Medicaid Adult Vaccine Provider Reimbursement in 2024: Comparison Across 50 States, Puerto Rico, and Washington, DC

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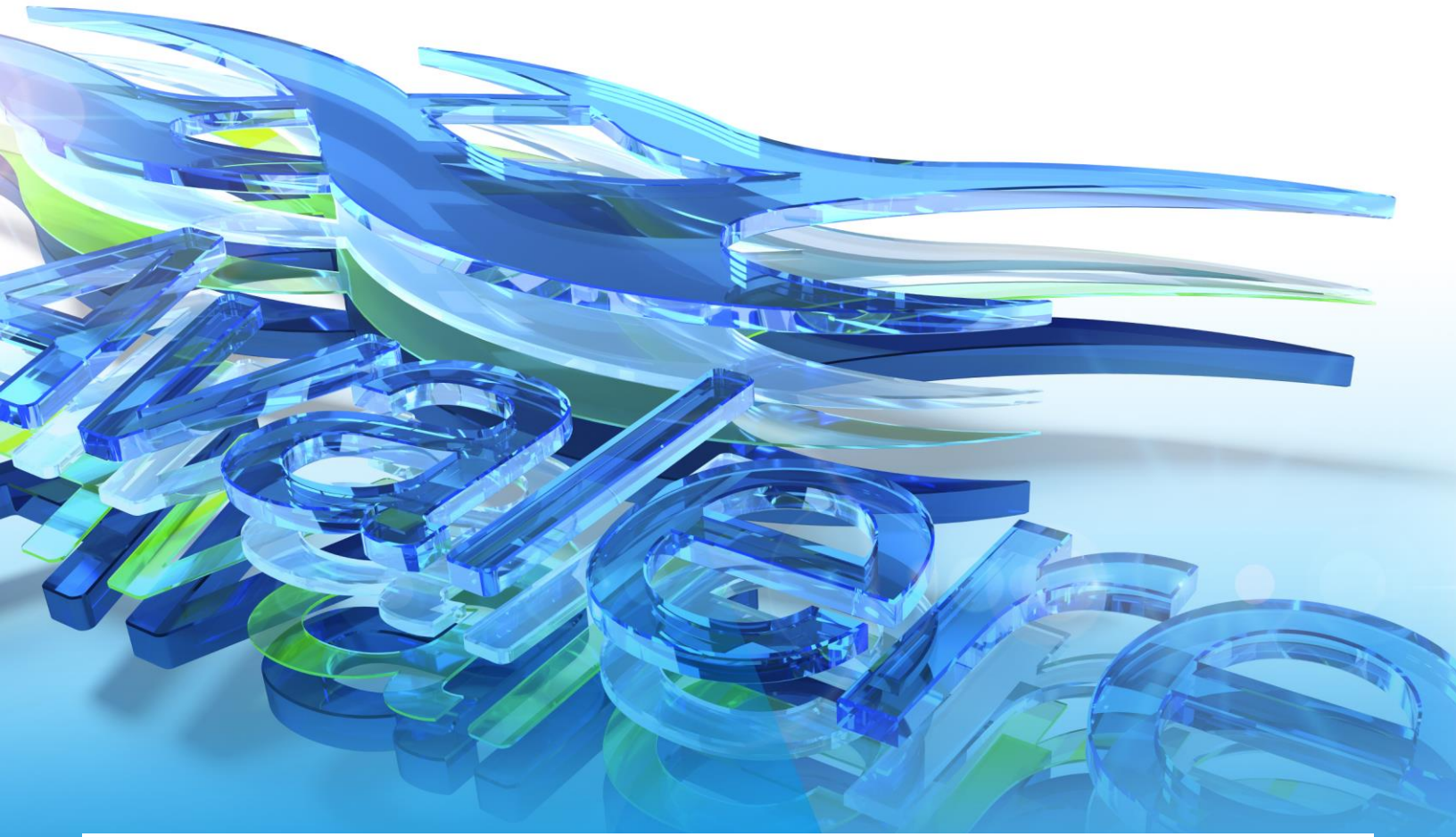

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Table of Contents

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Avalere

Executive Summary

State Medicaid program vaccine provider reimbursement amounts vary widely. In 2022, the Inflation Reduction Act (IRA) required state Medicaid programs to cover all Advisory Committee on Immunization Practices (ACIP) recommended adult vaccines without cost sharing, which aimed to increase access to vaccines for all adults. While the IRA improved coverage of adult vaccines, it did not address Medicaid vaccine reimbursement rates, which are historically lower than other markets, as shown in Avalere's prior whitepaper based on data from 2021.[1] Research has shown that higher reimbursement rates may increase vaccine uptake among Medicaid beneficiaries.[2,3] Specifically, providers may be more willing to order, stock, and administer vaccines if they feel they are adequately reimbursed for the vaccine product and administration, including time spent counseling patients.

To characterize the post-IRA vaccine reimbursement landscape and update its previous 2023 whitepaper on Medicaid reimbursement in 2021, Pfizer commissioned Avalere to assess all 50 states, Puerto Rico, and Washington, DC to identify Medicaid fee-for-service (FFS) physician office and pharmacy vaccine reimbursement. Avalere focused its research and analysis on four vaccine products: 20-valent pneumococcal conjugate vaccine (PCV20), maternal respiratory syncytial virus (RSV), COVID-19, and shingles. Findings showed:

- Physician office vaccine product reimbursement is often equivalent to Medicare reimbursement rates. Therefore, rates are higher for Part B preventive vaccines (i.e., COVID-19, influenza, pneumococcal, and hepatitis B), and lower for vaccines not covered under Part B (e.g., shingles, RSV).
- Pharmacy product reimbursement under the pharmacy benefit is largely reimbursed via a "lesser of" methodology, which often leads to reimbursement at wholesale acquisition cost.
- More states permit pharmacy reimbursement for all assessed vaccines compared to 2021, representing an increase in pharmacy access to vaccination.
- Reimbursement for vaccine administration is variable and generally lower than Medicare amounts in both the physician and pharmacy settings.

Overall, Avalere's findings show relatively few changes in the Medicaid reimbursement landscape compared to 2021. As stakeholders look to increase vaccine uptake among adults, ensuring adequate reimbursement would likely increase vaccine access for Medicaid beneficiaries.

1 Avalere. Medicaid Adult Vaccine Provider Reimbursement in 2021: Comparison Across 50 States and Washington, DC. 2023. https://avalere.com/wp-content/uploads/2023/04/Medicaid-Adult-Vaccine-Provider-Reimbursement-in-2021.pdf. (accessed August 27, 2024).

2 IQVIA Institute for Human Data Science and the Global Healthy Living Foundation. Trends in Adult Vaccination in the U.S.: Impact of Reimbursement to Health Care Providers on Influenza Vaccination for Medicaid Fee-for-Service Population. 2024. https://www.iqvia.com/-/media/iqvia/pdfs/institute-reports/trends-in-adult-vaccination-in-the-us/iqvia-institute-trends-in-adult-vaccination-02-2024-forweb.pdf. (accessed August 27, 2024).

3 MACPAC. Chapter 3: Acting to Improve Vaccine Access for Adults Enrolled in Medicaid. 2022. https://www.macpac.gov/wp-content/uploads/2022/06/Chapter-3-Acting-to-Improve-Vaccine-Access-for-Adults-Enrolled-in-Medicaid.pdf. (accessed August 27, 2024).

Introduction

Vaccines are a critical component of public health and prevent 3.5 to 5 million global deaths annually.[4] The US public health framework Healthy People 2030 includes a target to "increase the proportion of adults aged 19 years or older who get recommended vaccines."[5] However, only about 25% of adults are up-to-date on ACIP recommended vaccines, leaving Americans vulnerable to illness, hospitalization, and death due to preventable diseases.[6] Furthermore, Medicaid vaccination uptake significantly lags behind commercial and Medicare vaccination uptake, creating inequitable vaccine coverage and likely contributing to health disparities.[7,8] During the 2022–2023 influenza season, the influenza vaccine coverage rate (VCR) among Medicaid beneficiaries was estimated to be 25%, compared to 34.7% for commercial market enrollees and 65% for Medicare beneficiaries.[9]

VCR, the proportion of a population that is vaccinated against a vaccine-preventable disease, is an amalgamation of many factors but access to vaccines is a major driver. While the IRA increased access to adult vaccines in 2022 by mandating state Medicaid programs to cover all ACIP-recommended adult vaccines without cost sharing, it did not address Medicaid vaccine reimbursement rates. As noted in Strategy 4.4 of the National Vaccine Plan, "[reducing] financial and systems barriers for health care providers to facilitate delivery of routinely recommended vaccines" is an essential part of ensuring broad vaccine access.[10]

Several recently published studies discuss the importance of Medicaid vaccine reimbursement. The June 2022 Medicaid and Children's Health Insurance Program Payment and Access Commission (MACPAC) Report to Congress noted Medicaid reimbursement rates may not keep up with the cost of vaccines.[11] In its previous white paper, Avalere found many state Medicaid programs reimbursed physician offices below wholesale acquisition cost (WAC), and most states reimbursed administration below the Medicare rate in 2021.[12] Other published studies

4 World Health Organization. Vaccines and immunization. https://www.who.int/health-topics/vaccines-and-immunization#tab=tab_1 (accessed August 27, 2024).

5 Healthy People 2030 Framework. Increase the proportion of adults age 19 years or older who get recommended vaccines — IID-D03. https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination/increase-proportion-adults-age-19-years-or-older-who-get-recommended-vaccines-iid-d03 (accessed August 27, 2024).

6 Immunize.org. Strategies to Improve Adult Vaccination Coverage. 2024. https://www.immunize.org/wp-content/uploads/catg.d/p2050.pdf#:~:text=Only%20about%2025%%20of%20adults%20are%20up%2Dto%2Ddate,including%20lack%20of%20patient%20awareness%20of%20vaccines (accessed August 27, 2024).

7 IQVIA Institute for Human Data Science and the Global Healthy Living Foundation. Trends in Adult Vaccination in the U.S.: Impact of Reimbursement to Health Care Providers on Influenza Vaccination for Medicaid Fee-for-Service Population. 2024. https://www.iqvia.com/-/media/iqvia/pdfs/institute-reports/trends-in-adult-vaccination-in-the-us/iqvia-institute-trends-in-adult-vaccination-02-2024-forweb.pdf. (accessed August 27, 2024).

8 MACPAC. Chapter 3: Acting to Improve Vaccine Access for Adults Enrolled in Medicaid. 2022. https://www.macpac.gov/wp-content/uploads/2022/06/Chapter-3-Acting-to-Improve-Vaccine-Access-for-Adults-Enrolled-in-Medicaid.pdf. (accessed August 27, 2024).

9 IQVIA Institute for Human Data Science and the Global Healthy Living Foundation. Trends in Adult Vaccination in the U.S.: Impact of Reimbursement to Health Care Providers on Influenza Vaccination for Medicaid Fee-for-Service Population. 2024. https://www.iqvia.com/-/media/iqvia/pdfs/institute-reports/trends-in-adult-vaccination-in-the-us/iqvia-institute-trends-in-adult-vaccination-02-2024-forweb.pdf. (accessed August 27, 2024).

10 US Department of Health and Human Services. Vaccines National Strategic Plan 2021-2025. 2021. https://www.hhs.gov/sites/default/files/HHS-Vaccines-Report.pdf. (accessed August 27, 2024).

11 MACPAC. Chapter 3: Acting to Improve Vaccine Access for Adults Enrolled in Medicaid.

12 Avalere. Medicaid Adult Vaccine Provider Reimbursement in 2021: Comparison Across 50 States and Washington, DC. 2023. https://avalere.com/wp-content/uploads/2023/04/Medicaid-Adult-Vaccine-Provider-Reimbursement-in-2021.pdf. (accessed August 27, 2024).

had similar findings.[13,14] Notably, a recent study from The Global Healthy Living Foundation showed that a $13 increase in Medicaid FFS pharmacy reimbursement for influenza vaccination is associated with a 5.6% increase in vaccine uptake among Medicaid beneficiaries.[15] According to the American Academy of Pediatrics, both sufficient reimbursement for vaccine products and reimbursement for vaccine administration, including vaccine counseling and supplies, are essential.[16,17]

Several adult vaccines have entered the market in recent years to protect against RSV, COVID-19, and pneumococcal disease. As the adult vaccine pipeline grows, disparate access to and uptake of products could further inequities. Comparing vaccine product and administration reimbursement across states may assist state Medicaid FFS programs and stakeholders in considering future policy changes.

Background

When administering adult vaccines to Medicaid beneficiaries, reimbursement is an important factor in increasing VCR.[18] In most states, providers purchase vaccines and are reimbursed after administration ("buy and bill"), and thus may be less likely to stock vaccines if they are reimbursed below the cost of acquiring, storing, and administering the vaccine.

Avalere's findings on both vaccine product and administration reimbursement relate to specific pricing and reimbursement benchmarks, which will be referenced throughout the white paper:

Vaccine Product Benchmarks

Average Sales Price (ASP): A Centers for Medicare and Medicaid Services (CMS)-reported, market-based price that reflects the weighted average of all manufacturer sales prices for a drug. CMS only reports ASP data for certain vaccines (i.e., tetanus diphtheria and acellular pertussis [Tdap], tetanus diphtheria, rabies, and hepatitis A).

13 Pfister, Polaris, and Itzkowitz. Prenatal Vaccines in Medicaid and CHIP: Coverage, Reimbursement, and State Policy Solutions to Increase Access. Manatt Health. 2023. https://www.manatt.com/Manatt/media/Media/PDF/White%20Papers/Pfizer-Prenatal-Vaccines-in-Medicaid-and-CHIP_2023-05_c.pdf. (accessed August 27, 2024).

14 Polaris et al. "State Medicaid Coverage and Reimbursement of Adult Vaccines Administered by Physicians and Pharmacists." *AJPM Focus*, 3, no. 4 (August 2024): https://www.sciencedirect.com/science/article/pii/S2773065424000701.

15 IQVIA Institute for Human Data Science and the Global Healthy Living Foundation. Trends in Adult Vaccination in the U.S.: Impact of Reimbursement to Health Care Providers on Influenza Vaccination for Medicaid Fee-for-Service Population. 2024. https://www.iqvia.com/-/media/iqvia/pdfs/institute-reports/trends-in-adult-vaccination-in-the-us/iqvia-institute-trends-in-adult-vaccination-02-2024-forweb.pdf.

16 American Academy of Pediatrics (AAP). The Business Case for Pricing Vaccines. 2022. https://downloads.aap.org/AAP/PDF/practicet_businesscasepricingvacc.pdf (accessed September 18, 2024).

17 AAP. The Business Case for Pricing Immunization Administration. 2019. https://downloads.aap.org/AAP/PDF/The%20Business%20Case%20for%20Pricing%20Imm%20Admin%20Dec%202019.pdf (accessed September 18, 2024).

18 IQVIA Institute for Human Data Science and the Global Healthy Living Foundation. Trends in Adult Vaccination in the U.S.: Impact of Reimbursement to Health Care Providers on Influenza Vaccination for Medicaid Fee-for-Service Population. 2024. https://www.iqvia.com/-/media/iqvia/pdfs/institute-reports/trends-in-adult-vaccination-in-the-us/iqvia-institute-trends-in-adult-vaccination-02-2024-forweb.pdf.

Average Wholesale Price (AWP): A manufacturer-determined price reported by pricing compendia, generally about 20% higher than WAC.

Wholesale Acquisition Cost: A vaccine's list price reported in pricing compendia and included on the Centers for Disease Control and Prevention (CDC) Vaccine Price list as the "private sector price."[19]

Vaccine Administration Benchmarks

National Payment Amount (NPA): The base rate (i.e., not adjusted for geography) published in the Medicare Physician Fee Schedule. CMS calculates the rate annually through the resource-based relative value scale (RBRVS) methodology, which relies on multiplying relative value units (RVUs) by a conversion factor. RVUs are a metric used by the American Medical Association (AMA)/Specialty Society Relative Value Scale Update Committee (RUC) to assign value to provider services based on cost inputs. While the benchmark is not used by Medicare, other payers, including some state Medicaid agencies, use the NPA in their methodologies. In 2024, the NPA for Current Procedural Technology (CPT) code 90471 (i.e., the immunization administration CPT code used for most vaccines administered to adults) is $20.64. At the time of this analysis, there is no NPA for 90480 (COVID-19 vaccine administration).

National Fee Schedule for Medicare Part B Vaccine Administration: The administration reimbursement amount published annually on CMS's Vaccine Pricing website, which is reimbursed to Medicare Part B FFS providers.[20] CMS developed this benchmark as part of the 2023 Medicare Physician Fee Schedule rule. In 2024, the rate is $32.57 for influenza, pneumococcal, and hepatitis B vaccines and $40.00 for COVID-19 vaccines.

Physician Office Reimbursement

Physician offices are usually reimbursed for the vaccine product and a vaccine administration fee based on a state-determined methodology.

Most payers, including Medicaid programs, permit providers to bill for an Evaluation and Management (E/M) visit (if applicable), a vaccine product, and a vaccine administration code. Some states deviate from this approach and may restrict vaccine administration reimbursement to immunization-only visits, because the state has a policy that E/M visit reimbursement includes all services such as vaccine administration. Other states may include reimbursement for vaccine administration in the product fee, or do not separately reimburse for administration.

States that reimburse physician offices for vaccine administration generally use one of three methodologies: 1) the RBRVS, 2) percentage of Medicare's maximum payment amount, or 3)

19 CDC. Current CDC Vaccine Price List. 2024. https://www.cdc.gov/vaccines-for-children/php/awardees/current-cdc-vaccine-price-list.html?CDC_AAref_Val=https://www.cdc.gov/vaccines/programs/vfc/awardees/vaccine-management/price-list/index.html (accessed August 27, 2024).
20 CMS. Vaccine Pricing. 2024. https://www.cms.gov/medicare/payment/part-b-drugs/vaccine-pricing (accessed August 27, 2024).

state-specific factors.[21] Additional explanation can be found in MACPAC's 2017 Issue Brief; however, most states directly or indirectly use the AMA RUC's RVU valuations when determining the reimbursement rate. A minority of states have statutory or regulatory caps on vaccine administration; in these states, vaccine administration rates are often lower than states using the alternative methodologies.

COVID-19 vaccine administration reimbursement is unique. During the Public Health Emergency (PHE), CMS created a temporary reimbursement rate of $40 in the Medicare program. Under the American Rescue Plan Act (ARPA) of 2021, states received full federal match (100% Federal Medical Assistance Percentage [FMAP]) for COVID-19 vaccine administration through September 30, 2024.[22] Consequently, many state Medicaid programs reimbursed COVID-19 vaccine administration at a higher rate than other vaccines.

For vaccine products, state reimbursement methodologies often rely on common reimbursement benchmarks, including manufacturer-published prices such as AWP and WAC. Additionally, some state programs reference ASP as determined by CMS; however, ASP data are only available for a limited set of vaccines. Some states choose to develop their own reimbursement rate, often using a percentage of one of the benchmarks described above. Other states choose to tie their reimbursement rate to the Medicare rate, when available, (i.e., 95% of AWP or 106% of ASP, depending on the vaccine). Polaris et al. determined that 21 states reimburse physician offices for vaccines at the Medicare rate.[23]

Independent of a state's reimbursement methodology, there is often a disconnect between the rate determined via the methodology and the reimbursed amount. Under the medical benefit, states develop fee schedules that establish provider reimbursement rates based on the state's reimbursement methodology. Fee schedules are manually updated with varying frequency depending on the state. A fee schedule may become outdated if a state ties vaccine product reimbursement to a benchmark such as WAC or AWP and uses out-of-date prices that do not reflect changes in the fee schedule that would be published in the next update. This can result in reimbursement that is lower than the provider's acquisition cost.

Pharmacy Reimbursement

While all states reimburse physician offices for administering vaccines to Medicaid beneficiaries, some states restrict pharmacies from billing for certain or all vaccines. For states that permit

21 MACPAC. Medicaid Physician Fee-for-Service Payment Policy Issue Brief. 2017. https://www.macpac.gov/wp-content/uploads/2017/02/Medicaid-Physician-Fee-for-Service-Payment-Policy.pdf (accessed August 27, 2024).
22 42 USCS § 1396a
23 Polaris et al. "State Medicaid Coverage and Reimbursement of Adult Vaccines Administered by Physicians and Pharmacists." AJPM Focus, 3, no. 4 (August 2024): https://www.sciencedirect.com/science/article/pii/S2773065424000701.

pharmacy billing, reimbursement may only be available under a certain benefit (i.e., medical or pharmacy benefit), which could affect reimbursement rates and billing and coding procedures. Medicaid programs also may reimburse an administration fee, a dispensing fee, or both, in addition to the product cost.

Under the medical benefit, Medicaid programs may reimburse pharmacies for vaccine products the same as physician offices or based on a different methodology. Under the pharmacy benefit, states traditionally apply a "lesser of" methodology, which compares billed charges from the pharmacy with established pricing benchmarks and pays the lowest. For example, the pharmacy may submit its usual and customary (U&C) price, which the system compares to benchmarks such as WAC or ASP. In these "lesser of" methodologies, many states reimburse vaccines at WAC, since it is traditionally the lowest applicable reimbursement benchmark. Some states require pharmacies to submit their invoiced cost or actual acquisition cost, which is likely to be lower than WAC, to determine reimbursement.

Approach

Avalere was commissioned by Pfizer to assess Medicaid FFS vaccine reimbursement in the 50 states, Puerto Rico, and Washington, DC, looking at both physician office and pharmacy reimbursement. Avalere focused its research and analysis on four vaccine products: PCV20, COVID-19, maternal RSV, and shingles.

Table 1: Vaccine Products and Relevant Current Procedural Terminology Codes

Product	CPT Codes		Patient Population
	Product	Administration	
PCV20	90677	90471	• Adults 65+ • Adults 19-64 with certain risk factors
COVID-19 Vaccine	91320	90480	• Adults ≥19 years
Maternal RSV Vaccine	90678	90471	• Pregnant people at 32–36 weeks gestation using seasonal administration

Shingles Vaccine	90750	90471	• Adults ≥50 years

Research occurred between June 3 and July 8, 2024. Avalere investigated the following questions for each Medicaid FFS program and vaccine product:

- What is the Medicaid physician reimbursement amount for vaccine administration and product?
- Are pharmacies able to bill for the vaccine administration and product?
  - If yes, do pharmacies bill for vaccination under the medical or pharmacy benefit?
  - What is the Medicaid reimbursement methodology and/or amount for pharmacy administration and product?

Avalere reviewed publicly available resources to answer the research questions, including Medicaid program websites, fee schedules, physician office and pharmacy manuals, coverage policies, and preferred drug lists.

Avalere was unable to determine Medicaid reimbursement in some states due to incomplete or ambiguous publicly available resources. While Medicaid Managed Care (MMC) is the dominant method of care delivery across most states, Avalere's research and analysis excluded MMC reimbursement information because it is often not publicly available.

Physician Office Findings

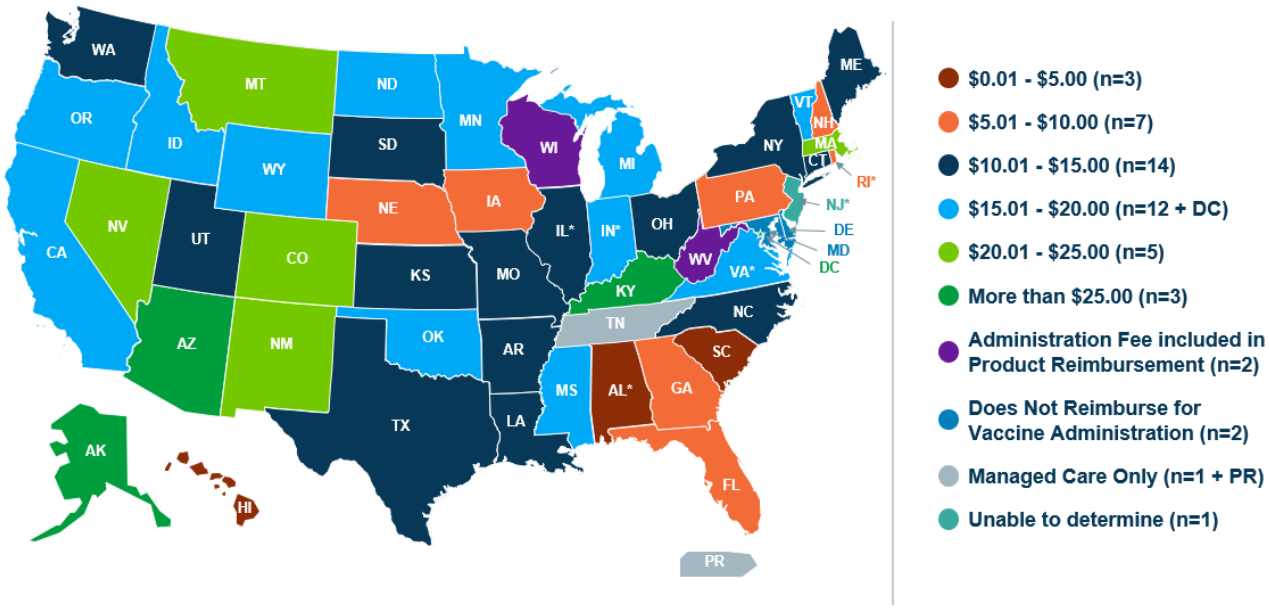
Most state Medicaid programs reimburse physician offices for vaccine administration less than the NPA

State Medicaid programs vary in how they reimburse physician offices for vaccine administration, if at all. Thirty-nine states and DC reimburse vaccine administration separately and five states only reimburse physicians for vaccine administration during an immunization-only visit. Two states include administration reimbursement in the product fee, and two states do not separately reimburse for administration.

Of states that reimburse for vaccine administration outside of an E/M code or solely during an immunization-only visit, reimbursement rates ranged from $3.72 (18% of NPA) in SC to $31.39 (152% of NPA) in AK (Figure 1). The median vaccine administration rate is $14.70, 71% of the NPA ($20.64) and 45% of the Medicare Part B Vaccine Administration rate ($32.57).[24,25]

24 CMS. Search the Physician Fee Schedule. 2024. https://www.cms.gov/medicare/physician-fee-schedule/search?Y=0&T=4&HT=0&CT=0&H1=90471&M=5 (accessed August 27, 2024).
25 CMS. Vaccine Pricing. 2024. https://www.cms.gov/medicare/payment/part-b-drugs/vaccine-pricing (accessed August 27, 2024).

Figure 1: Physician Vaccine Administration by State



* Providers only reimbursed for administration if immunization only visit

For COVID-19 vaccine administration, almost all states reimburse at or above the Medicare rate of $40. The 100% FMAP for COVID-19 vaccine administration under the ARPA may be a potential driver of increased rates.[26] After the ARPA 100% FMAP ended on September 30, 2024, states may lower their reimbursement rate to align with other vaccine products.

Comparison to 2023 Findings

Avalere conducted a similar analysis using 2021 rates in a white paper published in 2023.[27] At a high level, physician office vaccine administration reimbursement has increased since 2021. The median reimbursement amount increased by 28.3% ($11.46 to $14.70). This change was likely not driven by state policy changes but instead by a RUC re-evaluation of CPT code 90471, the CPT code used generally for the administration of a single vaccine or toxoid, in 2023. Between 2021 and 2024, the national payment amount increased by 20.7% ($17.10 to $20.64), similar to the 28.3% increase in median reimbursement, supporting the hypothesis that administration reimbursement may be driven by the increase in the NPA, rather than state policy changes.

Across most states, Medicaid programs generally reimburse products covered under the Medicare Part B preventive vaccine benefit higher than WAC, while vaccines not covered

26 42 USC § 1396d (a)(4)
27 Avalere. Medicaid Adult Vaccine Provider Reimbursement in 2021: Comparison Across 50 States and Washington, DC. 2023. https://avalere.com/wp-content/uploads/2023/04/Medicaid-Adult-Vaccine-Provider-Reimbursement-in-2021.pdf. (accessed August 27, 2024).

under the Part B preventive benefit are often reimbursed lower or at their private sector price

For vaccine products, multiple states reimburse PCV20 and COVID-19 above WAC, maternal RSV at WAC, and shingles below WAC (Table 2). Notably, significantly more states reimburse PCV20 and COVID-19 above WAC compared to the other assessed products. Both PCV20 and COVID-19 vaccines are included in the Medicare Part B reimbursement file; Medicare reimburses providers at 95% of AWP for these products. Sixteen states reimburse physician offices for PCV20, and 33 states reimburse COVID-19 at 95% of AWP. Given this consistency, it is likely many states are directly pulling reimbursement rates from the Medicare Part B file.

Conversely, fewer states reimburse maternal RSV and shingles vaccines above WAC, and no states reimburse at 95% of AWP. This dichotomy may be explained by these products not being included in the Medicare Part B reimbursement file. Some states do not list maternal RSV vaccines on the fee schedule and instead manually price the vaccine, possibly because of its recent introduction to the market. Shingles reimbursement is low across most states, which may be explained by the outdated fee schedule phenomenon described above.

Table 2: Medicaid Physician Office Vaccine Product Reimbursement Relative to WAC by State

State Medicaid Reimbursement Rate	Vaccine Product			
	PCV20	COVID-19	Maternal RSV	Shingles
Below WAC	7	1	6	29
At WAC	0	2	17	3
Above WAC	34	36	11	6
Total States Analyzed*	41	39	34	38

*Table only includes states that have the product reimbursement rates on their fee schedule and does not include states that have universal purchase (UP) programs (states purchase vaccines off of the CDC federal contract and distribute vaccines free of charge to providers), are entirely MMC, or in which a reimbursement rate or methodology was unable to be determined

Comparison to 2023 Findings

Avalere's 2023 analysis of 2021 reimbursement rates included four different vaccine products: 13-valent pneumococcal conjugate vaccine (PCV13), 23-valent pneumococcal polysaccharide vaccine (PPSV23), human papillomavirus (HPV), and Tdap); however findings were strikingly similar. The two vaccines covered as a preventive Medicare Part B vaccine, PCV13 and PPSV23, were reimbursed higher than the other products; PCV13 was reimbursed over 100% of WAC in 30/39 states and PPSV23 in 28/38 states. The most common benchmark states used to reimburse providers for these vaccines was 95% of AWP. Another vaccine included in the file, Tdap, was reimbursed above WAC in only 1/36 states, and many states reimbursed Tdap at 106% of ASP, which is the Medicare rate published in the Part B reimbursement file (Tdap has an ASP because it is a therapeutic vaccine). The one vaccine not included in the file, HPV, was reimbursed at or above WAC in 16/33 states, similar to the 2024 findings for RSV and shingles. Overall, both assessments suggest that the greatest predictor of whether a vaccine will be reimbursed above the private sector price is inclusion in the Medicare Part B reimbursement file.

Pharmacy Findings

While all states must reimburse physician office vaccination, pharmacies may face restrictions in billing for vaccines

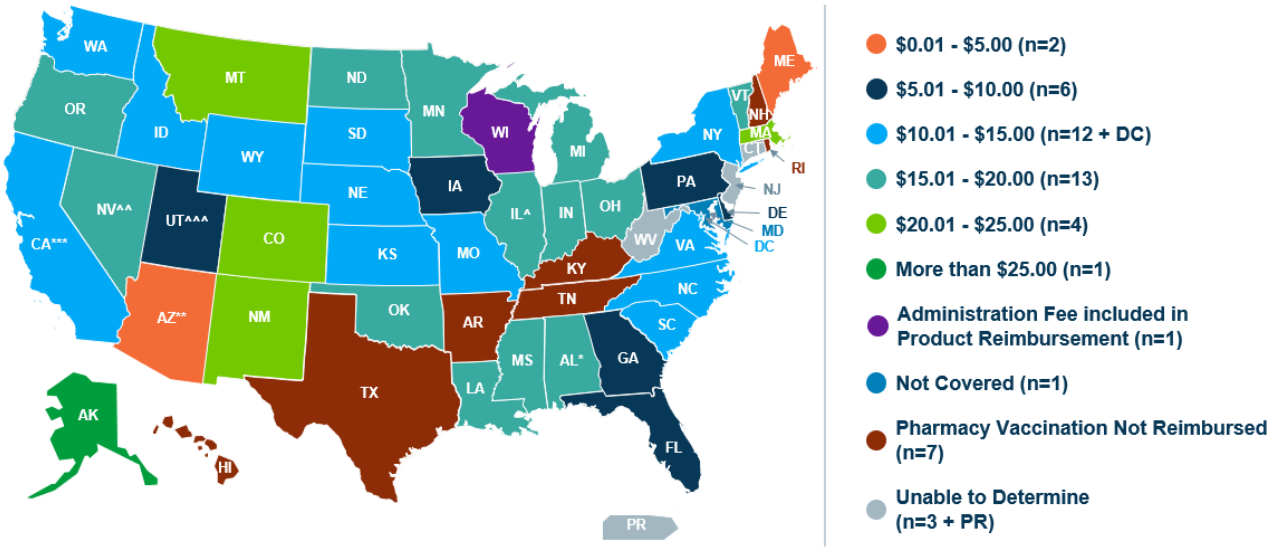
Thirty-seven states and DC allow pharmacies to bill for administering all assessed products. In 11 states, pharmacies may bill for some, but not all, included products.[28] In six of these states, pharmacies may only bill for COVID-19, which may be driven by increased flexibility during the PHE. Specifically, the Public Readiness and Emergency Preparedness (PREP) Act permits pharmacists in all states to administer COVID-19 vaccines to individuals aged three or older.[29]

Pharmacy reimbursement for vaccine administration is similar to physician reimbursement

Of the 41 states that permit pharmacy billing for adult vaccine administration (other than COVID-19), 39 reimburse for vaccine administration, and two do not. Pharmacy vaccine administration reimbursement ranges from $4.10 (20% of NPA and 13% of Part B rate) to $27.19 (132% of NPA and 83% of Part B rate) (Figure 2). Five states reimburse both a dispensing fee and an administration fee. Dispensing fees range from $8.85 to $13.20. Including dispensing fees, the median pharmacy vaccine administration fee is $14.23, $0.47 lower than the physician administration fee. Excluding dispensing fees, the median declines to $13.33.

28 One state, RI, does not permit pharmacy billing, and pharmacy vaccine billing policy was unable to be determined in NJ and PR.
29 ASPR. PREP Act. 2024. https://aspr.hhs.gov/legal/PREPact/Pages/default.aspx

Figure 2: Pharmacy Vaccine Administration Amount by State



*AL: $5.00 administration fee plus $10.64 dispensing fee

**AZ: $4.10 administration fee; Avalere was unable to determine if the $10.11 dispensing fee is additionally reimbursed.

***CA: Pharmacy claims are reimbursed $3.79 administration fee plus $10.05 to $13.20 dispensing fee; Medical claims are reimbursed $3.79 admin fee only

^IL: $6.40 administration fee plus $8.85 dispensing fee

^^NV: $7.80 administration fee plus $10.17 dispensing fee

^^^UT: Administration fee $9.99 - $10.15

For COVID-19 vaccination, 27 states reimburse pharmacies at or above the Medicare rate of $40. Like physician office reimbursement, states may begin to decrease reimbursement following the end of the ARPA 100% FMAP on September 30, 2024.

Pharmacy reimbursement for vaccine products varies based on the billing pathway and state reimbursement methodology

In states that permit pharmacy billing, 34 states and DC allow pharmacies to bill under the pharmacy benefit, 10 states allow billing under the medical benefit, and four states allow billing under either benefit. Under the pharmacy benefit, most states exclude reimbursement from the fee schedule and instead determine reimbursement by the “lesser of” methodology. Conversely, most states that permit billing under the medical benefit reimburse pharmacies at the rate included on the physician services fee schedule.

In states that reimburse pharmacies for vaccination under the medical benefit, PCV20 and COVID-19 are reimbursed primarily above WAC while maternal RSV and shingles are primarily reimbursed at or below WAC, mirroring physician office reimbursement.

Reimbursement trends differ when reviewing vaccination reimbursed under the pharmacy benefit. For all products, more than half of states reimburse at WAC, which is driven by “lesser

of" reimbursement (Table 3). In some instances, states' lesser of methodology includes a percentage of WAC or AWP. States that do not use a "lesser of" methodology may reimburse pharmacies at a rate included on physician or pharmacy specific fee schedules, which follows similar trends as physician office and medical benefit reimbursement.

Finally, under both benefits, states may reimburse vaccines at the invoiced cost or U&C price or price claims manually. These benchmarks rely on provider-submitted reimbursement information and may be higher or lower than WAC depending on the scenario.

Table 3: Medicaid Pharmacy Vaccine Product Reimbursement Relative to WAC by State

State Medicaid Reimbursement Rate**	Medical Benefit				Pharmacy Benefit			
	PCV20	COVID-19	Maternal RSV	Shingles	PCV20	COVID-19	Maternal RSV	Shingles
Below WAC	4	2	3	10	4	4	6	7
At WAC	2	1	7	3	18	19	16	16
Above WAC	8	10	3	1	7	10	2	3
U&C, Individual Consideration, Priced by Report, or Invoiced Cost	0	1	1	0	3	4	4	4
Total States Analyzed*	14	14	14	14	32	37	28	30

*Table does not include states that are UP, MMC, or in which a reimbursement rate or methodology was unable to be determined; Total states analyzed represent the total number of states that permit billing under each benefit for specific vaccine product

**Reimbursement rates relative to WAC are based on Avalere's assessment of state "lesser of" methodologies

Comparison to 2023 findings

Pharmacy reimbursement has expanded across states when compared to the 2021 assessment published in 2023. In 2021, 23 states reimbursed all assessed vaccines, compared to 37 states

in 2024. Additionally, 10 states did not reimburse pharmacies for any assessed vaccine in 2021, compared to only one in 2024. While the 2021 and 2024 assessments included different products and thus are not a one-to-one comparison, these findings generally indicate that pharmacy vaccination access has expanded.

Implications and Looking Ahead

Avalere finds significant variability in state Medicaid FFS vaccine reimbursement methodology and rates for physician offices and pharmacies. Most states continue to reimburse vaccine administration below the NPA. Between 2021 and the 2024 assessment, there was a 28.3% increase in the median Medicaid physician office vaccine administration fee, which may be explained by a change in the NPA and RVU valuations. Between the studies, Avalere found the number of state Medicaid programs that reimburse pharmacies for all assessed vaccines increased from 23 to 38 states, representing a likely increase in pharmacy access for vaccines.

Notably, many state Medicaid programs reimburse COVID-19 vaccine administration at $40. In the next year, stakeholders should monitor the COVID-19 vaccine reimbursement rate, as there will be changes in the policy environment, including the expiration of the 100% FMAP for COVID-19 vaccine administration under the ARPA.

In line with findings from 2021, most states differentially reimburse physician offices for vaccine products based on whether the product is included in the Medicare Part B reimbursement file, and for included products whether it is covered under the preventive vaccine benefit in Medicare.

Avalere found limited evidence that there were significant changes in Medicaid reimbursement for vaccination between 2021 and 2024. Consequently, the state and federal level Medicaid reimbursement reforms discussed in Avalere's 2023 white paper are still relevant:[30]

- Creating federal standards for Medicaid provider reimbursement rates for both vaccine products and their administration. Such federal standards could be combined with an increased FMAP for vaccination across states to incentivize higher reimbursement across states.
- 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 the number and type of Medicaid providers administering adult vaccines, state minimum standards for vaccine reimbursement across all provider types).

Based on the combined findings of this and other analyses, the greatest determiner of future Medicaid vaccine reimbursement rates may be future reforms to the Medicare program. For example,

30 Avalere. Medicaid Adult Vaccine Provider Reimbursement in 2021: Comparison Across 50 States and Washington, DC. 2023. https://avalere.com/wp-content/uploads/2023/04/Medicaid-Adult-Vaccine-Provider-Reimbursement-in-2021.pdf.

- Increasing the total RVUs for adult immunization administration (i.e., CPT code 90471) would likely result in commensurate increases to the Medicaid reimbursement rate in many states, since many state Medicaid programs use RVUs in their methodology to determine vaccine administration reimbursement.
- Findings show that preventive vaccines included in the Medicare Part B reimbursement file are reimbursed at higher rates relative to WAC compared to vaccines not covered under Part B or covered for therapeutic purposes. Covering all vaccine products under the Medicare Part B preventive benefit would likely result in an increase in the reimbursement rate in many states since Medicaid reimbursement is often tied to Medicare Part B reimbursement.

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, interested stakeholders should consider engaging with federal and state policymakers to help shape these policy reforms.

About Us

A healthcare consulting firm for more than 20 years, Avalere partners with leading life sciences companies, health plans, providers, and investors to bring innovative, data-driven solutions to today's most complex healthcare challenges. For more information, please contact info@avalere.com. You can also visit us at **avalere**.com.

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