

Supplementary Online Content

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eTable 1. Vaccine Benefits Coverage of All ACIP-Recommended Adult Vaccinations Under FFS Arrangements, by *CPT* Code

eTable 2. Reimbursement Amounts to Health Care Professionals for Vaccine Purchase Under FFS Arrangements, by *CPT* Code

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Vaccine Benefits Coverage of All ACIP-Recommended Adult Vaccinations Under FFS Arrangements, by *CPT* Code^a

Programs	Influenza						MMR		Td		
	90630	90654	90656	90658	90660	90661	90662	90672	90682	90707	90714
Alabama	0	1	1	1	1	1	1	0	1	1	1
Alaska	1	1	1	1	1	1	1	0	0	1	1
Arizona	1	0	1	1	1	0	1	1	1	1	1
Arkansas	1	1	1	1	1	0	1	1	1	1	1
California	1	1	1	1	1	0	1	0	1	1	1
Colorado	1	1	1	1	0	1	0	1	0	1	1
Connecticut	1	1	1	1	1	0	1	U	U	1	1
Delaware	1	1	1	1	1	1	1	1	1	1	1
District of Columbia	1	1	1	1	1	1	0	1	0	1	1
Florida ^c	0	0	1	1	0	0	0	0	0	1	1
Georgia	0	0	1	0	0	0	1	1	1	1	1
Hawaii ^d	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Idaho	1	1	1	1	1	1	1	1	1	1	1
Illinois	1	0	1	1	0	0	1	1	1	1	1
Indiana	1	1	1	1	1	1	1	1	1	1	1
Iowa	1	0	1	0	1	0	0	1	0	1	1
Kansas	1	1	1	1	0	1	1	1	1	1	1
Kentucky	0	1	1	1	1	1	1	1	1	1	1
Louisiana	0	1	1	1	0	0	0	1	1	1	1
Maine	0	0	1	1	1	0	1	1	1	1	1
Maryland	1	0	1	1	1	1	1	1	1	1	1
Massachusetts	0	1	0	1	1	1	0	0	1	1	0
Michigan	1	1	1	1	0	1	1	1	1	1	1
Minnesota	0	0	1	1	0	0	1	1	1	1	1
Mississippi	1	1	1	1	0	1	1	0	1	1	1

Programs	Influenza									MMR	Td
	90630	90654	90656	90658	90660	90661	90662	90672	90682	90707	90714
Missouri	1	1	1	1	1	0	0	1	0	1	1
Montana	1	0	1	0	0	0	0	0	1	1	1
Nebraska	1	1	1	1	1	0	1	1	1	1	1
Nevada	0	1	1	1	1	0	0	1	0	1	1
New Hampshire	1	1	1	1	1	1	1	U	U	1	1
New Jersey	1	1	1	1	1	1	1	U	U	1	1
New Mexico	1	1	1	1	1	1	1	1	1	1	1
New York	1	1	1	1	1	1	1	1	1	1	1
North Carolina	1	0	1	1	0	0	1	1	1	1	1
North Dakota	1	1	1	1	0	0	1	1	0	1	1
Ohio	1	1	1	1	1	0	1	1	1	1	1
Oklahoma	1	1	1	1	0	0	0	1	1	1	1
Oregon	1	1	1	1	1	1	1	1	1	1	1
Pennsylvania	1	1	1	1	1	1	0	1	1	1	1
Rhode Island	0	0	0	0	0	0	0	0	0	0	0
South Carolina	1	1	1	1	1	0	1	1	1	1	1
South Dakota	0	1	1	1	1	1	1	1	0	1	1
Tennessee ^d	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Texas	1	1	1	1	1	1	1	1	1	1	1
Utah	1	1	1	1	1	1	1	0	1	1	1
Vermont	1	1	1	1	0	1	1	1	1	1	1
Virginia	1	1	1	1	1	0	0	U	U	1	1
Washington	0	1	1	1	0	1	1	1	1	1	1
West Virginia	0	1	1	1	1	1	1	1	0	1	1
Wisconsin	0	0	1	1	1	1	1	1	0	1	1
Wyoming	0	0	1	1	1	0	0	1	1	1	1
Total number of states	34	36	47	45	33	26	35	36	33	48	47

Programs	Tdap	PCV13	PPSV23	Hep A	Hep A/B	Hep B			MenB		
	90715	90670	90732	90632	90636	90739	90740	90746	90747	90620	90621
Alabama	1	1	1	0	0	0	1	1	1	1	1
Alaska	1	0	1	1	1	0	1	1	0	0	0
Arizona	1	1	1	1	1	1	1	1	1	1	1
Arkansas	1	1	1	1	1	0	1	1	1	1	1
California	1	1	1	1	1	0	1	1	1	1	1
Colorado	1	1	1	1	1	1	1	1	1	1	1
Connecticut	1	1	1	1	1	1	1	1	1	1	1
Delaware	1	1	1	1	1	0	1	1	1	1	1
District of Columbia	1	1	1	1	1	0	1	1	1	1	1
Florida ^c	1	1	1	1	0	1	0	1	0	1	1
Georgia	1	1	1	1	1	1	0	1	1	1	1
Hawaii ^d	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Idaho	1	1	1	1	1	1	1	1	1	1	1
Illinois	1	1	1	1	1	1	1	1	1	1	1
Indiana	1	1	1	1	1	1	1	1	1	1	1
Iowa	1	1	1	1	1	0	1	1	0	1	1
Kansas	1	1	1	1	1	1	1	1	1	1	1
Kentucky	1	1	1	1	1	1	1	1	1	1	1
Louisiana	1	1	1	1	1	1	0	1	0	1	1
Maine	1	1	1	1	1	1	1	1	1	1	1
Maryland	1	1	1	1	1	1	1	1	1	1	1
Massachusetts	0	0	0	0	0	1	0	0	0	1	1
Michigan	1	1	1	1	1	1	1	1	1	1	1
Minnesota	1	1	1	1	1	1	1	1	1	1	1
Mississippi	1	1	1	0	0	0	1	1	1	1	1

Programs	Tdap	PCV13	PPSV23	Hep A	Hep A/B	Hep B				MenB	
	90715	90670	90732	90632	90636	90739	90740	90746	90747	90620	90621
Missouri	1	1	1	1	1	0	0	1	1	1	1
Montana	1	1	1	1	1	1	1	1	1	1	1
Nebraska	1	1	1	1	1	1	1	1	1	1	1
Nevada	1	1	1	1	1	0	1	1	1	0	0
New Hampshire	1	1	1	1	1	1	1	1	1	1	1
New Jersey	1	1	1	1	1	1	1	1	1	1	1
New Mexico	1	1	1	1	1	1	1	1	1	1	1
New York	1	1	1	1	1	1	1	1	1	1	1
North Carolina	1	1	1	1	1	1	1	1	1	1	1
North Dakota	1	1	1	0	1	0	1	1	1	1	1
Ohio	1	1	1	1	1	1	1	1	1	1	1
Oklahoma	1	1	1	1	1	1	1	1	1	0	0
Oregon	1	1	1	1	1	1	1	1	1	1	1
Pennsylvania	1	1	1	1	1	1	0	1	0	1	1
Rhode Island	1	0	1	1	1	0	1	1	1	0	0
South Carolina	1	1	1	1	1	1	1	1	1	1	1
South Dakota	1	1	1	1	1	0	1	1	1	1	1
Tennessee ^d	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Texas	1	1	1	1	1	0	1	1	1	1	1
Utah	1	1	1	1	1	1	1	1	1	1	1
Vermont	1	1	1	1	0	1	1	1	1	0	0
Virginia	1	1	1	1	1	1	1	1	1	1	1
Washington	1	1	1	1	1	1	1	1	1	1	1
West Virginia	1	1	1	1	1	1	1	1	1	1	1
Wisconsin	1	1	1	1	1	1	1	1	1	1	1
Wyoming	1	1	1	1	1	1	1	1	1	1	1
Total number of states	48	46	48	45	44	35	43	48	43	44	44

Programs	MenACWY		HPV		Varicella	Zoster		Hib		Total number of adult vaccine products covered	Total ACIP-recommended vaccines covered ^b
	90733	90734	4vHPV: 90649	9vHPV: 90651	90716	90736	90750	90647	90648		
Alabama	1	1	0	1	1	0	0	0	0	21	10
Alaska	1	1	1	1	1	1	1	0	0	22	10
Arizona	1	1	1	0	1	1	0	1	1	27	11
Arkansas	1	1	1	1	1	1	1	1	0	28	13
California	1	1	1	1	1	1	1	1	1	28	13
Colorado	1	1	1	1	1	1	1	1	0	27	13
Connecticut	1	1	1	1	1	1	1	U	U	26	12
Delaware	1	1	1	1	1	1	0	1	1	29	12
District of Columbia	1	1	1	1	1	1	0	1	1	27	12
Florida ^c	0	1	0	1	1	1	1	0	0	17	12
Georgia	0	1	0	1	1	1	1	0	0	21	12
Hawaii ^d	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Idaho	1	1	1	1	1	1	0	1	1	30	12
Illinois	1	1	1	1	1	1	1	1	1	28	13
Indiana	1	1	1	1	1	1	1	1	1	31	13
Iowa	1	1	1	1	1	1	1	1	1	24	13
Kansas	1	1	0	1	1	0	1	1	1	28	13
Kentucky	1	1	1	0	1	1	1	1	1	29	12
Louisiana	0	1	1	1	1	1	1	1	1	24	13
Maine	1	1	1	1	1	1	1	1	1	28	13
Maryland	1	1	0	1	1	1	1	1	1	29	13
Massachusetts	1	1	1	1	1	1	1	1	1	18	9
Michigan	0	1	0	1	1	1	1	0	0	26	12
Minnesota	0	1	1	1	1	1	1	0	1	25	13

Programs	MenACWY		HPV		Varicella	Zoster		Hib		Total number of adult vaccine products covered	Total ACIP-recommended vaccines covered ^b
	90733	90734	4vHPV: 90649	9vHPV: 90651	90716	90736	90750	90647	90648		
Mississippi	1	1	1	1	1	1	0	1	1	25	11
Missouri	0	1	1	1	1	1	1	1	1	25	13
Montana	0	1	0	1	1	1	1	0	0	21	12
Nebraska	1	1	1	1	1	0	0	0	1	27	12
Nevada	1	1	1	0	1	1	0	1	1	22	10
New Hampshire	1	1	1	1	1	1	1	1	1	29	13
New Jersey	1	1	1	1	1	1	0	U	U	26	11
New Mexico	1	1	1	1	1	1	1	1	1	31	13
New York	1	1	1	1	1	1	1	1	1	31	13
North Carolina	1	1	1	1	1	1	1	1	1	28	13
North Dakota	1	1	1	1	1	1	0	0	0	23	11
Ohio	1	1	1	1	1	1	1	1	1	30	13
Oklahoma	1	0	0	1	1	1	1	0	0	22	11
Oregon	1	1	1	1	1	1	1	1	1	31	13
Pennsylvania	1	1	1	1	1	1	1	1	1	28	13
Rhode Island	1	0	1	0	0	1	0	0	0	10	5
South Carolina	1	1	0	0	1	0	0	1	1	26	11
South Dakota	1	1	1	1	1	1	0	1	1	27	12
Tennessee ^d	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Texas	1	1	0	1	1	0	0	0	1	26	12
Utah	1	1	1	1	1	1	1	1	1	30	13
Vermont	1	0	0	0	1	1	0	1	1	23	10
Virginia	1	1	1	1	1	0	0	U	U	23	11
Washington	1	1	0	1	1	1	1	1	1	28	13
West Virginia	1	1	1	1	1	1	1	1	1	29	13

Programs	MenACWY		HPV		Varicella	Zoster		Hib		Total number of adult vaccine products covered	Total ACIP-recommended vaccines covered ^b
	90733	90734	4vHPV: 90649	9vHPV: 90651	90716	90736	90750	90647	90648		
Wisconsin	1	1	1	1	1	1	1	1	1	28	13
Wyoming	1	1	1	1	1	1	1	1	1	27	13
Total number of states	42	46	37	43	48	43	33	34	35		

Abbreviations: 4vHPV = 4-valent human papillomavirus vaccine; 9vHPV = 9-valent human papillomavirus vaccine; ACIP = Advisory Committee on Immunization Practices; CPT code = Current Procedural Terminology code; FFS = fee-for-service; HepA = hepatitis A vaccine; HepA/B = hepatitis A and B combination vaccine; HepB = hepatitis B vaccine; Hib = *Haemophilus influenzae* type b vaccine; MenACWY = serogroup A, C, W, and Y meningococcal vaccine; MenB = serogroup B meningococcal vaccine; MMR = measles, mumps, rubella vaccine; PCV13 = pneumococcal conjugate vaccine; PPSV23 = pneumococcal polysaccharide vaccine; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine; U = Unable to determine.

^a Data from public domain document review. Because the following Medicaid programs did not participate in the semi-structured survey, data from Arkansas, Iowa, New Jersey, North Carolina, and Utah were not validated.

^b There are multiple vaccine products available for hepatitis B, serogroup A, C, W, and Y meningococcal, serogroup B meningococcal, and *Haemophilus influenzae* type b vaccines. Therefore, ACIP coverage was determined using the most frequently available CPT code for each of these vaccines.

^c In Florida, adult vaccination coverage benefits for influenza, pneumococcal, and zoster immunization apply to vaccinations given through the pharmacy to adult beneficiaries who reside in nursing facilities. All other vaccines are covered for adults aged 19-20 years only.

^d Both Hawaii and Tennessee Medicaid are under 100% managed care organization arrangements.

eTable 2. Reimbursement Amounts to Health Care Professionals for Vaccine Purchase Under FFS Arrangements, by CPT Code^{a,b,c}

Programs	Influenza							MMR	Td		
	90630 ^d	90654	90656	90658 ^e	90660 ^f	90661 ^d	90662	90672	90682	90707	90714 ^d
Alabama	NC	18.92	19.25	10.80	20.99	22.29	49.03	NC	53.37	70.92	22.07
Alaska	By report	16.74	15.56	15.56	22.03	13.35	13.70	NC	NC	54.69	8.00
Arizona	19.32	NC	18.29	10.54	20.91	NC	46.58	24.60	46.31	55.87	22.96
Arkansas	25.07	10.31	13.12	12.06	18.40	NC	13.80	25.54	46.31	34.64	14.00
California	24.80	20.36	24.23	22.70	17.88	NC	57.83	NC	57.83	73.13	27.61
Colorado	16.54	19.70	17.18	15.80	NC	14.82	NC	22.43	NC	70.92	32.89
Connecticut	20.34	MP	19.25	MP	MP	NC	49.03	U	U	MP	25.80
Delaware	MP	MP	16.72	15.87	MP	MP	MP	MP	MP	MP	MP
District of Columbia	16.27	15.13	15.40	16.28	55.20	17.72	NC	21.50	NC	34.91	20.64
Florida	NC	NC	16.33	16.33	NC	NC	NC	NC	NC	75.04	32.89
Georgia	NC	NC	19.77	NC	NC	NC	53.37	22.95	53.37	75.04	23.14
Hawaii ^g	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Idaho	18.31	17.03	17.79	13.22	21.11	20.06	48.03	24.19	48.03	70.19	23.22
Illinois	20.71	NC	19.77	17.74	NC	NC	53.37	22.95	53.37	70.92	23.15
Indiana	18.08	16.77	17.56	16.14	0.00	19.87	48.50	24.10	48.50	76.43	18.89
Iowa	17.10	NC	12.91	NC	28.91	NC	NC	23.00	NC	50.50	40.24
Kansas	20.34	18.92	19.77	20.16	NC	19.68	53.37	23.70	46.31	70.92	23.92
Kentucky	NC	18.92	12.40	14.35	21.70	20.66	31.82	24.60	46.31	56.14	19.30
Louisiana	NC	17.22	19.77	15.37	NC	NC	NC	25.00	53.37	75.04	23.13
Maine	NC	NC	19.77	11.37	23.46	NC	53.37	26.88	53.37	47.07	23.13
Maryland	20.34	NC	19.78	18.24	22.32	By report	53.38	26.88	53.38	47.01	23.15
Massachusetts	NC	IC	NC	IC	IC	IC	NC	NC	IC	IC	NC
Michigan	20.34	18.92	19.77	17.72	NC	22.29	53.37	24.32	53.37	77.15	23.14
Minnesota	NC	NC	19.77	16.12	NC	NC	53.37	26.87	53.37	75.04	23.12
Mississippi	20.34	18.92	19.77	37.23	NC	22.29	53.37	NC	53.37	84.65	23.14

Programs	Influenza									MMR	Td
	90630 ^d	90654	90656	90658 ^e	90660 ^f	90661 ^d	90662	90672	90682	90707	90714 ^d
Missouri	0.00	0.00	7.11	13.51	21.97	NC	NC	5.27	NC	56.04	15.80
Montana	18.31	NC	19.77	NC	NC	NC	NC	NC	53.37	75.04	23.14
Nebraska	19.19	17.86	19.77	17.22	10.71	NC	53.37	24.51	46.31	80.14	23.13
Nevada	NC	18.60	13.48	13.74	9.34	NC	NC	9.34	NC	33.23	20.43
New Hampshire	20.12	19.91	13.68	5.38	57.50	19.01	19.01	20.11	35.28	71.49	22.50
New Jersey	22.26	18.00	32.19	32.19	25.69	20.70	32.50	U	U	62.33	26.05
New Mexico	20.34	18.92	19.77	11.37	23.46	22.29	53.37	26.88	53.37	47.07	23.13
New York	MP	MP	MP	MP	MP	MP	MP	MP	MP	MP	MP
North Carolina	17.74	NC	16.75	15.33	NC	NC	47.58	23.64	47.58	74.97	32.33
North Dakota	20.34	18.92	17.72	12.68	NC	NC	42.72	26.88	NC	67.03	23.23
Ohio	20.34	18.92	19.77	10.39	23.46	NC	53.37	26.88	53.37	57.66	23.13
Oklahoma	19.68	18.30	19.13	10.65	NC	NC	NC	22.20	51.64	51.08	22.37
Oregon	20.34	18.92	19.77	15.83	23.46	22.29	53.37	26.88	53.37	70.85	23.13
Pennsylvania ^h	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Rhode Island	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
South Carolina	17.56	16.33	17.06	15.74	20.25	NC	46.07	22.58	46.07	69.41	23.55
South Dakota	NC	18.93	16.27	13.83	28.29	22.30	39.22	24.68	NC	68.38	37.66
Tennessee ^g	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Texas	19.17	22.96	17.69	35.86	24.65	42.95	47.75	24.65	47.75	75.76	20.71
Utah	21.41	13.52	19.77	15.64	22.38	% of charges	53.37	NC	53.37	75.04	23.14
Vermont	20.34	17.60	19.18	11.36	NC	20.73	51.77	24.99	51.77	34.93	22.45
Virginia	20.34	18.38	19.24	13.22	22.32	NC	NC	U	U	70.92	32.89
Washington	NC	DC	19.77	33.24	NC	31.28	53.37	22.95	53.37	70.92	23.13

Programs	Influenza									MMR	Td
	90630 ^d	90654	90656	90658 ^e	90660 ^f	90661 ^d	90662	90672	90682	90707	90714 ^d
West Virginia	NC	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	NC	Carrier-priced	Carrier-priced
Wisconsin	NC	NC	17.19	15.39	26.77	25.60	34.18	30.19	NC	66.10	21.06
Wyoming	NC	NC	17.72	14.41	23.46	NC	NC	26.88	46.31	44.40	21.91
Median	20.34	18.60	19.16	15.48	22.32	20.73	50.40	24.51	53.37	70.52	23.13
CDC price	12.38	U	U	N/A	N/A	15.28	U	18.88	U	49.54	18.32
Private sector price	16.82	U	U	N/A	N/A	23.40	U	23.70	U	75.04	29.48
Programs	Tdap	PCV13	PPSV23	Hep A	Hep A/B	Hep B			MenB		
	90715 ^d	90670	90732	90632 ^d	90636	90739	90740	90746 ^d	90747	90620	90621
Alabama	31.67	192.64	98.85	NC	NC	NC	126.60	63.30	126.60	160.75	122.65
Alaska	40.10	NC	55.82	71.07	100.71	NC	188.43	58.99	NC	NC	NC
Arizona	30.66	194.85	102.36	44.94	89.39	124.55	123.74	61.86	123.74	115.50	112.04
Arkansas	28.80	9.56	12.34	61.05	91.28	NC	153.14	57.58	110.20	183.11	131.81
California	35.36	207.57	112.21	63.10	103.96	NC	134.71	69.58	134.71	169.46	137.33
Colorado	44.24	180.05	94.51	66.91	101.00	131.10	55.65	55.65	76.43	165.75	133.62
Connecticut	30.96	192.64	107.75	51.38	MP	131.10	126.60	63.30	126.60	MP	MP
Delaware	MP	MP	MP	MP	MP	NC	MP	MP	MP	MP	MP
District of Columbia	24.77	154.11	86.20	41.11	78.16	NC	101.28	50.64	101.28	153.09	115.75
Florida	41.39	180.05	100.19	67.55	NC	115.00	NC	57.25	NC	165.75	133.62
Georgia	32.05	215.33	114.21	59.65	103.75	131.10	NC	67.06	134.12	170.63	140.15
Hawaii ^g	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Idaho	27.86	173.37	96.97	46.24	85.00	117.99	113.94	56.97	113.94	149.06	120.50
Illinois	30.90	205.11	107.75	58.64	101.00	131.10	130.25	65.12	130.24	165.75	133.62
Indiana	39.69	188.26	105.19	70.84	101.43	120.75	173.55	59.33	118.65	139.51	139.51
Iowa	40.24	112.56	56.56	72.59	87.35	NC	182.95	52.78	NC	153.76	112.75
Kansas	42.14	215.33	94.51	66.28	101.64	131.10	134.12	67.06	134.12	165.75	133.62
Kentucky	31.84	145.11	72.35	51.55	92.50	117.99	119.42	59.71	119.42	122.95	95.75

Programs	Tdap ^d	PCV13	PPSV23	Hep A	Hep A/B	HepB			MenB		
	90715	90670	90732	90632 ^d	90636	90739	90740	90746 ^d	90747	90620	90621
Louisiana	32.34	205.11	107.75	58.27	102.50	131.10	NC	65.12	NC	160.00	132.87
Maine	32.34	205.11	107.75	58.27	110.64	131.10	130.25	65.12	130.25	147.37	122.70
Maryland	30.90	205.12	107.75	58.65	78.16	131.10	130.25	65.13	130.25	160.75	115.75
Massachusetts	NC	NC	NC	NC	NC	IC	NC	NC	NC	IC	IC
Michigan	32.05	215.33	114.21	59.65	108.65	131.10	134.12	67.06	134.12	180.20	140.84
Minnesota	32.05	215.33	114.21	59.65	104.00	131.10	134.12	67.06	134.12	170.75	140.27
Mississippi	32.05	215.33	114.21	NC	NC	NC	134.12	67.06	134.12	198.75	160.20
Missouri	21.74	158.83	11.33	69.55	96.35	NC	NC	54.12	43.38	5.27	5.27
Montana	32.05	215.33	114.21	59.65	101.00	131.10	134.12	67.06	134.12	165.75	133.62
Nebraska	32.33	205.11	107.75	58.27	107.87	131.10	130.24	65.12	130.24	177.02	142.71
Nevada	35.65	139.49	11.12	56.31	62.71	NC	102.77	51.08	102.77	NC	NC
New Hampshire	46.23	136.14	95.27	61.00	123.00	115.92	197.72	65.00	110.20	160.64	115.46
New Jersey	47.25	132.10	35.76	80.95	103.04	By report	209.86	65.25	209.86	158.40	113.85
New Mexico	32.34	205.11	107.75	58.27	113.28	131.10	130.25	65.12	130.25	169.60	121.9
New York	MP	MP	MP	MP	MP	MP	MP	MP	MP	MP	MP
North Carolina	40.11	200.00	105.17	70.87	105.58	118.45	170.25	59.95	119.89	175.10	143.70
North Dakota	29.98	181.06	89.95	NC	92.50	NC	122.96	61.48	122.96	160.75	122.65
Ohio	32.34	205.11	107.75	58.27	97.37	131.10	130.25	65.12	130.25	171.20	123.05
Oklahoma	32.34	198.45	104.24	56.38	82.50	126.84	126.01	63.01	126.01	NC	NC
Oregon	32.34	205.11	107.75	58.27	78.30	131.10	130.25	65.12	130.25	146.75	119.01
Pennsylvania ^h	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	NC	see footnote	NC	see footnote	see footnote
Rhode Island	32.34	NC	107.75	58.27	94.73	NC	130.25	65.12	130.25	NC	NC
South Carolina	39.04	177.05	93.00	65.71	99.14	113.16	163.26	56.21	112.42	162.98	131.36
South Dakota	41.83	172.50	88.45	65.77	94.36	NC	112.88	57.45	112.88	163.98	163.98
Tennessee ^g	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote

Programs	Tdap ^d	PCV13	PPSV23	Hep A	Hep A/B	HepB			MenB		
	90715	90670	90732	90632 ^d	90636	90739	90740	90746 ^d	90747	90620	90621
Texas	27.65	183.52	96.41	52.47	108.21	NC	116.54	58.27	116.54	177.88	95.59
Utah	32.05	215.33	114.21	59.65	98.10	131.10	134.12	67.06	134.12	170.75	140.26
Vermont	29.97	198.96	104.51	45.88	NC	127.17	126.34	63.17	126.34	NC	NC
Virginia	40.05	180.05	94.51	58.64	77.41	131.10	130.24	63.29	130.24	160.75	133.62
Washington	32.05	215.33	114.21	59.65	98.10	131.10	134.12	67.02	134.12	165.75	133.62
West Virginia	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced	Carrier-priced
Wisconsin	31.58	176.46	90.82	52.71	95.81	115.00	122.73	63.02	122.73	164.06	119.06
Wyoming	28.29	181.06	89.95	49.73	95.23	115.00	122.96	61.47	122.96	160.75	122.65
Median	32.19	193.75	103.30	58.65	98.10	131.10	130.25	63.30	126.60	164.02	131.59
CDC price	24.80	125.07	66.20	30.76	61.86	69.75	U	25.18	U	103.94	85.10
Private sector price	43.35	188.26	100.19	68.90	104.00	115.75	U	41.45	U	170.75	139.52
Programs	MenACWY		HPV		Varicella	Zoster ⁱ		Hib			
	90733 ^f	90734 ^d	4vHPV: 90649 ^f	9vHPV: 90651	90716	90736	90750	90647	90648 ^d		
Alabama	120.83	120.83	NC	204.87	112.94	NC	NC	NC	NC		
Alaska	119.31	117.03	142.50	245.00	95.49	172.06	By report	NC	NC		
Arizona	101.17	113.66	95.07	NC	94.27	206.07	NC	19.78	5.30		
Arkansas	69.85	65.60	9.56	9.56	51.53	129.20	112.00	25.09	NC		
California	126.88	121.33	164.72	208.58	125.73	218.97	144.46	29.94	20.68		
Colorado	124.44	116.30	167.94	204.87	122.02	212.67	140.00	26.23	NC		
Connecticut	MP	MP	MP	MP	MP	MP	MP	U	U		
Delaware	MP	MP	MP	158.41	MP	MP	NC	MP	MP		
District of Columbia	85.19	82.00	130.27	162.45	39.94	114.69	NC	20.37	15.75		
Florida	NC	126.95	NC	217.11	129.30	212.67	144.20	NC	NC		
Georgia	NC	122.18	NC	216.99	129.30	212.67	144.20	NC	NC		
Hawaii ^g	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote		

Programs	MenACWY		HPV		Varicella	Zoster ⁱ			Hib	
	90733 ^f	90734 ^d	4vHPV: 90649 ^f	9vHPV: 90651	90716	90736	90750	90647	90648 ^d	
Idaho	95.84	90.20	131.73	216.81	77.33	159.16	NC	23.34	21.78	
Illinois	123.17	126.95	161.69	204.87	122.02	223.12	140.00	26.23	16.05	
Indiana	126.08	102.50	167.39	227.18	117.80	161.63	151.41	26.76	10.61	
Iowa	107.55	120.32	145.36	140.45	87.87	162.36	141.85	20.91	22.52	
Kansas	106.49	121.63	NC	204.87	122.02	NC	140.00	26.12	24.34	
Kentucky	106.49	117.41	141.38	NC	94.14	165.69	280.00	22.77	26.21	
Louisiana	NC	116.39	121.03	217.71	129.30	212.67	140.00	16.15	10.55	
Maine	106.49	97.49	120.00	172.04	81.67	187.66	148.95	22.16	23.41	
Maryland	100.43	82.00	NC	177.70	81.75	212.00	140.00	20.37	22.83	
Massachusetts	IC	IC	IC	IC	IC	IC	IC	IC	IC	
Michigan	NC	128.85	NC	229.34	136.26	236.51	148.40	NC	NC	
Minnesota	NC	122.31	160.17	217.11	129.30	212.67	144.20	NC	10.85	
Mississippi	0.00	0.00	384.90	491.38	146.28	267.74	NC	62.66	18.75	
Missouri	NC	120.01	152.84	5.27	89.09	162.25	164.56	27.48	5.27	
Montana	NC	126.95	NC	217.11	129.30	223.12	144.20	NC	NC	
Nebraska	131.55	124.21	171.06	231.87	10.71	NC	NC	NC	11.59	
New Hampshire	113.76	111.61	148.49	165.17	122.51	198.71	208.24	0.01	27.49	
New Jersey	127.85	125.46	165.49	163.97	105.50	188.66	NC	U	U	
New Mexico	106.49	127.15	130.00	176.95	81.67	201.88	MP	20.37	23.34	
New York	MP	MP	MP	MP	MP	MP	MP	MP	MP	
North Carolina	123.68	133.90	165.77	222.85	132.40	229.81	148.53	26.25	10.40	
North Dakota	117.42	112.93	160.17	193.63	115.16	196.91	NC	NC	NC	
Ohio	126.39	115.88	144.43	173.70	104.85	210.93	149.80	23.56	28.11	
Oklahoma	103.03	NC	NC	165.86	88.75	171.88	165.45	NC	NC	
Oregon	123.17	111.84	153.79	196.70	121.90	197.49	138.60	26.21	10.45	
Pennsylvania^h	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	

Programs	MenACWY		HPV		Varicella	Zoster ⁱ		Hib	
	90733 ^f	90734 ^d	4vHPV: 90649 ^f	9vHPV: 90651	90716	90736	90750	90647	90648 ^d
Rhode Island	106.49	NC	135.66	NC	NC	152.00	NC	NC	NC
South Carolina	104.66	114.32	NC	NC	119.94	NC	NC	25.69	10.26
South Dakota	110.15	118.71	166.16	197.52	117.47	216.94	NC	31.55	17.42
Tennessee^g	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote	see footnote
Texas	132.15	124.77	NC	193.64	130.91	NC	NC	NC	17.10
Utah	147.65	122.31	280.03	217.11	112.94	138.23	144.20	26.23	10.85
Vermont	58.66	NC	NC	NC	57.86	114.69	NC	28.00	28.00
Virginia	106.49	116.30	204.87	204.87	122.02	NC	NC	U	U
Washington	116.30	126.95	NC	204.87	122.02	212.67	140.00	78.70	16.05
West Virginia	Carrier- priced	Carrier- priced	Carrier- priced	Carrier- priced	Carrier- priced	Carrier- priced	Carrier- priced	Carrier- priced	Carrier- priced
Wisconsin	109.80	118.48	163.48	204.12	110.98	169.00	140.00	26.96	30.80
Wyoming	100.46	112.93	160.17	193.63	77.04	196.91	140.00	20.91	22.08
Median	108.68	117.95	153.79	204.87	114.05	197.49	144.20	25.69	18.09
CDC price	N/A	71.34	N/A	144.99	84.88	134.16	102.61	13.21	9.47
Private sector price	N/A	126.53	N/A	217.11	129.30	212.67	144.20	26.23	13.68

Abbreviations: 4-valent human papillomavirus vaccine; 9vHPV = 9-valent human papillomavirus vaccine; ACIP = Advisory Committee on Immunization Practices; CPT code = Current Procedural Terminology code; DC = Different code; FFS = fee-for-service; HepA = hepatitis A vaccine; HepA/B = hepatitis A and B combination vaccine; HepB = hepatitis B vaccine; Hib = *Haemophilus influenzae* type b vaccine; IC = individual consideration; MenACWY = serogroup A, C, W, and Y meningococcal vaccine; MenB = serogroup B meningococcal vaccine; MMR = measles, mumps, rubella vaccine; MP = Manually priced; N/A = Not applicable; NC = Not covered; PCV13 = pneumococcal conjugate vaccine; PPSV23 = pneumococcal polysaccharide vaccine; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine; U = Unable to determine.

^a Data from public domain document review with reimbursement amounts shown in 2018 US dollars. Because the following Medicaid programs did not participate in the semi-structured survey, data from Arkansas, Iowa, New Jersey, North Carolina, and Utah were not validated.

^b Data on reimbursement to health care professionals for adult vaccine purchase current as of 4/30/2019.

^c Cost data for CDC and manufacturer-reported prices current as of 8/01/2019.

^d There are multiple vaccine products available for CPT codes 90630 (influenza), 90632 (HepA), 90648 (Hib), 90661 (influenza), 90734 (MenACWY), 90746 (HepB), 90714 (Td), and 90715 (Tdap). Therefore, the CDC and manufacturer-reported prices were averaged for each code and the average is presented here.

^e For CPT code 90658 (influenza), the CDC and manufacturer-reported prices are marked “N/A” because the CPT code is no longer valid.

^f For CPT codes 90660 (influenza), 90733 (MenACWY), and 90649 (4vHPV), the CDC and manufacturer-reported prices are marked “N/A” because the vaccine is no longer in production.

^g Both Hawaii and Tennessee are under 100% managed care organization arrangements.

^h Pennsylvania reimburses adult vaccine purchase for actual dose administered by using each vaccine’s associated national drug code (NDC).

ⁱ For 90736 (zoster), this information is as of 6/01/2018.