

Letters

RESEARCH LETTER

HEALTH CARE POLICY AND LAW

Primary Care Spending in the United States, 2002-2016

Insufficient investment in primary care is one reason that the US health care system continues to underperform relative to the health systems in other high-income countries.¹ States and countries with greater access to primary care clinicians and more robust primary care services have better outcomes and lower costs.^{2,3} For this reason, Rhode Island and Oregon have mandated measurement and targeting of primary care expenditures, and other states are considering related legislation.^{2,4,5}

Despite consistent evidence of cost savings, variations in definitions of primary care make comparisons of spending difficult, both in the US and other countries. We used national US health care survey data to assess primary care expenditures relative to other sources of health care spending.

Methods | Using Medical Expenditure Panel Survey (MEPS) data from 2002 to 2016, we estimated total annual expenditure from an aggregate of 10 subcategories: inpatient, outpatient, office based, prescriptions, dental services, vision services, mental health, home health, emergency department, and other medical. We further divided outpatient and inpatient spending using clinician type and physician specialty. Primary care physicians were defined as physicians coded as practicing family medicine, general practice, geri-

atrics, general internal medicine, and general pediatrics. This study was exempt from institutional review board approval owing to use of publicly available, deidentified data. Data analysis used Stata, version 14.1 (StataCorp) and was performed from October 2018 through April 2019.

Results | Total annual health care expenditures in the US, based on MEPS data, increased from \$810 billion in 2002 to \$1617 billion in 2016 (Table). Inpatient expenses were the largest spending category; although these expenses increased, they became a smaller percentage of total expenses owing to more rapid increases in other categories, notably spending on prescriptions and subspecialist care. Prescription spending was the second largest category, increasing from 18.6% to 23.6% of total expenditures and accounting for 28.6% of the increased spending. Specialty care was the third largest category, accounting for 17.9% of the increase in spending.

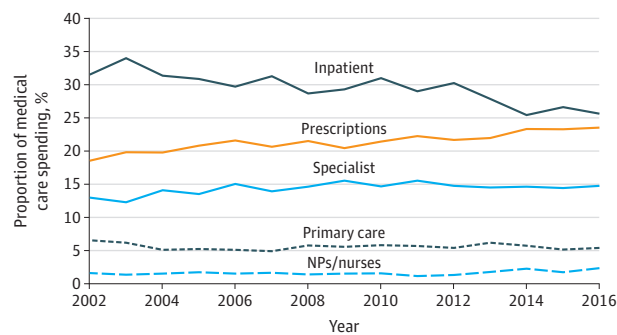
In contrast, primary care spending accounted for 6.5% of total expenditures in 2002 and 5.4% in 2016 (Table). As a proportion of total expenditures, primary care spending was similar throughout the study period (Figure). On average, office and outpatient visits to primary care physicians accounted for 6.6% of total health care expenditures from 2002 through 2016. Even when all nurse, nurse practitioner, and physician assistant expenditures were added to primary care spending—an overestimate given that a majority of this care is provided in specialty settings—there was no upward or downward trend (data not shown).

Table. Change in Medical Expenditures, 2002-2016^a

	Spending (billions), \$		% Of total		Difference, 2002 to 2016	
	2002	2016	2002	2016	Amount (billions), \$	% Of total
Overall spending						
Total	810.7	1617.5	100.0	100.0	806.8	100.0
Inpatient	256.1	415.0	31.6	25.7	159.0	19.7
Office based	180.0	400.0	22.2	24.7	219.9	27.3
Prescription	150.6	381.1	18.6	23.6	230.5	28.6
Outpatient	78.9	139.1	9.7	8.6	60.1	7.5
Dental	64.3	101.3	7.9	6.3	37.0	4.6
Home health	34.8	87.4	4.3	5.4	52.6	6.5
Emergency	27.9	62.5	3.4	3.9	34.7	4.3
Other	18.1	31.2	2.2	1.9	13.1	1.6
Office based and outpatient, by clinician type						
Subspecialist	122.3	266.4	15.1	16.5	144.1	17.9
Other nonphysicians	65.3	129.3	8.1	8.0	64.0	7.9
Primary care	53.1	87.1	6.5	5.4	34.0	4.2
RNs/NPs/PAs	14.4	45.8	1.8	2.8	31.4	3.9
Behavioral health	3.8	10.3	0.5	0.6	6.5	0.8

Abbreviations: NP, nurse practitioner; PA, physician assistant; RN, registered nurse.

^a Data from the Medical Expenditure Panel Survey, 2002-2016 (<https://www.meps.ahrq.gov/mepsweb/>).

Figure. Trends in Spending for Select Types of Medical Care^a

NP indicates nurse practitioner.

^a Data from the Medical Expenditure Panel Survey, 2002-2016 (<https://www.meps.ahrq.gov/mepsweb/>).

Discussion | Using MEPS data, we found that spending on inpatient services, specialty care, and prescriptions combined accounted for about two-thirds of the increase in total US health care expenditures from 2002 to 2016. In contrast, primary care accounted for 4.2% of the total increase in health care expenditures, while declining as a proportion of all expenditures. There are many reasons to increase investment in primary care, including its beneficial effects on quality of care, access to care, and mortality.⁶ Our results bring attention once again to the many opportunities in the US to increase spending on primary care.

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Study concept and design: Martin, Phillips, Petterson, Bazemore.

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