# Borrowing Proven Policy Strategies to Vaccinate Kids Against COVID-19: Lessons from Past Successes can Provide a Roadmap for Ensuring Equity in Immunization Efforts

*Prepared by the State Health Access Data Assistance Center, University of Minnesota*

STATE Health & Value STRATEGIES | *Driving Innovation Across States*

*A grantee of the Robert Wood Johnson Foundation*

**November 2021**

## Introduction

With the authorization of COVID-19 vaccines for children ages five and older, focus is shifting to how the United States can deploy those shots widely and equitably. The country has yet to hone its approach to immunizing adults, as shown by low vaccination rates and persistent disparities in COVID-19 and other vaccines, such as flu shots.[1,2]

For vaccinating children against COVID-19, however, there is reason for optimism if policymakers and healthcare providers apply lessons from prior vaccination challenges and successes. The United States generally performs admirably in most children's immunizations, reaching more than 90 percent of kids for some vaccines, such as polio and chickenpox, and greatly reducing vaccination disparities in the past few decades.[3]

However, there also is cause for concern. For instance, disinformation and concerns about safety have made COVID-19 vaccines contentious for some people, and the United States has underperformed in the delivery of other similarly controversial vaccines. Rates of vaccination against human papillomavirus (HPV)—an infection that can cause cancer—remain well below other vaccines more than a decade after it was first approved and recommended, with controversy around the immunization relating to HPV being a sexually transmitted infection.[4] Those low vaccination rates also come with disparities in which lower-income and Black and Hispanic children experience lower HPV vaccination rates.[5,6]

Additionally, even though one COVID-19 vaccine has been authorized for children ages 12-17 for months, vaccination rates for those children fall behind even the lackluster rates for adults.[7] Recent survey data also indicate that many parents remain hesitant to vaccinate younger children against COVID-19, as well.[8]

This does not necessarily mean that COVID-19 vaccination campaigns for U.S. children cannot be successful. By borrowing from strategies that have worked historically, states can develop strong playbooks for protecting children from COVID-19, turning another page in the fight against the pandemic.

## Leveraging Health Insurance Coverage to Improve Healthcare Access

One indispensable asset in the effort to vaccinate kids against COVID-19 is the high health insurance rate for children as compared to adults, which came as a result of decades of health policy innovations (e.g., the Children's Health Insurance Program [CHIP]) and hard work to enroll kids in coverage. This is key because uninsurance is a notable barrier to healthcare—including vaccinations—as data show that people without insurance are less likely to get immunizations.[9]

Similarly, studies demonstrate that people with health insurance are more likely to have a regular source of healthcare, where physicians and other healthcare professionals can recommend and administer vaccinations.[10] That opportunity is important because research also shows that when providers recommend certain, sometimes controversial vaccines (e.g., the HPV vaccine) and administer them on-site, rather than referring the patient elsewhere, kids are more likely to get the immunization.[11,12]

## Borrowing the Vaccines for Children Program Infrastructure

Even with their lower rates of uninsurance compared to adults, millions of kids in this country remain without health insurance. Additionally, despite efforts in recent years to expand coverage of routine vaccinations and other preventive healthcare, some children remain "under-insured"—enrolled in health coverage that poses cost barriers to needed care. Historically, uninsured and under-insured children have had lower vaccination rates. And because children of color—such as American Indian and Alaska Native (AI/AN), Black, and Hispanic or Latino kids—disproportionately experience uninsurance and under-insurance, they also experience stark vaccination disparities.[13]

However, the federal Vaccines for Children (VFC) program is credited with a major role in boosting vaccination rates and narrowing childhood vaccination inequities since its inception in 1994.[14,15,16] The program offers free vaccinations to uninsured and under-insured children through healthcare providers enrolled in the VFC program, such as Federally Qualified Health Centers (FQHCs), Rural Health Clinics (RHCs), and public health clinics. The federal government has already taken steps in that direction by pre-purchasing COVID-19 vaccinations for the entire U.S. population and requiring they be administered at no cost to individuals. To further build on that strength, states could leverage VFC-enrolled providers as key hubs for outreach and provision of COVID-19 vaccines to children, especially since many families already know them as trusted places where their kids have received free vaccines in the past.

## Employing COVID-19 Vaccination Quality Measures in Medicaid

Nationally, one-third of children receive health insurance through Medicaid, and that rate ranges up to about one-half of kids in states such as New Mexico, Mississippi, Louisiana, and Arkansas.[17] Because lower-income children such as those enrolled in Medicaid also tend to have lower vaccination rates, states should consider how to use their Medicaid programs to reach more kids with COVID-19 vaccines.

For instance, states that use managed care organizations (MCOs) to administer their Medicaid programs could require those MCOs to meet vaccination rate benchmarks for ensuring the children enrolled in their plans have sufficient access to COVID-19 immunizations. And states with payment and delivery system reforms such as patient-centered medical home (PCMH) programs that reward healthcare providers that meet quality measures could implement similar requirements in those programs.

Such steps would be a logical extension of existing initiatives that require MCOs and PCMHs to meet vaccination benchmarks for other vaccinations, as in the Childhood Immunization Status (NQF 38) already included in the 2021 Core Set of Children's Health Care Quality Measures for Medicaid and CHIP. Furthermore, states with multipayer quality measure alignment efforts could include COVID-19 vaccination measures in those measure sets, as well, to encourage private insurers to follow suit.

## Encouraging Best Practices Among Providers

States can encourage healthcare providers to adopt immunization best practices. For instance, the "4 Pillars Immunization Toolkit" is a strategic framework designed for healthcare providers, and research has shown it can increase vaccination rates and reduce racial and ethnic disparities.[18,19] Though initially designed to improve flu vaccination rates, the same approaches—making vaccination services convenient, education of parents and patients about vaccines, and improved clinic systems, for example—could be adopted for COVID-19 vaccinations.

### 4 Pillars Immunization Toolkit

Originally developed to improve children's flu vaccination rates and decrease disparities, the immunization toolkit strategies could be applied to COVID-19 vaccinations, as well.

**Pillar 1: Make vaccination services convenient for families**

- e.g., offer walk-in vaccinations without appointments

**Pillar 2: Educate parents and patients about vaccine**

- e.g., conduct outreach via mail, email, phone, text messaging

**Pillar 3: Improve clinic systems to simplify vaccination**

- e.g., determine vaccination eligibility for each scheduled patient at start of day

**Pillar 4: Motivate staff to meet immunization goals**

- e.g., chart progress toward vaccination goals and provide regular feedback to staff

Source: Lin, C.J., Nowalk, M.P., Zimmerman R.K., Moehling, K.K., Conti, T., Allred, N.J., & Reis, E.C. (May/June 2016). Reducing Racial Disparities in Influenza Vaccination among Children With Asthma. J Pediatric Health Care, 30 (3), 208-215. doi: 10.1016/j.pedhc.2015.06.006

## Requiring Immunization for Daycare and School Enrollment

Although the details vary, all 50 states require children to receive certain vaccinations to attend public schools, and some even require vaccination for kids to attend private schools or other childcare settings.[20] Research has identified those strategies as an important component of multilayered approaches that have increased vaccination rates and reduced disparities.[21] States could lean on those existing policies and infrastructure to achieve COVID-19 vaccination goals by adding the immunization to existing lists of other required vaccines. And they could further simplify the process for children to get vaccinated with school-located vaccination clinics.[22] Research from other vaccine-preventable contagious diseases, such as measles and pertussis, suggests that communities that decline to require COVID-19 immunizations or that offer broad exemption policies are likely to experience continued outbreaks well into the future.[23,24,25,26]

## Conclusion

In contrast with the challenge of vaccinating adults against COVID-19—for which the United States does not have a recent example of widespread success—states have proven strategies and policies that work for improving immunization rates among children. Rates of childhood vaccination against diseases such as chickenpox, measles and others have increased in recent decades, and racial and ethnic inequities have narrowed dramatically, with the implementation of those strategies. To protect children against COVID-19 and to protect their larger communities, states should borrow those evidence-based strategies. If not, they risk seeing child COVID-19 vaccination rates languish at disappointingly low levels and with notable disparities, as the United States has seen for HPV vaccines in recent years—and seeing the largely preventable consequences of the pandemic persist within under-vaccinated communities.

Support for this issue brief was provided by the Robert Wood Johnson Foundation. The views expressed here do not necessarily reflect the views of the Foundation.

ABOUT THE ROBERT WOOD JOHNSON FOUNDATION

The Robert Wood Johnson Foundation (RWJF) is committed to improving health and health equity for all in the United States. In partnership with others, we are working toward a nation that is rooted in equity, compassion, and respect. A nation that provides every individual with a fair and just opportunity to thrive, no matter who they are, where they live, or how much money they have. We call this a Culture of Health. And it is our Foundation's vision for America. For more information, visit *www.rwjf.org*. Follow the Foundation on Twitter at *www.rwjf.org/twitter* or on Facebook at *www.rwjf.org/facebook*.

ABOUT STATE HEALTH AND VALUE STRATEGIES—PRINCETON UNIVERSITY SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS

State Health and Value Strategies (SHVS) assists states in their efforts to transform health and healthcare by providing targeted technical assistance to state officials and agencies. The program is a grantee of the Robert Wood Johnson Foundation, led by staff at Princeton University's School of Public and International Affairs. The program connects states with experts and peers to undertake healthcare transformation initiatives. By engaging state officials, the program provides lessons learned, highlights successful strategies and brings together states with experts in the field. Learn more at *www.shvs.org*.

ABOUT STATE HEALTH ACCESS DATA ASSISTANCE CENTER, UNIVERSITY OF MINNESOTA

This issue brief was prepared by Colin Planalp. The State Health Access Data Assistance Center (SHADAC) is an independent, multi-disciplinary health policy research center, housed in the School of Public Health at the University of Minnesota, with a focus on state policy. SHADAC produces rigorous, policy-driven analyses and translates its complex research findings into actionable information for states.

# ENDNOTES


1. Ngep, J. (2021, July 19). COVID-19 Vaccination Rates: State-level and Subpopulation Evidence from the Household Pulse Survey. *SHADAC Blog.* https://www.shadac.org/news/HPSVax-06.21
2. Planalp, C. & Hest, R. (January 2021). *Anticipating COVID-19 Vaccination Challenges through Flu Vaccination Patterns*. State Health Access Data Assistance Center (SHADAC). https://www.shadac.org/sites/default/files/Flu%20Vaccination%20Patterns%20Brief_CHCF_Jan2021.pdf
3. National Center for Health Statistics. (2021, August 3). *Immunization*. Centers for Disease Control and Prevention (CDC). https://www.cdc.gov/nchs/fastats/immunize.htm
4. Boersma, P. & Black, L.I. (January 2020). *Human Papillomavirus Vaccination Among Adults Aged 18–26, 2013–2018* [NCHS Brief No. 354]. https://www.cdc.gov/nchs/data/databriefs/db354-h.pdf
5. Vadaparampil, S.T., Staras, S.A.S., Malo, T.L., Eddleton, K.Z., Christie, J., Rodriguez, M., Giuliano, A.R., & Shenkman, E.A. (2013, February 1). Provider Factors Associated With Disparities in Human Papillomavirus Vaccination Among Low-Income 9- to 17-Year-Old Girls. *Cancer, 119*(3), 621-628. doi: 10.1002/cncr.27735
6. Burdette, A.M., Webb, N.S., Hill, T.D., & Jokinen-Gordon, H. (January 2017). Race-specific trends in HPV vaccinations and provider recommendations: persistent disparities or social progress? *Public Health*, 142, 167-176. doi: 10.1016/j.puhe.2016.07.009
7. Murthy, B.P., Zell, E., Saelee, R., Murthy, N., Meng, L., Meador, S., Reed, K., Shaw, L., Gibbs-Scharf, L., McNaghten, A.D., Patel, A., Stokley, S., Flores, S., Yoder, J.S., Black, C.L., & Harris, L.Q. (2021, September 3). COVID-19 Vaccination Coverage Among Adolescents Aged 12–17 Years — United States, December 14, 2020–July 31, 2021. *MMWR, 70*(35), 1206-1213. https://www.cdc.gov/mmwr/volumes/70/wr/mm7035e1.htm
8. Brenan, M. (2021, September 28). In U.S., *55% Would Get COVID-19 Vaccine for Young Child*. Gallup. https://news.gallup.com/poll/354998/covid-vaccine-young-child.aspx
9. Planalp, C. & Hest, R. (January 2021). *Anticipating COVID-19 Vaccination Challenges through Flu Vaccination Patterns*. State Health Access Data Assistance Center (SHADAC). https://www.shadac.org/sites/default/files/Flu%20Vaccination%20Patterns%20Brief_CHCF_Jan2021.pdf
10. State Health Compare. *Had Usual Source of Medical Care; All Coverage Types; 2011-2017* [Data set]. State Health Access Data Assistance Center (SHADAC). http://statehealthcompare.shadac.org/
11. Burdette, A.M., Webb, N.S., Hill, T.D., & Jokinen-Gordon, H. (January 2017). Race-specific trends in HPV vaccinations and provider recommendations: persistent disparities or social progress? *Public Health*, 142, 167-176. doi: 10.1016/j.puhe.2016.07.009
12. Vadaparampil, S.T., Staras, S.A.S., Malo, T.L., Eddleton, K.Z., Christie, J., Rodriguez, M., Giuliano, A.R., & Shenkman, E.A. (2013, February 1). Provider Factors Associated With Disparities in Human Papillomavirus Vaccination Among Low-Income 9- to 17-Year-Old Girls. *Cancer, 119*(3), 621-628. doi: 10.1002/cncr.27735
13. State Health Access Data Assistance Center (SHADAC). (May 2019). *Children's Health Insurance Coverage Nationwide and in the States, 2016 to 2017*. https://www.shadac.org/sites/default/files/publications/KidsCoverage_2016_2017_Chartbook_0.pdf
14. Walsh, B., Doherty, E., & O'Neill, C. (February 2016). Since The Start Of The Vaccines For Children Program, Uptake Has Increased, And Most Disparities Have Decreased. *Health Aff (Millwood), 35*(2):356-364. doi: 10.1377/hlthaff.2015.1019
15. Zhao, Z., & Smith, P.J. (2013, May 1). Trends in vaccination coverage disparities among children, United States, 2001–2010. *Vaccine, 31*(19), 2324-2327. doi: 10.1016/j.vaccine.2013.03.018
16. Luman, E.T., Ching, P.L.Y.H., Jumaan, A.O., & Seward, J.F. (April 2006). Uptake of Varicella Vaccination Among Young Children in the United States: A Success Story in Eliminating Racial and Ethnic Disparities. *Pediatrics, 117*(4), 999-1008. doi: 10.1542/peds.2005-1201
17. State Health Access Data Assistance Center (SHADAC). *Health Insurance Coverage Type; Age 0-18; Medicaid/CHIP; 2019* [Data set]. State Health Compare. http://statehealthcompare.shadac.org/
18. Lin, C.J., Nowalk, M.P., Zimmerman R.K., Moehling, K.K., Conti, T., Allred, N.J., & Reis, E.C. (May/June 2016). Reducing Racial Disparities in Influenza Vaccination among Children with Asthma. *J Pediatric Health Care, 30*(3), 208-215. doi: 10.1016/j.pedhc.2015.06.006
19. Lin, C.J., Nowalk, M.P., Zimmerman R.K., Moehling, K.K., Conti, T., Allred, N.J., & Reis, E.C. (May/June 2016). Reducing Racial Disparities in Influenza Vaccination among Children with Asthma. *J Pediatric Health Care, 30*(3), 208-215. doi: 10.1016/j.pedhc.2015.06.006
20. Centers for Disease Control and Prevention (CDC). (2016, November 15). *State Vaccination Requirements*. https://www.cdc.gov/vaccines/imz-managers/laws/state-reqs.html

# ENDNOTES


21. Hutchins, S.S., Jiles, R., & Bernier, R. (2004, May 1). Elimination of Measles and of Disparities in Measles Childhood Vaccine Coverage among Racial and Ethnic Minority Populations in the United States. *J Infect Dis, 189*(Suppl 1), S146-152. doi: 10.1086/379651

22. Centers for Disease Control and Prevention (CDC). (2021, August 23). *Considerations for Planning School-Located Vaccination Clinics*. https://www.cdc.gov/vaccines/covid-19/planning/school-located-clinics.html

23. Omer, S.B., Enger, K.S., Moulton, L.H., Halsey, N.A., Stokley, S., & Salmon, D.A. (2008, December 15). Geographic clustering of nonmedical exemptions to school immunization requirements and associations with geographic clustering of pertussis. *Am J Epidemiol, 168*(12), 1389-1396. doi: 10.1093/aje/kwn263

24. May, T &, Silverman. R.D. (2003, March 7). 'Clustering of exemptions' as a collective action threat to herd immunity. *Vaccine, 21*(11-12), 1048-1051. doi: 10.1016/s0264-410x(02)00627-8

25. Omer, S.B., Pan, W.K.Y., K.S., Halsey, N.A., Stokley, S., Moulton, L.H., Navar, A.M., Pierce, M., & Salmon, D.A. (2006, October 11). Nonmedical Exemptions to School Immunization Requirements: Secular Trends and Association of State Policies with Pertussis. *JAMA, 296*(14), 1757-1763. doi: 10.1001/jama.296.14.1757

26. Feikin, D.R., Lezotte, D.C., Hamman, R.F., Salmon, D.A., Chen, R.T., & Hoffman, R.E. (2000, December 27). Individual and Community Risks of Measles and Pertussis Associated With Personal Exemptions to Immunization. *JAMA, 284*(24), 3145-3150. doi: 10.1001/jama.284.24.3145