongoing struggle for racial justice.”

The Biden administration’s plan for vaccinating children ages 5–11 years outlines partnerships with pediatric and primary care providers, children’s hospitals, pharmacies, community health centers, and school-based clinics across the country. As states begin their efforts to get younger children vaccinated, they will expand on their partnerships with these groups. Pediatric providers will be critical to this effort — especially for the many parents who have questions about the safety and efficacy of the vaccine for their children. This brief identifies current challenges and state-level strategies to vaccinate children 5–11 years old through pediatric providers.
Challenges for Pediatric Providers

Pediatric vaccination efforts have typically been anchored in the pediatric medical home. Pediatric medical offices routinely administer immunizations and are well-trained and well-equipped to vaccinate young children who may be fearful or uncooperative when it comes time to be vaccinated. These providers also are an important source of trusted information for many parents who have questions or concerns around vaccines. Moreover, while the need for routine immunizations may initiate the need for an in-office appointment with a pediatric medical provider, these visits also provide important opportunities to evaluate a child’s physical, emotional, and behavioral development and overall health.

Pediatricians will be critical to the successful rollout of COVID-19 vaccines for young children. The American Academy of Pediatrics estimates 75% of pediatricians are signed up to provide COVID-19 vaccines to children; however, moving from program enrollment to successfully executing vaccination efforts on the ground can be challenging. The inability of some enrolled pediatricians to order, stock, and administer COVID-19 vaccines due to administrative, payment, and logistical barriers could leave critical access gaps that result in inequitable vaccine access. Such barriers to success should be acknowledged and addressed:

- **Pediatricians are experiencing staffing shortages that make it difficult to keep up with routine office work**, and many cannot absorb the additional time and cost involved with providing COVID-19 vaccinations.

- **Payments for counseling (both in Medicaid and private insurance) are typically contingent upon the actual administration of the vaccine**, which may disincentivize providers from spending the time needed to discuss COVID-19 vaccinations questions with parents who have concerns around the vaccine.

- **The administration of the vaccine poses new logistical challenges** as the formulation of the Pfizer/BioNTech vaccine for children younger than 12 years of age is different than the formulation of the vaccine for individuals 12 years and older. This requires medical staff to order and stock an additional vaccine and learn how to administer it.

- **Administrative barriers to enrolling in the COVID-19 vaccination program can be significant and redundant** to the requirements many pediatricians already meet through enrollment in the Vaccines for Children (VFC) Program, serving as a disincentive for some pediatricians to sign up as COVID-19 vaccinators.
Strategies to Increase Vaccinations: Identifying Local Pediatric Providers and Access Points

The initial COVID-19 vaccine rollout largely prioritized mass vaccination sites, hospitals, health departments, and chain pharmacies; current distribution plans recognize that reaching children will require a more local response. Studies show that about half of adults prefer to have conversations with their own doctor to decide on vaccination. The American COVID-19 Vaccine Poll reported that all low-income groups indicated they preferred to receive a COVID-19 vaccine in their doctor’s office. Thus, partnering with medical providers to counsel for and provide COVID-19 vaccines is paramount to addressing equitable access, and strategies to ensure adequate provider availability in those communities is essential. Ariadne Labs and Boston Children’s Hospital have partnered to create the Vaccine Equity Planner, which can be used to identify pediatric COVID-19 “vaccine deserts” and potential new vaccination sites. The tool can filter based on the location of pediatric medical providers and Social Vulnerability Index (SVI) to help reduce disparities in vaccine access.

Many states are also leveraging existing infrastructure with the VFC program to recruit pediatric practices to become COVID-19 vaccine providers, as these sites have already met many of the federal criteria required to receive and administer COVID-19 vaccines. The VFC program provides childhood vaccines at no charge to children who are Medicaid-eligible, uninsured, under-insured, or American Indian or Alaska Native, and VFC providers are critical to equitable vaccine access. More than half of the children in the U.S. qualify to receive vaccines through the VFC program. The CDC provides a comparison of the VFC and COVID-19 programs, which can clarify the additional steps needed to enroll in the COVID-19 vaccination program. However, because VFC providers need to enroll in the COVID-19 vaccine program through a separate process, these additional administrative requirements can be challenging for pediatric practices. Examples of state efforts to enroll more COVID-19 vaccinating providers include:

- **Mississippi** uses tools to identify COVID-19 vaccine deserts and determine locations for pop-up vaccination clinics. The state offers $75 to providers per individual vaccinated at locations where the population has been disproportionately impacted by COVID-19. Such incentives help offset the cost pediatric and other providers incur through their efforts to vaccinate their patients.

- **Texas** has enrolled more than 70% of its VFC practices as COVID-19 vaccine providers, expanding COVID-19 vaccine access for children from low-income families, especially in rural areas. While beyond the scope of this brief, access points in schools and community-based settings will play a significant role, as laid out in the Biden plan. Many states are collaborating with local school...
districts to ensure vaccinations are easily accessible for the 5-to-11-year-old population. For example, Maryland is working with local school districts to make vaccinations more accessible, and California has worked to establish school-based vaccination clinics in 100 schools in preparation for authorization of the vaccine for 5-to-11-year-old children. Comprehensive plans that knit together all access points are evolving and will need to address the unique considerations for the pediatric population. For example, through the federal pharmacy program, pharmacies have been critical access points for vaccination for eligible adult populations, especially in rural areas where the closest medical office may be a considerable distance away. Their role in pediatric vaccinations may be more limited due to several challenges pharmacies face in supporting pediatric vaccination.

**Strategies to Increase Vaccinations:**

**Provider Incentives**

Vaccine incentives are another lever states are using to help address barriers to vaccinations that pediatricians and other pediatric providers are experiencing. In recognizing the additional complexity of the COVID-19 vaccine administration, some states have used American Rescue Plan Act funding to incentivize vaccine administration by making additional payments to medical providers. These same strategies can be applied to pediatric practices. Some examples of states with provider incentive programs include:

- **North Carolina’s** Medicaid program added a new code, allowing providers up to 15 minutes to counsel Medicaid beneficiaries on the benefits of receiving a COVID-19 vaccine. Providers are paid regardless of whether patients choose to get the vaccine at that visit. BlueCross and BlueShield of North Carolina followed suit to allow for counseling reimbursement for their commercial plan populations.

- **California** offers medical practices, safety net clinics, independent pharmacies, school-based clinics, and other vaccination providers up to $55,000 to support their COVID-19 vaccination efforts, which can be used for staffing and training, technology, infrastructure, supplies/equipment, and administrative overhead. The application for this funding is open through December 17, 2021.

**Strategies to Increase Vaccinations:**

**Communicating the Importance of Pediatric COVID-19 Vaccination**

Effective messaging around the importance of pediatric vaccination helps us move one step closer to controlling the pandemic and several states are working to raise awareness around the impact of COVID-19 upon the pediatric population. Examples of state efforts to communicate the importance of pediatric COVID-19 vaccination include:
• New Mexico's Department of Health published a COVID-19 Pediatric Case Report that provides up-to-date trends, including disparities among race and ethnicity groups, and informs messaging for the department’s weekly public updates.

• Oregon recently posted a blog discussing the importance of pediatric vaccination and using safety measures to help protect those who are not yet eligible to be vaccinated.

**Strategies to Increase Vaccinations:**

**Trainings for Pediatric Vaccine Administration**

The new Pfizer/BioNTech vaccine formulation for children will require additional training to handle, store, prepare, and administer. Pediatricians and their staff are vaccine experts, can adapt to new protocols quickly, and have deep expertise in counseling and vaccinating young children. However, medical providers who are less familiar with childhood vaccinations may need more in-depth training. Their ability to find concise, up-to-date information that is easily accessible will be key to the success of their vaccination efforts. The CDC’s COVID-19 Vaccine Training Modules provide up-to-date information by vaccine manufacturer. States can centralize access to, and facilitate use of, these modules and other trainings dedicated to vaccine storage, handling, and administration. In addition, consulting with pediatric practices could yield useful strategies to the non-technical aspects of vaccinating young children (e.g., developmentally appropriate approaches). Several states have published training sites where information can be found quickly, including:

• Virginia Department of Health has an online training center with training modules, checklists, and FAQs to assist vaccinators in building their skills and confidence in providing COVID-19 vaccinations.

• Minnesota Department of Health has an online Interim COVID-19 Vaccine Provider Guide and Supplemental On-Demand Training for vaccine providers

• Colorado Department of Public Health & Environment has a Colorado COVID-19 Health Care Provider Vaccine Information Toolkit with a best practice checklist, list of key staff roles and responsibilities, and fee and billing information, among other topics.
Federal Considerations

The Biden Administration has already taken steps to prioritize COVID-19 vaccines for younger children; however, more can be done to address challenges at the state and local level. State officials and other key stakeholders shared the following areas where the federal government could further support state and local efforts:

- Releasing national guidance recommending that state Medicaid programs and Medicaid managed care plans incentivize medical providers who counsel patients on COVID-19 vaccination, regardless of if the patient agrees to be vaccinated during the visit. Providing reimbursement for CPT code 99401 (separately from the vaccine administration code) may help to encourage busy medical providers to engage in these critical, but sometimes difficult, conversations with their patients.

- VFC providers are required to go through the same COVID-19 vaccination program onboarding process as non-VFC providers, even though they already meet most of the criteria needed to order, receive, store, and administer COVID-19 vaccines. Allowing automatic enrollment of VFC program providers in the COVID-19 vaccination program could remove barriers to participation and help increase access to the COVID-19 vaccine for more than half of the country’s pediatric population.

- Providing vaccines in smaller quantities that can be directly shipped to vaccination sites, rather than transported using a hub-and-spoke model, would significantly reduce the burden of vaccine redistribution and reduce vaccine wastage. Such a program could be targeted to areas where few pediatricians are providing vaccine access. Additionally, providing COVID-19 vaccines in pre-filled syringes or unit dose vials would reduce administrative burden and errors associated with the handling of multi-dose vials.

As states enter this newest phase of the COVID-19 vaccination effort, engaging pediatricians and other providers of pediatric medical care will be critical to vaccinating the 28 million children ages 5–11, and to moving closer to herd immunity and mitigating the effects of COVID-19.

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