Medicaid Adult Vaccine Provider Reimbursement in 2021:

Comparison Across 50 States and Washington, DC

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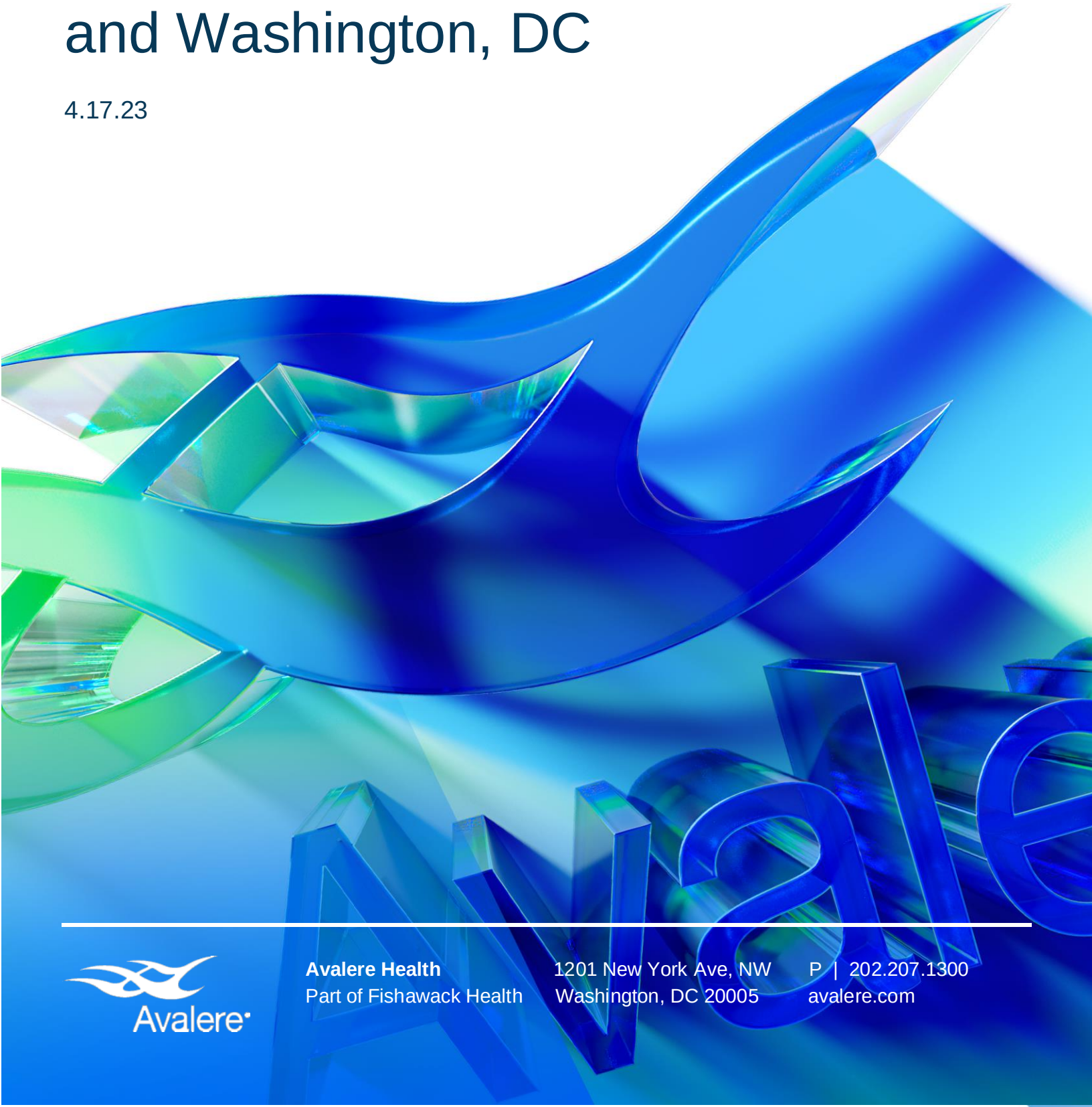

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Funding for this research was provided by Pfizer. Avalere Health retained full editorial control.

Avalere

Executive Summary

Ensuring equitable vaccine access for Medicaid beneficiaries is a priority for policymakers, particularly given disparities in vaccination rates between commercially insured members and Medicaid beneficiaries.[1] Medicaid covers vulnerable populations such as low-income adults and individuals who are pregnant. In 2022, Avalere published findings from an analysis that highlighted the impacts of the Inflation Reduction Act (IRA) on vaccine coverage requirements across Medicaid programs. Although the IRA addresses vaccine coverage gaps in Medicaid, there are no federal regulations governing Medicaid reimbursement to healthcare providers for adult vaccines.[1] Provider reimbursement rates for vaccine product and administration vary, and lower rates may influence provider decisions to stock vaccines, affecting patient access.[1,2] Reimbursement policies also vary by provider type. For example, pharmacies in some states are ineligible to receive reimbursement under Medicaid for vaccine administration, which limits immunization settings available to beneficiaries. Similarly, Medicaid payment rules for Federally Qualified Health Centers (FQHCs) differ from those for other providers in ways that could disincentivize vaccination, including by not directly reimbursing for vaccines and limiting the types of providers within an FQHC that can be reimbursed for vaccine administration.

To characterize this landscape, Avalere assessed state Fee-for-Service (FFS) Medicaid reimbursement policies for physician offices, pharmacies, and FQHCs in all 50 states and the District of Columbia (DC). Avalere reviewed publicly available sources from 2021 to identify reimbursement policies for four recommended adult vaccines: (1) tetanus, diphtheria, and acellular pertussis (Tdap); (2) pneumococcal polysaccharide vaccine (PPSV23); (3) human papillomavirus (HPV); and (4) pneumococcal conjugate vaccine (PCV13). Findings showed variability in physician office vaccine administration and product reimbursement rates:

- Eighty-two percent* of states plus DC reimbursed vaccine administration below the 2021 Medicare Physician Fee Schedule (MPFS) National Payment Amount ($17.10).[3]
- At least six states and DC reimbursed physician offices below the private sector price for all four reviewed vaccines.
- Ten states did not allow pharmacies to obtain reimbursement for any of the reviewed vaccines.
- Twenty-five states did not allow pharmacies to obtain reimbursement for at least one of the reviewed vaccines.
- Most states did not reimburse FQHCs for vaccine product and administration outside the encounter payment (i.e., few states reimburse separately for vaccines).

Reimbursement under Medicaid remains a barrier to providers stocking and administering vaccines.[1] Avalere's findings demonstrate the variability in Medicaid vaccine reimbursement across states and could help inform stakeholder and policymaker engagement to improve Medicaid vaccine access in the future.

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[1] Medicaid and Children's Health Insurance Program (CHIP) Payment and Access Commission. Report to Congress on Medicaid and CHIP. 2022. https://www.macpac.gov/wp-content/uploads/2022/03/March-2022-Report-to-Congress-on-Medicaid-and-CHIP.pdf.
[2] Avalere. Vaccine Incentives for Providers Would Change Due to 2 MPFS Proposals. 2022. https://avalere.com/insights/vaccine-incentives-for-providers-would-change-due-to-2-mpfs-proposals.
[3] The Medicare Physician Fee Schedule values 90471 separately from the Part B preventive vaccine administration fee (G009).
* Includes 3 states for which information was not available

Background

Unlike most prescription drugs, which must be reimbursed based on Actual Acquisition Cost (AAC) in Medicaid, there are no federal standards for Medicaid reimbursement for either vaccine products or related administration services.[4] Consequently, reimbursement rates vary by state and by provider type. Many adult vaccine providers purchase vaccines and are reimbursed retrospectively, and the relationship between reimbursement amounts and product acquisition costs can influence a provider's decision to stock vaccines. Studies have found that some providers report losing money when they administer vaccines to Medicaid beneficiaries, and that low reimbursement rates impact their decision to vaccinate these patients.[1] Providers that do not stock recommended vaccines may refer Medicaid beneficiaries to other providers, which could result in a missed opportunity to vaccinate. Reimbursement barriers are more commonly cited in reference to the Medicaid market compared to the commercial sector and may contribute to the disparity in vaccination rates between people with Medicaid and private insurance.[5,1]

Physician Reimbursement

Absent federal guidance for vaccines, states have discretion to use various pricing benchmarks to establish Medicaid FFS program reimbursement rates, which are typically published in fee schedules. For example, for vaccine products some states may reference Medicare Part B payment rates, which are published quarterly and based on Average Wholesale Price (AWP), whereas other states may reference Wholesale Acquisition Cost (WAC) data from pricing compendia. States may develop a reimbursement methodology that reflects a percent above or below a pricing benchmark (e.g., WAC + 5%), but as reimbursement rates are often published periodically in fee schedules, states sometimes do not update reimbursement rates often enough to account for price changes or new product launches. For vaccine administration reimbursement, states typically establish a flat fee, which is published in the fee schedule. For Medicaid Managed Care (MMC), reimbursement for both vaccine products and administration are typically negotiated between the managed care plan and providers and may not be publicly available.

Pharmacy Reimbursement

State Medicaid programs can limit pharmacies' eligibility to receive reimbursement for vaccines. When a pharmacy is ineligible for vaccine reimbursement, Medicaid patients may be required to pay full out-of-pocket costs when receiving a vaccine at a pharmacy. When pharmacies are eligible to receive reimbursement, Medicaid programs may reimburse a separate administration fee and/or a dispensing fee in addition to the product fee.[6] Vaccine administration reimbursement rates paid to pharmacists may differ from those paid to physician offices.

[4] Federal Regulations. 42 CFR Part 447. 2023. https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-C/part-447 .
[5] National Vaccine Advisory Committee. A Pathway to Leadership for Adult Immunization: Recommendations of the National Vaccine Advisory Committee. 2012. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3235599/ .
[6] The dispensing fee is intended to cover costs associated with providing the vaccine, including the service, facility and equipment costs.

FQHC Reimbursement

Approximately 50 percent of patients who visit FQHCs are covered by Medicaid. In 2021, nearly 22 million adults aged 18 years and older received care at an FQHC.[7] Unlike physician offices and pharmacies that are typically paid individually for each service performed under Medicaid FFS, many state Medicaid programs reimburse FQHCs using the Prospective Payment System (PPS). The PPS is a payment system that reimburses a single, bundled rate paid by the Medicaid program for each qualifying patient visit, and is intended to cover the cost of all services and supplies provided during that visit (the encounter payment). The encounter payment is calculated based on an FQHC's base year and reflects historical costs of providing care for each Medicaid patient.[8] States update rates annually to account for changes in service and inflation; however, stakeholders have noted that PPS updates may not be sufficient to track increasing FQHC expenditures.[9,10] States may also opt to reimburse FQHCs through Alternative Payment Models (APM) (e.g., wrap around payments), which can be designed to improve FQHC payments.

Although the PPS technically accounts for vaccine expenditures in the calculation of the base rate, the encounter payment is sometimes lower than the cost of a vaccine provided during a visit, meaning that for the full patient visit, the FQHC may be reimbursed at a rate lower than the amount it spent to acquire the vaccine.[11] Furthermore, FQHCs may receive an encounter payment only when a service is performed by a "billable provider". In states where a nurse, for example, is not considered a billable provider, an FQHC may not be reimbursed when a patient presents for an immunization-only visit with a nurse. Stakeholders frequently cite issues with the PPS as a potential barrier to vaccinating Medicaid beneficiaries at FQHCs, which may result in further immunization disparities between Medicaid FQHC patients and other Medicaid beneficiaries.[13]

[7] Health Resources and Services Administration. 2021 Health Center Data. https://data.hrsa.gov/tools/data-reporting/program-data/national/table?tableName=Full&year=2021.
[8] Calendar year 2000 for most FQHCs
[9] Medicaid and Children's Health Insurance Program (CHIP) Payment and Access Commission. Medicaid Payment Policy for Federally Qualified Health Centers. 2017. https://www.macpac.gov/publication/medicaid-payment-policy-for-federally-qualified-health-centers/.
[10] National Association of Community Health Centers. The Facts about Medicaid's FQHC Prospective Payment System. 2017. http://www.nachc.org/wp-content/uploads/2017/03/PPS-One-Pager-noask.pdf.
[11] For illustrative purposes, this could occur if the encounter payment is $250, and the vaccine being administered is $265. While the calculation of the encounter payment may account for vaccine expenditures, at the per-visit level it appears to be insufficient to cover the cost of the product

Approach

To characterize the adult vaccine reimbursement landscape, Avalere assessed Medicaid FFS reimbursement policies in all 50 states and in Washington, DC. This research occurred between April 2021 and December 2021 and included four ACIP-recommended vaccines: Tdap, PPSV23, PCV13, and HPV (Figure 1). For each vaccine, Avalere researched state Medicaid FFS policies for:

- Reimbursement amounts for physician offices, including specific amounts for vaccine product and administration
- Pharmacy eligibility for reimbursement of vaccine products and its administration
- Pharmacy reimbursement methodology and amounts for vaccine products, administration fees, and dispensing fees (as applicable)
- FQHC reimbursement methodology for vaccines compared to other services
- State definitions of an FQHC billable visit and inclusion of immunization-only visit

Avalere focused on physician offices, pharmacies and FQHCs because most vaccines are administered in these settings and Medicaid programs often have explicit policies governing reimbursement therein. To answer the specified research questions, Avalere reviewed publicly available resources, including Medicaid program websites and fee schedules as well as FQHC, physician office, pharmacy, and patient manuals. When a state's reimbursement policy was not confirmable via publicly available resources, Avalere attempted to contact the state's Medicaid agency to gather relevant reimbursement policy information.

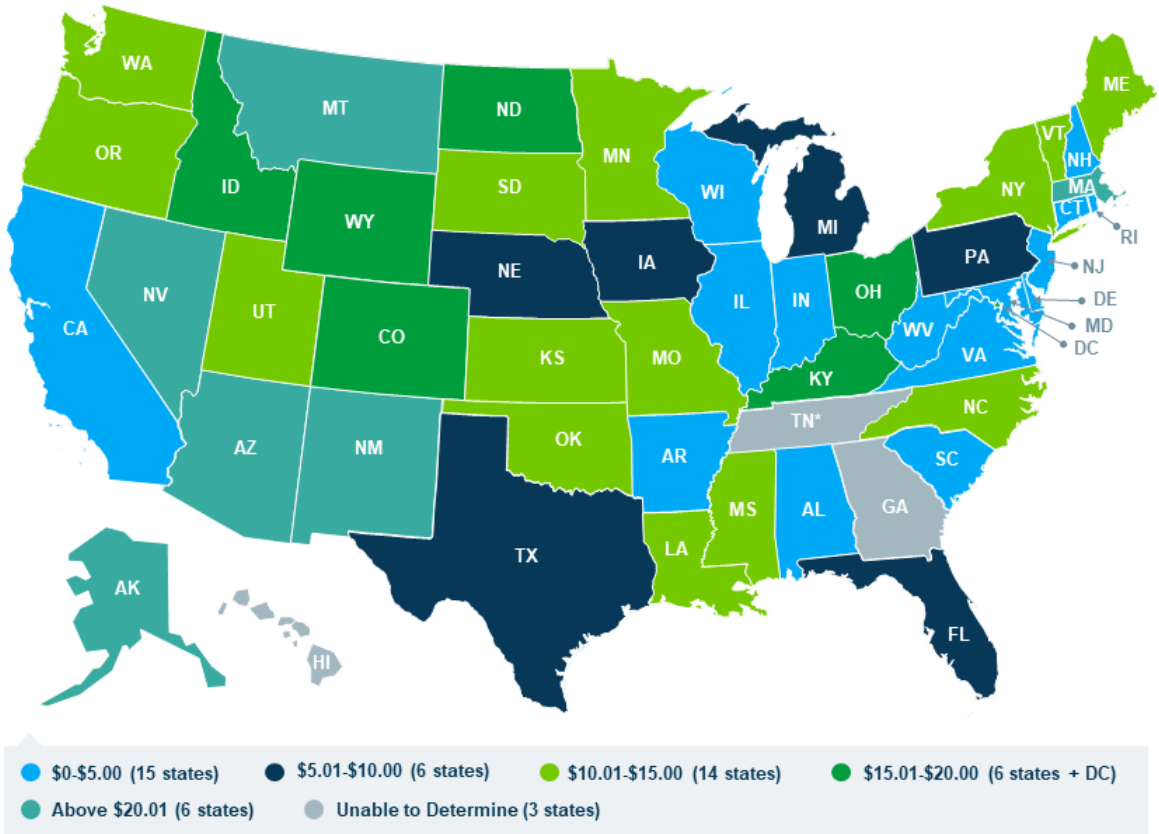
Avalere was unable to determine coverage policies in some states because of lacking, incomplete, or ambiguous publicly available resources, and/or lack of response from Medicaid agencies. Avalere's analysis excluded MMC reimbursement policies because MMC provider reimbursement information was not publicly available.

Findings

Most Medicaid FFS Programs Reimbursed Physician Offices for Vaccine Administration Below Medicare Payment Rates

Reimbursement rates for vaccine administration ranged from $3.72 (SC) to $25.62 (AZ) (Figure 1). The median reimbursement rate was $11.46, which was lower than the 2021 MPFS National Payment Amount of $17.10 (CPT code 90471). [12,13] Only nine states (AK, AZ, CO, ID, MA, MT, NV, NM, and OH) reimbursed an amount above the 2021 MPFS National Payment Amount. Eleven states (AL, AR, CT, DE, IL, IN, MD, RI, VA, WV, and WI) did not pay providers a vaccine administration fee separate from the physician office visit. In these cases, Avalere recorded the reimbursement rate for these states as $0.

Figure 1: Medicaid FFS Physician Office Vaccine Administration Reimbursement, by State, 2021



*TN does not have FFS Medicaid
$0- $5.00 includes states that specify that they do not separately reimburse for vaccine administration and instead denoted that it's included in the physician office visit payment or in the product fee

[12] New Jersey doesn't reimburse for vaccine administration however provides a $2.50 fee for vaccine supply
[13] The MPFS payment amounts are calculated through a process that assesses the value of each service. Notably, in 2022 Medicare decoupled the vaccine payment rate for Part B vaccines from the MPFS and in 2023 reimburse preventive vaccine administration at $30 + an annual adjustment for inflation+ a geographic adjustment.

Reimbursement for vaccine products also varied by state (Figure 2). Of the four vaccines assessed, Tdap was consistently reimbursed at a rate below 85% of the private sector price, and at least six states and DC reimbursed physician offices below the private sector price for all four reviewed vaccines.

An analysis of product reimbursement rates compared to publicly available price benchmarks found that the most common benchmark that states used to reimburse providers for PPSV23 and PCV13 was 95% AWP (i.e., the Medicare Part B preventive vaccine reimbursement rate). Many states reimbursed Tdap vaccines at 106% Average Sales Price (ASP) (i.e., the Medicare Part B therapeutic vaccine rate). HPV was commonly reimbursed at 100% WAC. These findings may result from the fact that the Medicare ASP/AWP file only includes AWP for PPSV23 and PCV13 and ASP for Tdap vaccines and does not include any benchmark for HPV vaccines. Many states likely tied vaccine reimbursement rates to the benchmarks included in the Medicare ASP/AWP file.

Figure 2: Medicaid FFS Physician Office Vaccine Product Reimbursement, Reimbursement Rates Relative to Private Sector Price 2021

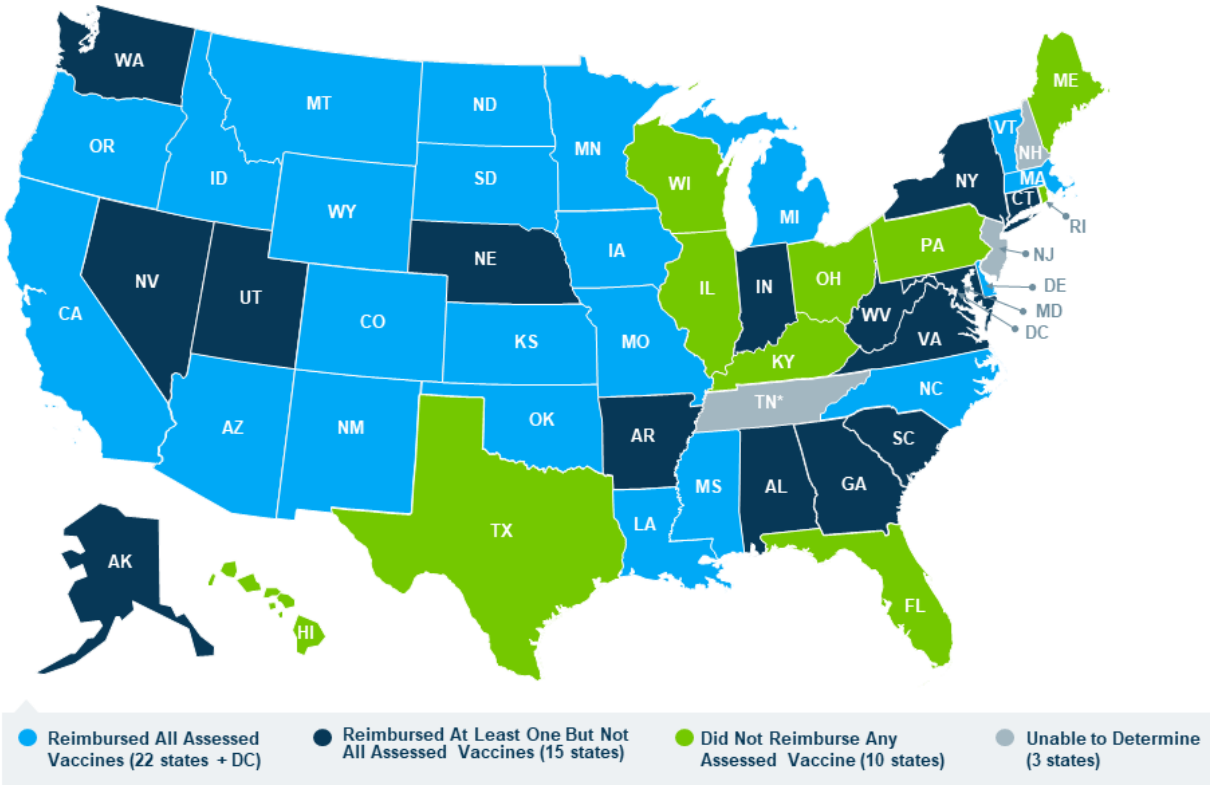
State Medicaid Reimbursement Rate Relative to Private Sector Price*	Vaccine Product			
	Tdap	HPV	PPSV23	PCV13
< 85%	30/38	3/33	4/38	6/39
85% - < 100%	7/38	14/33	6/38	3/39
100% - < 115%	1/38	15/33	26/38	29/39
> 115%	0/38	1/33	2/38	1/39

Note: States that did not denote a dollar amount for a vaccine, are Universal Purchase, or did not cover the vaccine were excluded from the table
*The private sector price refers to the price listed on the CDC Adult Vaccine Price List

Half of States Did Not Permit Pharmacy Reimbursement for All Assessed Vaccines

Most states allowed pharmacies to receive reimbursement for vaccine products and vaccine administration for at least one of the assessed vaccines, and 14 states (AZ, CA, DE, IA, KS, MA, MI, MS, NC, ND, OK, OR, SD, and VT) explicitly noted the program reimbursed pharmacies for all Advisory Committee on Immunization Services (ACIP)-recommended vaccines (Figure 3). Avalere identified 24 states that reported a pharmacy administration or dispensing rate, ranging from $0.00–$23.34. At the product-specific level, states were more likely to restrict pharmacies' ability to obtain reimbursement for HPV and Tdap than for PPSV23 and PCV13 vaccines.

Figure 3: Medicaid FFS Pharmacy Vaccine Product Reimbursement, by State, 2021



*TN does not have FFS

Most States Did Not Allow Vaccine Reimbursement for FQHCs Outside of the Encounter Payment

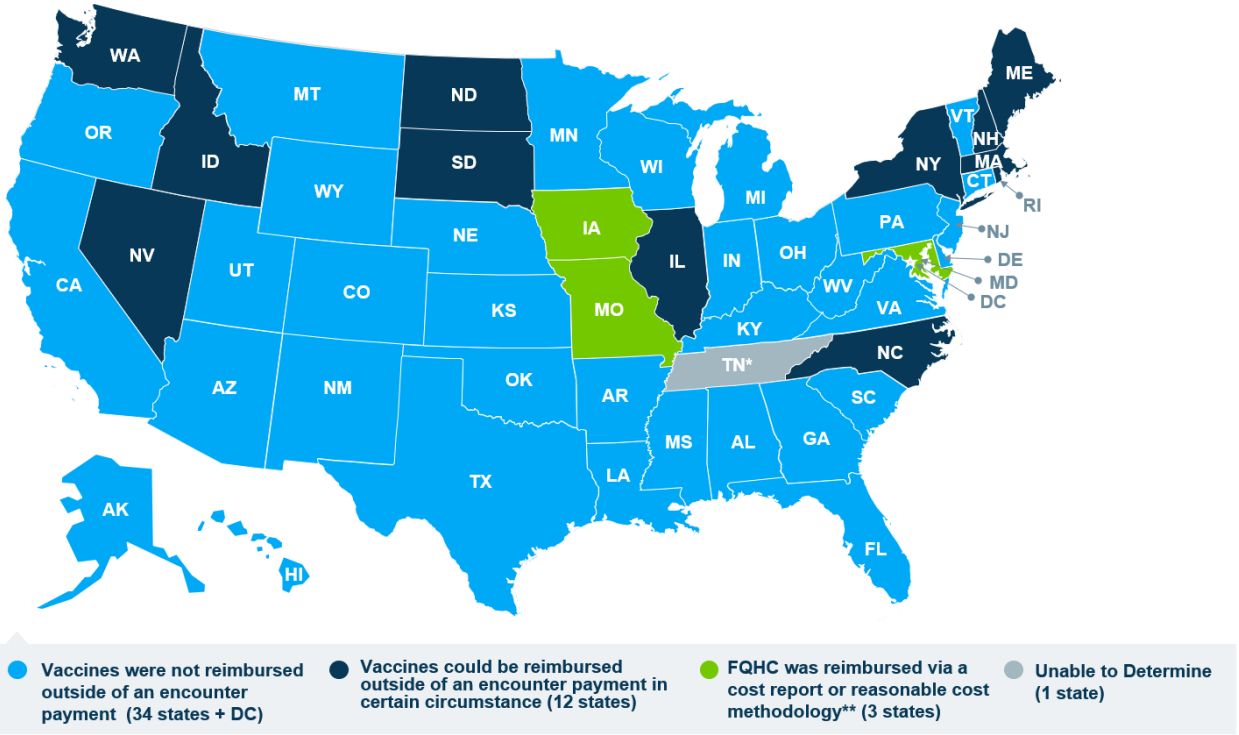
Thirty-four states and DC did not reimburse vaccines separately from the PPS encounter payment under any circumstance (Figure 4). All vaccines administered by FQHCs in these states were reimbursed as part of the encounter rate, which is intended to compensate the FQHC for all services performed during the visit, including vaccines and administration services. Encounter payment rates differed by state and each FQHC was reimbursed at a different rate (e.g., reimbursement rates for FQHCs in Texas ranged from $134.17–$319.61). Although the analysis did not include comprehensive review of encounter rates paid to each FQHC, it suggested that encounter rates were often lower than the private sector cost for certain adult vaccines.

These 34 states also adhered to differing requirements on whether an immunization-only visit could be reimbursed. Four of these states (CA, KS, TX, PA) did not permit reimbursement for immunization-only visits under any circumstance, regardless of the provider type administering the vaccine. A common reason cited by these states was that an immunization was considered “incident-to” a billable provider service, and only billable provider services were eligible for an encounter payment—thus, immunization-only visits could not be reimbursed. In effect, if any

provider administered an adult vaccine at an FQHC in these four states and did not provide any other services, the FQHC would not obtain reimbursement for either the vaccine or related administration services. In the remaining 30 states plus DC, administering an immunization was considered a billable provider service, and was therefore eligible for an encounter payment. In these states, only a "billable provider" could perform an immunization-only visit. It was common in these states for nurses, for example, not to be considered billable providers—thus, if a nurse administered PCV13 or another adult vaccine at an FQHC in these states, and a billable provider (e.g., physician) did not provide another service during the same visit, the FQHC would not have obtained reimbursement.

Twelve states (ID, IL, MA, ME, NC, ND, NH, NV, NY, RI, SD, and WA) could reimburse FQHCs for vaccines outside the PPS under certain circumstances (e.g., via a APM or program policy). Nine states (ID, IL, MA, ME, ND, NV, NY, SD, and WA) reimbursed for the vaccines and the administration via a different method (e.g., via FFS) if the visit did not meet the billable visit requirements. A common reason why a vaccination may not have met the billable visit requirements was that it was classified as an immunization-only visit and a non-billable provider (e.g., a nurse in many states) administered the vaccine. In three of these 12 states (NH, NC, and RI), Medicaid reimbursed for the cost of the vaccine at the Medicaid FFS fee-schedule rate, regardless of what provider administered the vaccine or what other services were performed during the visit (i.e., vaccination services are reimbursed separately from the PPS).

Figure 4: Medicaid FFS FQHC Vaccine Reimbursement Methodology, by State, 2021



*TN does not have FFS

**Defined as an amount calculated on a per-visit basis that is equal to the reasonable cost of such services documented for a baseline period, with certain adjustments

Key Considerations

Avalere found significant variability in state Medicaid FFS vaccine reimbursement methods and rates for physician offices, pharmacies, and FQHCs. Many states reimbursed physician offices for vaccine products at rates below the private sector price for those vaccines, although several states reimbursed vaccine products at the Medicare Part B FFS rate. Most states reimbursed for administration below the 2021 MPFS National Payment Amount. Ten states (FL, HI, IL, KY, ME, OH, PA, RI, WI, and TX) did not reimburse pharmacies for any of the reviewed vaccines. Lastly, most states did not separate vaccines from the FQHC PPS encounter payment. Given evidence on the impact of reimbursement policies on provider decisions to stock and administer vaccines, these issues could affect adult vaccine access, which may contribute to immunization disparities affecting Medicaid beneficiaries.[1]

If a state opts to modify its vaccine reimbursement policies, the vehicle for doing so may differ by state. For example, some states may require legislation and/or regulations, whereas others may submit a state plan amendment (SPA) and/or issue updates to billing guidance. Similarly, timelines for states to implement reimbursement modifications may differ based on the policy vehicle pursued and on state legislative calendars.

Looking Ahead

Policymakers have focused on ensuring coverage without cost sharing for all ACIP-recommended vaccines for patients covered under Medicare, Medicaid, and private insurance. The IRA addressed several gaps in adult vaccine access, for example by extending vaccine coverage requirements to all Medicaid adults by October 1, 2023.[14]

Looking ahead, policymakers may turn their attention to issues that can help address provider financial barriers and incentives to vaccinate adults, in alignment with the Vaccine National Strategic Plan 2021-2025 Objective 4.5: *Reduce financial and systems barriers for the public to facilitate access to routinely recommended vaccines.*[15] To address this objective, policymakers may seek to advance Medicaid reimbursement reforms such as:

- Creating federal standards for Medicaid provider reimbursement rates for both products and their administration (e.g., Center for Medicare and Medicaid Services (CMS) payment regulations, SPAs in states with low reimbursement rates).[1]
- Establishing Medicaid coverage and reimbursement parity among all provider types that vaccinate adults including pharmacists, physicians, and nurses (e.g., CMS guidance outlining reimbursement strategies to expand Medicaid providers administering adult vaccines, state minimum standards for vaccine reimbursement across all provider type).[1]
- Ensuring that FQHCs are incentivized to vaccinate Medicaid beneficiaries through payment reform (e.g., CMS toolkits informing states on how vaccines can be excluded from the

[14] Public Law No: 117-169. Inflation Reduction Act of 2022. https://www.congress.gov/bill/117th-congress/house-bill/5376/text.
[15] Department of Health and Human Services. Vaccine National Strategic Plan 2021-2025. 2021. https://www.hhs.gov/sites/default/files/HHS-Vaccines-Report.pdf.

encounter payment, SPAs in states that do not exclude vaccines from the encounter payment).

In the future, policymakers may also consider broader adult vaccine payment reforms across markets, such as requiring Medicaid reimbursement for adult standalone vaccine counseling by providers, simplifying pharmacy medical benefit billing procedures, and ensuring providers are reimbursed for each component/toxoid of combination adult vaccines. As more adult vaccines become available (e.g., RSV adult and prenatal, meningococcal), interested stakeholders should consider engaging with federal and state policymakers to help shape these policy reforms.

Funding for this research was provided by Pfizer. Avalere Health retained full editorial control.

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