The General Public Vastly Overestimates Primary Care Spending in the United States

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ABSTRACT

This study assessed public perceptions of US primary care spending. An online survey was conducted using SurveyMonkey Audience (Symphony Technology Group), achieving a sample of 1,135 adult respondents reflective of the demographic distribution of the US adult population. Respondents' mean estimate of the percentage of US health care spending funding primary care was 51.8% (SD 24.8, interquartile range [IQR] 40). Respondents' mean estimate of the percentage of health care needs addressed by primary care was 58.7% (SD 22.2, IQR 28.5) These results reveal a tremendous disparity between current levels of primary care spending (4.7%) and public perceptions of primary care expenditure and value.

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INTRODUCTION

he United States has chronically underinvested in primary care. Despite its foundational importance to health outcomes, ^{1,2} with primary care accounting for only 4.7% of national health care expenditures.³ Several states have recently taken steps to address this issue by pursuing legislation to measure and increase primary care spending.^{4,5} Public support is crucial for enacting policies to increase primary care investment. Public understanding of primary care spending in the United States, however, remains poorly characterized. We conducted a novel survey to assess public perceptions of primary care expenditures.

METHODS

We contracted with SurveyMonkey (Symphony Technology Group) to administer an English-language online survey using SurveyMonkey Audience, a service that connects volunteers who receive survey invitations with researchers who seek a pool of survey respondents from the general public with characteristics matching study needs. SurveyMonkey Audience has been utilized in previous peer-reviewed studies to assess perspectives of survey respondents selected to fit study criteria. ^{6,7} We requested a target sample of 1,000 respondents, aged ≥18 years, residing in the United States, sampled to reflect the demographic distribution of the US adult population and to minimize duplicate respondents or contamination by bots. The demographic distribution of respondents was compared with US census data to verify sample demographics were reasonably aligned (Table 1). The survey was conducted in June 2024.

Survey items were designed to replicate a public opinion survey conducted in Australia,⁹ with questions preceded by a definition of primary care. Respondents were asked to estimate the percentage of Americans' total health care needs addressed by primary care, to estimate the percentage of total US health care spending funding primary care, and to rate the importance of primary care to the overall functioning of health care (1-10 Likert scale anchored at "not important" and "very important"). Descriptive analyses were conducted in Excel (Microsoft Corporation). The study protocol was reviewed by the Virginia Commonwealth University IRB and determined to be exempt.

RESULTS

The characteristics of our 1,135 survey respondents are shown in <u>Table 1</u>. Respondents estimated that primary care addresses 58.7% (95% CI, 57.4% to 59.9%; SD





Table 1. Characteristics of Survey Respondents
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Characteristics	Respondents No. (%) (n = 1,135)	US Census Data (%) ^{a,}
Sex		
Male	511 (45.0)	49.0
Female	607 (53.5)	51.0
Unknown	17 (1.5)	
Age, y		
18-29	218 (19.2)	21.6
30-44	292 (25.7)	25.4
45-60	325 (28.6)	23.0
≥ 60	283 (24.9)	30.0
Unknown	17 (1.5)	
Major geographic region	, ,	
Northeast	276 (24.3)	17.0
Midwest	190 (16.7)	20.6
West	240 (21.1)	23.6
South	386 (34.0)	38.9
Unknown	43 (3.8)	
Household income, USD		
0-24,999	192 (16.9)	14.1
25,000- 49,999	219 (19.3)	17.2
50,000- 74,999	174 (15.3)	15.7
75,000-99,999	144 (12.7)	12.1
100,000-149,999	190 (16.7)	17.0
150,000 and up	138 (12.2)	23.9
Unknown	78 (6.9)	
Self-identified race		
American Indian/Indigenous or Alaska Native	28 (2.5)	2.1
Asian	132 (11.6)	7.3
Black or African American	84 (7.4)	14.6
Native Hawaiian or Pacific Islander	9 (0.8)	0.5
White	789 (69.5)	75.5
Other	36 (3.2)	
Unknown	57 (5.0)	
Hispanic or Latinx		
Yes	203 (17.9)	19.5
No	895 (78.9)	80.5
Unknown	37 (3.3)	
Education level ^b		
Some high school	36 (3.2)	7.4
High school degree	247 (21.8)	35.9
Associate degree	128 (11.3)	7.2
Bachelor's degree	351 (30.9)	27.9
Graduate or professional degree	272 (24.0)	16.3
Trade school/technical college degree	56 (4.9)	5.3
Other	28 (2.5)	
Unknown	17 (1.5)	

US = United States; USD = United States dollars

22.2; interguartile range [IQR] 28.5) of US health care needs. The mean estimated percentage of health care spending allocated to primary care was 51.8% (95% CI, 50.3% to 53.2%; SD 24.8; IQR 40), with a median estimate of 50% (Figure 1). The mean rating of the importance of primary care to overall health care function was 8.0 (95% CI, 7.8 to 8.1; SD 2.1; IQR 3).

DISCUSSION

Our findings reveal a significant discrepancy between public perception and actual allocation of health care expenditures to primary care. On average, respondents overestimated spending by more than 10-fold compared with current estimates of actual primary care spending (4.7%).3 Although IQR for estimated primary care expenditure demonstrated some variation in responses, the first quartile estimate of 31% still greatly overestimates primary care spending. Respondents indicated that primary care is very important to US health care, and respondents' mean estimates that about one-half of all health care needs are addressed by primary care were very close to actual primary care utilization as a percentage of all ambulatory physician visits in the United States (50.3%).¹⁰ These results highlight the stark disparity between current levels of primary care investment and the public's perception of primary care importance, utility, and expenditure. A survey in Australia also found the public overestimated primary care spending, though to a lower degree.9

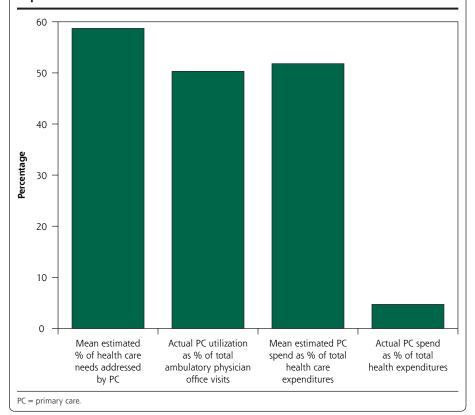
A study limitation is the potential non-representativeness of the sample. Although individuals volunteering for Survey-Monkey Audience likely differ from the general population on unmeasured characteristics such as health and digital literacy, the demographic characteristics of respondents closely mirrored the US adult population. Our results for public views on needs addressed by primary care and its importance are similar to findings from published public surveys in the United States and Australia, suggesting our sample did not disproportionately include individuals with an exceptionally favorable perception of primary care that might bias perception of spending. Although the survey included a definition of primary care, public understanding may differ from definitions used by researchers measuring primary care spending; respondents may count services in their estimates that are not part of conventional definitions. Additionally, our survey did not include qualitative methods. Future studies would benefit from a mixed methods approach to explore how respondents formulate their estimates.

While acknowledging a degree of imprecision in our results, we believe it is reasonable to conclude the public believes that the nation invests a substantially greater share of the health care budget in primary care than is the actual case. Yet in contrast to the public's high regard for primary care and commensurate expectations of primary care expenditure, primary care access, utilization, and spending have been decreasing nationally.3 Chronic underinvestment in primary care has resulted in workforce shortages, physician

^aAll categories derived from 2023 US Census data, except education level

bEducation level derived from 2022 US Census data

Figure 1. Comparison of the Public's Estimated Health Care Needs Addressed by Primary Care and Estimated PC Spend vs Actual PC Utilization and Expenditure in the United States



burnout, reduced access, and suboptimal care.² Access to high-quality primary care has been associated with better population health and more equitable outcomes, and The National Academies of Sciences, Engineering, and Medicine's Committee on Implementing High-Quality Primary Care has described primary care services as a common good, calling for greater investment in primary care.² A growing number of states have taken steps to achieve this by enacting legislation and implementing regulations to increase primary care spending, indicating political will to rebalance health care spending priorities.⁵ The substantial overestimation of primary care spending by the public highlights the need for increased patient and public engagement and education to rally additional state and national support

for policy change that affirms the essential role of primary care in the health care system.

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Key words: primary health care; health expenditures; health care reform; health policy

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References

- Stange KC, Miller WL, Etz RS. The role of primary care in improving population health. *Milbank Q*. 2023;101(S1):795-840. doi:10.1111/1468-0009. 12638
- National Academies of Sciences, Engineering, and Medicine (NASEM). Implementing High-Quality Primary Care. The National Academies Press; 2021. doi:10.17226/25983
- 3. Jabbarpour Y, Jetty A, Petterson S, et al. The health of US primary care: 2024 scorecard report no one can see you now. The Milbank Memorial Fund and The Physicians Foundation. Published Feb 28, 2024. https://www.milbank.org/publications/the-health-of-us-primary-care-2024-scorecard-report-no-one-can-see-you-now/
- Cohen DJ, Totten AM, Phillips RL Jr, Jabbarpour Y, DeVoe J. Measuring primary care spending in the US by state. JAMA Health Forum. 2024;5(5):e240 913. doi:10.1001/jamahealthforum.2024.0913
- State Primary Care Investment Initiatives. Primary care collaborative. Accessed Jul 2, 2024. https://thepcc.org/policy/state-investment-hub/state-initiatives/
- Youn B-Y, Moon S, Mok K, et al. Use of traditional, complementary and alternative medicine in nine countries: a cross-sectional multinational survey. Complement Ther Med. 2022;71:102889. doi:10.1016/j.ctim.2022.102889
- Patel SJ, Truong S, DeAndrade S, et al. Respectful maternity care in the United States—characterizing inequities experienced by birthing people. Matern Child Health J. 2024;28(7):1133-1147. doi:10.1007/s10995-023-03893-0
- 8. US Census Bureau. Tables and maps. Census.gov. Accessed Oct 30, 2024. https://www.census.gov/data.html
- Meldrum H, Wright M, Versteeg R. Public perceptions of general practice and the allocation of funds. Aust J Gen Pract. 2023;52(4):169-170. https://hdl.net/10453/174418
- Santo L, Kang K. National ambulatory medical care survey: 2019 national summary tables. Published Jan 20, 2023. doi:10.15620/cdc:123251