

Letters

RESEARCH LETTER

Primary Care Spending in the Commercially Insured Population

Efforts to increase the value of health care by allocating more resources to primary care have used the share of total health care spending attributed to primary care as a measure of success. A 2019 study found that primary care represented 2% to 5% of total spending among Medicare fee-for-service beneficiaries in 2015.¹ We assessed the share among individuals younger than 65 years covered by employer-sponsored insurance from 2013 to 2017.

Methods | Using Health Care Cost Institute data from 3 national payers, representing 26% of US individuals covered by employer-sponsored insurance, 3 annual measures were calculated. First, the share of total spending on services rendered by primary care clinicians (PCCs) was calculated (broad definition). Similar to previous studies,^{1,2} PCCs included family practice, geriatric medicine, gynecology, internal medicine, or pediatric physicians; physician assistants; or nurse practitioners on more than 50% of professional claims.

Hospitalists were excluded. Second, the share of spending on primary care services rendered by PCCs, defined by Current Procedural Terminology codes, including evaluation and management visits, vaccinations, care planning, and other related services, was calculated (narrow definition). Third, utilization was calculated as the share of individuals who received at least 1 service from a PCC. The measures were assessed in the overall sample and in subgroups by age. Spending was defined as the total amount paid by the insurer and individual. Individuals with 12 months of medical and prescription drug coverage and positive total spending, including medical care and prescription drugs, in a calendar year were included. Spending was inflation-adjusted to 2017 US dollars using the Consumer Price Index.

To determine differences between 2013 and 2017, Wilcoxon signed-rank tests and logistic regressions were calculated for the share of PCC spending and utilization, respectively. Statistical significance was defined as a 2-sided $P < .05$. Analyses were conducted using SAS, version 9.4 (SAS Institute).

Results | Under the broad definition, mean primary care spending increased from \$511 among 11 406 520 individuals in 2013

Table 1. Mean Health Care and Primary Care Spending by Age

Individuals by Age Group, y	No. of Individuals		Mean Spending in 2017, US \$					
	2013	2017	Total (Medical and Drug) ^a		Primary Care Clinician			
			2013	2017	Broad Definition		Narrow Definition	
Total	11 406 520	11 608 038	5701	6688	511	538	262	291
0-17 (Children)	2 778 902	2 656 739	2600	3007	529	588	356	376
18-24	991 142	979 503	3669	4144	319	351	167	187
25-34	1 411 538	1 491 395	4582	5113	351	362	173	191
35-44	1 858 028	1 847 887	5381	6192	421	435	212	237
45-54	2 256 798	2 216 787	7271	8366	544	553	249	284
55-64	2 110 112	2 415 727	10 087	11 575	731	733	303	348

^a To facilitate comparisons with previous work, prescription drug spending was included in the denominator. Because data on drug rebates are not available,

the calculations reflect gross spending. If rebates increased faster than gross spending, the findings overstate the decline in primary care share.

Table 2. Utilization and Share of Total Health Care Spending Attributed to Primary Care

Individuals by Age Group, y	Share of Total Health Care Spending in 2017, US \$								Individuals With Primary Care Clinician Utilization			
	Broad Definition				Narrow Definition							
	2013, %	2017, %	Difference, % (95% CI)	P Value	2013, %	2017, %	Difference, % (95% CI)	P Value	2013, %	2017, %	Difference, % (95% CI)	P Value
Total	8.97	8.04	-0.93 (-0.95 to -0.91)	<.001	4.60	4.35	-0.25 (-0.27 to -0.23)	<.001	78.35	79.65	1.30 (1.27-1.34)	<.001
0-17 (Children)	20.33	19.54	-0.79 (-0.82 to -0.76)	<.001	13.68	12.51	-1.17 (-1.20 to -1.14)	<.001	89.99	90.71	0.72 (0.70-0.74)	<.001
18-24	8.69	8.48	-0.21 (-0.23 to -0.19)	<.001	4.55	4.52	-0.03 (-0.05 to -0.01)	.03	66.77	69.23	2.46 (2.42-2.50)	<.001
25-34	7.66	7.07	-0.59 (-0.61 to -0.19)	<.001	3.77	3.74	-0.03 (-0.05 to -0.01)	.001	65.82	67.27	1.45 (1.41-1.49)	<.001
35-44	7.82	7.02	-0.80 (-0.82 to -0.78)	<.001	3.94	3.82	-0.12 (-0.14 to -0.10)	<.001	72.89	73.95	1.06 (1.02-1.10)	<.001
45-54	7.47	6.61	-0.86 (-0.88 to -0.84)	<.001	3.43	3.40	-0.03 (-0.04 to -0.02)	<.001	77.48	79.11	1.63 (1.60-1.66)	<.001
55-64	7.25	6.33	-0.92 (-0.94 to -0.90)	<.001	3.00	3.01	0.01 (0.00 to 0.02)	.26	82.59	84.23	1.64 (1.61-1.67)	<.001

to \$538 among 11 608 038 individuals in 2017 (Table 1), but declined as a share of total spending from 8.97% to 8.04% (difference, -0.93% [95% CI, -0.95% to -0.91%]; $P < .001$) (Table 2). Mean total spending increased from \$5701 to \$6688. Children had the highest primary care spending as a share of their total health care spending, with 20.33% in 2013 and 19.54% in 2017 ($P < .001$), and individuals aged 55 to 64 years had the lowest, with 7.25% in 2013 and 6.33% in 2017 ($P < .001$).

Under the narrow definition, the primary care spending share declined from 4.60% to 4.35% (difference, -0.25% [95% CI, -0.27% to -0.23%]; $P < .001$). This decline was accounted for by children, for whom the share decreased from 13.68% to 12.51% ($P < .001$). The primary care spending share under this definition did not change substantially for any other age group. The share of individuals utilizing a PCC increased from 78.35% in 2013 to 79.65% in 2017 (difference, 1.30% [95% CI, 1.27%-1.34%]; $P < .001$) and varied across age groups (Table 2).

Discussion | From 2013 to 2017, the share of total spending attributed to primary care declined among individuals covered by employer-sponsored insurance despite an increase in PCC utilization and spending on primary care because total spending grew more quickly. Primary care may be both a substitute for and complement to non-primary care services.³ As a substitute, primary care may decrease spending for specialty and inpatient care, where services are more expensive.⁴ As a complement, it may increase utilization of more expensive care because patients are referred to a broader network of clinicians.⁵ A better understanding of the relationship between primary care and specialty utilization and spending is needed.

The estimates of primary care spending share are higher than estimates among Medicare fee-for-service beneficiaries,¹ and fall between other estimates of individuals covered by employer-sponsored insurance using a convenience sample of insurers² and Medical Expenditure Panel data.⁶

Factors affecting primary care spending, such as patient and PCC demographics and insurance plan benefit design, were not studied. The data may not be representative of the entire employer-sponsored insurance population.

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Hepatitis C Virus Antibody Testing Among 13- to 21-Year-Olds in a Large Sample of US Federally Qualified Health Centers

Hepatitis C virus (HCV) incidence is increasing in the United States,¹ with most new transmissions occurring among people younger than 30 years who inject drugs.² Fifteen- to 24-year-olds represent an increasing proportion of reported chronic HCV infections, rising from 3.8% in 2009 to 9.1% in 2013-2016.¹ Although HCV testing and linkage to care are crucial steps toward eliminating HCV, to our knowledge no studies have specifically examined HCV testing practices among youths. Current guidance recommends HCV testing for children or adults with HCV risk,³ including anyone who has injected drugs, the most frequently identified risk factor.^{1,2} We sought to characterize HCV testing and the HCV care cascade among 13- to 21-year-olds accessing US federally qualified health centers (FQHCs), an important health care source for underserved communities.⁴

Methods | This study included individuals aged 13 to 21 years at study end who had 1 or more visits to an OCHIN (previously the Oregon Community Health Information Network)-affiliated FQHC from January 2012 to September 2017. OCHIN comprises a 57-FQHC (19 states) network sharing a common electronic health record. We excluded individuals with HCV diagnosed by an *International Classification of Diseases, Ninth Revision (ICD-9)* or *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10)* code before observed HCV testing.