# Access to Primary and Dental Care Among Adults Newly Enrolled in Medicaid

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ecent expansions in Medicaid have renewed policy debates on how to improve access to primary and dental care among low-income populations. Access to primary care is essential because it provides an entry point to other forms of healthcare, delivers preventive services, and treats chronic diseases. Better primary care access is also associated with improved health outcomes at a lower cost, including reductions in heart disease and cancer mortality.<sup>1,2</sup> Better dental care access is associated with lower rates of dental caries,<sup>3,4</sup> diabetes,<sup>5</sup> heart disease,<sup>6</sup> and low-value emergency department utilization.<sup>7</sup> Low-income populations in particular experience more access barriers to these 2 types of care than other populations.<sup>8,10</sup>

The Affordable Care Act (ACA) expanded coverage for primary and dental care services for low-income populations. As of 2016, when this study was conducted, 31 states and the District of Columbia had expanded Medicaid through the ACA, and 23 states included preventive dental service coverage for adults.<sup>11,12</sup> However, in states that have expanded coverage, newly insured Medicaid enrollees still face access barriers. The ACA Medicaid expansion focused on addressing affordability<sup>13-16</sup>; however, health reforms have not equally prioritized provider availability<sup>17,18</sup> and accessibility.<sup>18,19</sup>

The relationship between provider supply and the identification of a usual source of care among low-income populations for both primary and dental care is poorly understood. Therefore, the objective of this study was to examine the association between the supply of nearby Medicaid-accepting primary and dental care providers and the likelihood of identifying a usual source of care among newly enrolled Medicaid beneficiaries in an urban environment. Prior to our study, Pennsylvania began administering Medicaid to all of its expansion population through managed care organizations. In addition to covering primary care visits, these plans covered a limited set of dental visits for preventive, diagnostic, and minor restorative needs up to \$1000.<sup>20,21</sup> The population sampled resides in Philadelphia, a racially diverse city with a high density of providers and the fifth-largest population, but also the highest poverty rate among the 10 largest cities in the United States.<sup>22</sup>

#### ABSTRACT

**OBJECTIVES:** Adequate access to primary and dental care is essential for population health, and some state Medicaid programs have expanded insurance coverage for both. However, there are few data on new Medicaid enrollees' ability to access services. We examined the relationship between provider supply and enrollees' identification of usual sources of care.

**STUDY DESIGN:** Between November 2015 and February 2016, we surveyed low-income adults newly insured through Medicaid in Philadelphia, Pennsylvania, to determine if they had a usual source of care. Additionally, we used geospatial methods to calculate adult population per provider ratios by Census tract for primary and dental care providers who accepted Medicaid patients, then identified low-supply clusters.

**METHODS:** We used multivariable logistic regression models to describe the odds of identifying usual sources of care based on being in low- or high-supply clusters, adjusting for patient demographics.

**RESULTS:** Of 1000 contacted individuals, 312 completed the survey. Among respondents, 168 were previously uninsured and newly enrolled in Medicaid; 66.7% of this group identified a usual primary care provider and 42.3% identified a usual dental care provider. In adjusted analyses, individuals living in low- and high-supply areas had similar likelihoods of identifying a usual source of primary or dental care.

**CONCLUSIONS:** Many new Medicaid enrollees did not have usual sources of primary or dental care, regardless of nearby provider supply. Efforts to understand what improves access or engagement in healthcare among Medicaid enrollees are critical after low-income adults gain insurance.

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#### TAKEAWAY POINTS

- > Even after low-income adults gained insurance, barriers to accessing care persisted.
- Nearby provider supply did not affect identification of usual sources of primary or dental care among new Medicaid enrollees.
- Further efforts to understand what improves access or engagement in healthcare among Medicaid enrollees are critical.

# STUDY DATA AND METHODS

The University of Pennsylvania Institutional Review Board approved this study.

#### **Study Sample**

We surveyed new Medicaid enrollees between November 2015 and February 2016. We identified Medicaid applicants through a partnership with Benefits Data Trust (BDT), a Philadelphia-based nonprofit organization that facilitates access to comprehensive public benefits and provides Medicaid application assistance. We randomly selected 1000 individuals to participate in a mailed survey if they received assistance from BDT within the year prior to November 2015, were aged 18 to 64 years, were able to read English, and had a Philadelphia mailing address. We excluded individuals who had not yet enrolled in Medicaid or had insurance before enrolling to focus on responses from newly insured adults. Individuals first received a letter informing them of the upcoming survey. One week later, we mailed the survey, consent information, a prepaid return envelope, and a \$2 cash participation incentive. Nonrespondents received up to 2 additional reminders, then were called by phone to complete the survey. Respondents received an additional \$10 gift card.

We developed the survey assessing usual sources of care based on questions used by the Agency for Healthcare and Research and Quality<sup>23</sup> and our own pilot testing (see **eAppendix** [available at ajmc.com]). Specifically, the primary care question asked, "Is there a particular doctor's office, clinic, health center, or other place that you usually go if you are sick or need advice about your health?" The dental care question asked, "A regular dentist is the one you would go to for check-ups and cleanings or when you have a cavity or tooth pain. Do you have a regular dentist or dental clinic?" The survey confirmed whether respondents had ultimately enrolled in Medicaid and captured demographic and self-reported health measures. We geocoded survey respondent addresses using ArcGIS 10.3 (Environmental Systems Research Institute; Redlands, California) to identify their Census tract (a close approximation to neighborhoods in Philadelphia), which is more relevant than larger geographic areas, such as zip code, for policy makers and planners in dense urban environments.17

#### **Primary Care and Dental Practice Database**

We constructed a database of Medicaid-participating primary and dental care providers in and around Philadelphia. We aggregated

providers within office locations for the purposes of geospatial analyses. Primary care providers included physicians, nurse practitioners, and physician assistants. As described in a prior study,<sup>17</sup> we used SK&A (2014), a proprietary database, to identify all primary care providers in and near Philadelphia participating in Medicaid. We supplemented this database with provider directories from

the Philadelphia-based Medicaid plans and public lists of federally qualified health centers. Practices were contacted by phone to verify their address, the number of practicing clinicians, and each clinician's full-time equivalent (FTE) workload to calculate an aggregate FTE for each office. Dental care providers consisted of general practice dentists who treated adults. We utilized the 2014 American Dental Association masterfile as the initial file and supplemented it with the National Provider Identifier dentist registry and the Medicaid provider file from Pennsylvania's Department of Human Services. We defined the number of dental FTEs in a dental office based on the number of offices for which a dentist works.<sup>24</sup>

#### Census Tract Primary Care and Dental Care Provider Supply

Using the practice file described previously and population density data from the American Community Survey, we calculated a Medicaid adult population per provider ratio for each Census tract using the 2-step floating catchment area (2SFCA) method to estimate the ratio of Medicaid-enrolled adults per Medicaid-participating provider based on a 5-minute travel time. The 2SFCA method accounts for the providers in and around Philadelphia-based Census tracts and the population around a provider office.<sup>24</sup> In addition, the 2SFCA method helps account for the modifiable areal unit problem, or the error introduced into spatial analyses by drawing unit borders and by aggregating units.<sup>25</sup> We used ArcGIS 10.3 to account for traffic history and street restrictions in order to accurately measure travel times.

We defined low-provider areas as those with 5 or more contiguous Census tracts in the lowest quintile of supply—the population per provider ratio within a 5-minute travel time of a Census tract.<sup>17</sup> Our goal was to identify geographic clusters with lower supply (as opposed to isolated Census tracts that may be adjacent to higher supply areas) to more accurately reflect experiences of patients seeking usual sources of care within and outside of their neighborhood. We utilized a relative instead of absolute measure of supply because there is no agreed-upon definition of the ideal adult population per provider ratio in urban areas for either primary or dental care.

#### Data Analyses

For all analyses, we evaluated primary and dental care access separately. We assessed whether living in a low-provider supply area for primary or dental care was associated with having a usual source of primary or dental care, respectively. We used multivariable logistic regression models clustered at the level of Census

TABLE	<ol> <li>Characteristics</li> </ol>	of Survey	Responden
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	,	Usual Primary Care			Usual Dental Care			
	<b>Overall</b> <sup>a</sup>	No	Yes		No	Yes		
	(N = 168)	(n = 34)	(n = 112)	<b>P</b> <sup>b</sup>	(n = 84)	(n = 71)	P	
Age in years, n (%)				.10			.47	
18-44	54 (32.1)	16 (47.1)	30 (26.8)		24 (28.6)	27 (38.0)		
45-64	112 (66.7)	18 (52.9)	80 (71.4)		59 (70.2)	43 (60.6)		
≥65	2 (1.2)	0 (0.0)	2 (1.8)		1 (1.2)	1 (1.4)		
Female, n (%)	101 (60.1)	18 (52.9)	72 (64.3)	.23	46 (54.8)	48 (67.6)	.10	
Race, n (%)				.36			.30	
White	36 (21.4)	11 (32.4)	23 (20.5)		21 (25.0)	13 (18.3)		
African American	110 (65.5)	20 (58.8)	74 (66.1)		54 (64.3)	46 (64.8)		
Other or mixed	21 (12.5)	3 (8.8)	14 (12.5)		8 (9.5)	12 (16.9)		
Ethnicity, n (%)				.38			.61	
Hispanic	18 (10.7)	5 (14.7)	10 (8.9)		10 (11.9)	7 (9.9)		
Non-Hispanic	145 (86.3)	29 (85.3)	97 (86.6)		70 (83.3)	64 (90.1)		
Education level, n (%)				.88			.55	
High school or less	100 (59.5)	20 (58.8)	64 (57.1)		50 (59.5)	39 (54.9)		
At least some college	52 (31.0)	12 (35.3)	36 (32.1)		26 (31.0)	25 (35.2)		
Employment, n (%)				.05			.63	
Employed (full time or part time)	59 (35.1)	11 (32.4)	39 (34.8)		29 (34.5)	25 (35.2)		
Unemployed or laid off	51 (30.4)	15 (44.1)	27 (24.1)		28 (33.3)	19 (26.8)		
Other	58 (34.5)	8 (23.5)	46 (41.1)		27 (32.1)	27 (38.0)		
Self-reported health, n (%)				.56			.001	
Good, very good, or excellent	131 (78.0)	28 (82.4)	87 (77.7)		56 (66.7)	63 (88.7)		
Fair or poor	37 (22.0)	6 (17.6)	25 (22.3)		28 (33.3)	8 (11.3)		

Survey respondents' characteristics are based on the 168 individuals who indicated they were previously uninsured and confirmed they had enrolled in Medicaid.

<sup>b</sup>Tests of statistical significance compared those who had a usual source of care versus not for both primary and dental care. Fisher's exact or  $\chi^2$  tests were used for all tests comparing proportions.

tracts adjusting for age, gender, race/ethnicity, self-rated health, educational attainment, and employment status. In an additional analysis, we used the aforementioned models but changed the exposure of primary care and dental care supply to continuous measures of adult population per provider ratios. As a sensitivity analysis, we used 10-minute travel times to define supply. A 2-sided P <.05 was considered statistically significant. All analyses were carried out using Stata version 14.0 (StataCorp, LLP; College Station, Texas).

## RESULTS

Of 1000 contacted individuals, 312 completed the survey. Among respondents, 168 reported being enrolled in Medicaid and were previously uninsured. These individuals (Table 1) were predominantly female (60.1%), 45 years or older (67.9%), African American (65.5%), and non-Hispanic (86.3%). A total of 59.5% had a high school education or less, and few (35.1%) were employed full time or part time. The majority (78.0%) reported having good to excellent health.

Within the study cohort, 112 of 168 (66.7%) had a usual source of primary care and 71 of 168 (42.3%) had a usual source of dental care. Those with a usual source of primary and dental care did not differ significantly from those without a usual source based on their sociodemographic characteristics. However, those with a usual

source of dental care were more likely to have better self-reported health (excellent, very good, good) compared with respondents without a usual source of dental care (63/71 [88.7%] vs 56/84 [66.7%], respectively; P = .001). For primary care, there were no significant differences in self-reported health (P = .56).

Table 2 shows the unadjusted and adjusted associations between the supply of providers for respondents' Census tracts and respondents' identification of a usual source of primary and dental care. Individuals living in lower-supply areas were as likely to identify a usual source of primary or dental care as those living in highersupply areas. These findings were no different when supply was modeled as a continuous variable (adult population per provider ratio) or when using 10-minute travel times.

# DISCUSSION

In this study of new Medicaid beneficiaries from Philadelphia, we report 3 key findings. First, only 66.7% of our respondents identified a usual source of primary care, whereas nationally 78% did in 2016.<sup>26</sup> Second, only 42.3% identified a usual source of dental care, whereas nationally 64% did during a comparable time period. Third, the supply of nearby providers was not associated with a higher or lower likelihood of identifying a usual source of primary or dental care.

The high percentage of individuals without a usual source of primary or dental care could be due to lack of perceived need, difficulty finding a provider who accepts new Medicaid patients,<sup>27</sup> costs not covered by insurance (eg, missed work to attend appointments), or lack of knowledge about the healthcare system.<sup>28</sup> Although we hypothesized that individuals living in lower-supply areas would be less likely to find a source of care, Philadelphia is a uniquely high-supply market, potentially affecting our findings and limiting generalizability. For example, the Philadelphia hospital referral region has 87.5 primary care physicians per 100,000 residents compared with the national median of 73.5, and it is near the 90th percentile for physicians overall.<sup>29</sup> Second, beneficiaries may seek sources of care that are not necessarily near their home,<sup>30</sup> basing their decisions on convenience in relation to shopping centers, workplaces, or public transportation networks. Finally, the point

#### TRENDS FROM THE FIELD

**TABLE 2.** Association of Provider Supply and Establishing a Usual Source of Primary and

 Dental Care

	Unadjusted Results			Adjusted Results <sup>b</sup>				
Measurements of Access <sup>a</sup>	Usual Source of Care	P	95% CI	Usual Source of Care	Р	95% CI		
	Pri	mary Ca	ire					
Lives in low provider supply area	(5-minute d	rive tim	e)					
No	Ref	-	-	Ref	-	-		
Yes	0.85	0.77	0.27-2.63	0.71	0.62	0.18-2.77		
Lives in low provider supply area	(10-minute	drive tin	ne)					
No	Ref	-	-	Ref	-	-		
Yes	0.54	0.18	0.22-1.32	0.44	0.14	0.15-1.30		
Continuous measure of access (p	opulation p	er provid	ler ratio)					
5-minute drive time	1.00	0.96	1.00-1.00	1.00	0.70	1.00-1.00		
10-minute drive time	1.00	0.83	1.00-1.00	1.00	0.67	0.99-1.00		
Dental Care								
Lives in low provider supply area	(5-minute d	rive tim	e)					
No	Ref	-	-	Ref	-	-		
Yes	0.52	0.19	0.20-1.39	0.41	0.11	0.14-1.21		
Lives in low provider supply area (10-minute drive time)								
No	Ref	-	-	Ref	-	-		
Yes	0.76	0.50	0.34-1.69	0.58	0.20	0.25-1.35		
Continuous measure of access (population per provider ratio)								
5-minute drive time	1.00	0.63	1.00-1.00	1.00	0.87	1.00-1.00		
10-minute drive time	1.00	0.29	1.00-1.00	1.00	0.08	1.00-1.00		

Ref indicates reference.

<sup>a</sup>Levels of access were determined based on the ratio of Medicaid-enrolled adults per Medicaidparticipating provider [adult population per provider ratio] within a 5- or 10-minute drive time using the 2-step floating catchment area method and accounted for traffic history and street restrictions in order to accurately measure travel times. We defined low provider supply areas as those with 5 or more contiguous Census tracts in the lowest quintile of population per provider ratio within a 5- or 10-minute travel time of a Census tract.

<sup>b</sup>All adjusted results were calculated using multivariable logistic regression models with having a usual source of care as the outcome of interest and accounted for age, gender, race, ethnicity, educational attainment, employment status, and self-rated health of the respondents newly enrolled in Medicaid.

estimates from our model suggest that a relationship between supply and having a usual source of care may exist and is worth exploring in larger data sets across multiple cities.

#### Limitations

Our study should be interpreted in the context of several limitations. First, given the observational nature of our study, our results are measures of association, not causation. Second, our supply measure does not utilize detailed accounts of provider effort, productivity, services offered, or acceptance of new Medicaid patients. Similarly, our demand measure (population counts) does not consider factors such as health status and healthcare-seeking preferences. Third, our approach assumes that most people prefer to obtain primary care or dental care near their home. The optimal distance to primary or dental care in urban areas is not known and may vary based on individual preference or travel patterns. Fourth, our study population was identified through a benefits outreach

organization in a single urban area and may not be representative of all Medicaid enrollees in Philadelphia or other urban environments. Fifth, we were unable to determine which of 4 Medicaid managed care plans patients were enrolled in. Variations in plan types could lead to plan-level differences in provider availability, Census tract differences in plan-specific network adequacy standards, and different likelihoods of identifying a usual source of care. As a result, we may have overestimated access to care because not all nearby providers will participate in all Medicaid managed care plans. In addition, some individuals may have been assigned a provider by their insurance plan but may not have actually established a provider-patient relationship. Sixth, our generalizability is limited because we do not know the addresses or demographics of nonrespondents and cannot compare them with respondents. Finally, the modest response rate could lead to nonresponse bias. However, our response rate (31%) is an improvement compared with recent surveys of Medicaid patients, who are historically difficult to contact.31

# CONCLUSIONS

Although we did not observe a relationship between nearby provider supply and the identification of a usual source of primary or dental care, there are several key issues moving forward. This relationship should be evaluated in other geographic areas (urban and

rural) and in those with low provider supply. These evaluations may help determine whether characterizing access in terms of a population to provider ratio—a measure commonly used by policy makers and researchers—is useful.<sup>32</sup> Our results ultimately suggest that policy makers and insurance plan managers should better understand what improves access or engagement in healthcare among Medicaid enrollees so that gains in insurance coverage can be translated into gains in health.

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## REFERENCES

1. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank 0.* 2005;83(3):457-502. doi: 10.1111/j.1468-0009.2005.00409.x.

2. Shi L, Macinko J, Starfield B, Politzer R, Wulu J, Xu J. Primary care, social inequalities, and all-cause, heart disease, and cancer mortality in US counties, 1990. *Am J Public Health*. 2005;95(4):674-680. doi: 10.2105/AJPH.2003.031716. 3. Kronenfeld J. Access to dental care: a comparison of medicine/dentistry and the role of a regular source. *Med Care*. 1979-17(110):1001-1111

A. Institute of Medicine; National Research Council. Improving Access to Oral Health Care for Vulnerable and Underserved Populations. Washington, DC: The National Academies Press; 2011.

5. Chávary NG, Vettore MV, Sansone C, Sheiham A. The relationship between diabetes mellitus and destructive periodontal disease: a meta-analysis. *Oral Health Prev Dent.* 2009;7(2):107-127.

6. Offenbacher S, Beck JD, Moss K, et al. Results from the Periodontitis and Vascular Events (PAVE) Study: a pilot multicentered, randomized, controlled trial to study effects of periodontal therapy in a secondary prevention model of cardiovascular disease. *J Periodontol.* 2009;80(2):190-201. doi: 10.1902/jop.2009.080007. 7. Cohen LA, Bonito AJ, Eicheldinger C, et al. Comparison of patient visits to emergency departments, physician offices, and dental offices for dental problems and injuries. *J Public Health Dent.* 2011;71(1):13-22. doi: 10.1111/j.1752-7325.2010.00195.x.

8. Shoen C, Radley DC, Riley P, et al. Health care in the two Americas: findings from the Scorecard on State Health System Performance for Low-Income Populations, 2013. The Commonwealth Fund website. commonwealthfund.org/publications/fund-reports/2013/sep/health-care-two-americas-findings-scorecard-

state-health-system. Published September 18, 2013. Accessed August 2, 2018. 9. HHS. *Oral Health in America: A Report of the Surgeon General*. Rockville, MD: HHS, National Institute of Dental

and Craniofacial Research, National Institutes of Health; 200.

10. Dzau VJ, McClellan MB, McGinnis JM, et al. Vital directions for health and health care: priorities from a National Academy of Medicine initiative. *JAMA*. 2017;317(14):1461-1470. doi: 10.1001/jama.2017.1964.

11. Hinton E, Paradise J. Access to dental care in Medicaid: spotlight on nonelderly adults. Kaiser Family Foundation website. kff.org/medicaid/issue-brief/access-to-dental-care-in-medicaid-spotlight-on-nonelderlyadults. Published March 17, 2016. Accessed September 7, 2017.

12. Medicaid expansion enrollment. Kaiser Family Foundation website. kff.org/health-reform/state-indicator/ medicaid-expansion-enrollment/?currentTimeframe=0&sortModel=%7B%22colld%22:%22Location%22,%22 sort%22:%22asc%22%7D. Published 2016. Accessed August 30, 2017.

 Sommers BD, Blendon RJ, Orav EJ, Epstein AM. Changes in utilization and health among low-income adults after Medicaid expansion or expanded private insurance. *JAMA Intern Med.* 2016;176(10):1501-1509. doi: 10.1001/jamainternmed.2016.4419.

14. Marino M, Bailey SR, Gold R, et al. Receipt of preventive services after Oregon's randomized Medicaid experiment. *Am J Prev Med.* 2016;50(2):161-170. doi: 10.1016/j.amepre.2015.07.032.

 Nasseh K, Vujicic M. Early impact of the Affordable Care Act's Medicaid expansion on dental care use. Health Serv Res. 2017;52(6):2256-2268. doi: 10.1111/1475-6773.12606.

 Vujicic M, Buchmueller T, Klein R. Dental care presents the highest level of financial barriers, compared to other types of health care services. *Health Aff (Millwood)*. 2016;35(12):2176-2182. doi: 10.1377/hlthaff.2016.0800.
 Brown EJ, Polsky D, Barbu CM, Seymour JW, Grande D. Racial disparities in geographic access to primary care in Philadelphia. *Health Aff (Millwood)*. 2016;35(8):1374-1381. doi: 10.1377/hlthaff.2015.1612.
 Penchansky R, Thomas JW. The concept of access: definition and relationship to consumer satisfaction. *Med Care*. 1981;19(2):127-140.

19. Caldwell JT, Ford CL, Wallace SP, Wang MC, Takahashi LM. Intersection of living in a rural versus urban area and race/ethnicity in explaining access to health care in the United States. *Am J Public Health*. 2016;106(8):1463-1469. doi: 10.2105/AJPH.2016.303212.

 Medicaid expansion report. Pennsylvania Department of Human Services website. dhs.pa.gov/cs/groups/ webcontent/documents/document/c\_257436.pdf. Published January 27, 2017. Accessed December 3, 2018.
 Medicaid adult dental benefits: an overview. Center for Health Care Strategies, Inc. website. ches.org/ media/Adult-Oral-Health-Fact-Sheet\_Ol11618.pdf. Published January 2018. Accessed December 3, 2018.
 Philadelphia Department of Public Health. Community health assessment. City of Philadelphia website. phila.gov/media/20181105154446/CHAreport\_52114\_final.pdf. Published May 2014. Accessed February 6, 2019.
 MEPS topics: access to health care. Agency for Healthcare Research and Quality website. meps.ahrq.gov/ mepsweb/data\_stats/MEPS\_topics.jsp?topicid=12-1. Published 2013. Accessed January 4, 2016.
 Nasseh K, Eisenberg Y, Vujicic M. Geographic access to dental care varies in Missouri and Wisconsin. J Public Health Dent. 2017.77(3):197-206. doi: 10.1111/jphd.12197.

Fotheringham AS, Wong DWS. The modifiable areal unit problem in multivariate statistical analysis. *Environ Plan A.* 1991;23(7):1025-1044. doi: 10.1068/a231025.

National Center for Health Statistics. *Health, United States, 2016: With Chartbook on Long-term Trends in Health.* Hyattsville, MD: CDC; 2017. cdc.gov/nchs/data/hus/hus16.pdf. Accessed February 6, 2019.
 Polsky D, Candon M, Saloner B, et al. Changes in primary care access between 2012 and 2016 for new patients with Medicaid and private coverage. *JAMA Intern Med.* 2017;177(4):588-590. doi: 10.1001/jamainternmed.2016.9662.
 Kangovi S, Barg FK, Carter T, Long JA, Shannon R, Grande D. Understanding why patients of low socioeconomic status prefer hospitals over ambulatory care. *Health Aff (Milwood).* 2013;32(7):1196-1203. doi: 10.1377/htthaff.2012.0825.

29. The Dartmouth Atlas website. dartmouthatlas.org. Accessed January 12, 2018.

30. Victoor A, Delnoij DM, Friele RD, Rademakers JJ, Determinants of patient choice of healthcare providers: a scoping review. *BMC Health Serv Res.* 2012;12:272. doi: 10.1186/1472-6963-12-272.

 Barnett ML, Sommers BD. A national survey of Medicaid beneficiaries' expenses and satisfaction with health care [erratum in JAMA Intern Med. 2017;177(9):1399]. JAMA Intern Med. 2017;177(9):1378-1381. doi: 10.1001/jamainternmed.2017.3174.

32. Gudbranson E, Glickman A, Emanuel EJ. Reassessing the data on whether a physician shortage exists. JAMA. 2017;317(19):1945-1946. doi: 10.1001/jama.2017.2609.

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# **Pennsylvania Health Insurance Survey**

Mark the best answers with a  $\boxtimes$  or  $\boxtimes$ . Please complete all the questions that you can. It is okay to take breaks. You do not need to complete the survey in one sitting. Please return it even if you are unable to answer all the questions.

You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

 $\square Yes$  $\square No \rightarrow If No, go to #1$ 

#### About BenePhilly and You

**1. BenePhilly** is the organization that submitted your insurance application over the phone last time. How likely are you to apply for benefits through BenePhilly again?

- □ Very likely
- □ Likely
- □ Neither likely nor unlikely
- □ Unlikely
- □ Very unlikely

2. How would you rate your overall experience applying for benefits through BenePhilly?

- □ Excellent
- □ Very good
- $\Box$  Good
- □ Fair
- D Poor

3. How likely are you to recommend BenePhilly to a friend or relative who is in need of benefits?

- □ Very likely
- □ Likely
- □ Neither likely nor unlikely
- □ Unlikely
- $\Box$  Very unlikely
- 4. In general, how would you rate your health?
  - □ Excellent
  - □ Very good
  - $\Box$  Good
  - □ Fair
  - □ Poor

#### **MEDICAL Clinic Location**

**5.** Is there a particular doctor's office, clinic, health center, or other place that you usually go if you are sick or need advice about your health?

#### $\Box \text{ No} \rightarrow \text{ if No, go to #6}$

□ Yes

5a. What is the name of the clinic or medical office where you usually get your care? (Please print):

5b. What is the address of the clinic or medical office where you usually get your care? (if you do not

remember, write the name of a nearby intersection or cross-street) (Please print)

**5c.** How do you usually **get** to the clinic or medical office where you usually get your medical care? **(CHECK ALL THAT APPLY)** 

- □ Bus, SEPTA, train, or other public transportation
- $\Box$  Drive myself
- □ A shared van service like LogistiCare or Paratransit
- Driven by someone else (including family, friends or a taxi)
- □ Walk
- $\Box$  Some other way

**5d.** How **long** does it take you to get to the clinic or medical office where you usually get your medical care?

- $\Box$  Less than 15 minutes
- $\Box$  15 30 minutes
- $\square$  31 60 minutes (1 hour)
- $\Box$  61 90 minutes
- $\square \quad 91 120 \text{ minutes (2 hours)}$
- $\Box$  More than 2 hours

**5e.** Did you **choose** the clinic or place where you usually get your medical care or was it **assigned** to you by your insurance plan?

- $\Box \quad \text{I chose this place} \rightarrow \text{Go to } \#7$
- $\Box \quad \text{This place was assigned to me} \rightarrow \text{Go to } \#7$
- 6. What is the main reason you do not have a usual source of health care? (CHECK ONE)
  - □ Seldom or never get sick
  - $\Box$  Recently moved into area
  - $\Box$  Don't know where to go for care
  - □ Regular place for medical care in this area is no longer available
  - □ Can't find a provider who speaks my language
  - □ Like to go different places for different health needs
  - D Just changed insurance plans / Just got my insurance / I haven't selected a clinic yet
  - Don't use doctors, I treat myself
  - $\Box$  Cost of medical care, even with insurance

7. What is the **most** important factor in choosing the clinic or medical office to get regular medical care? **(CHECK ONE)** 

- $\Box$  I went there before
- $\Box$  I know someone that goes there
- $\Box$  It is close to where I live
- $\Box$  They can see me right away
- □ They have a good reputation
- □ They take my insurance
- $\Box$  Other (specify):

#### Health Plan and Health Care

8. Medicaid (also called Medical Assistance) is a state program that pays for health care for persons in need. Are you currently enrolled in a **Medicaid** insurance plan (for example, Keystone First, United Healthcare Community Plan, Aetna Better Health, Coventry Cares Health Plan, Health Partners)?

□ Yes

- $\square$  No  $\rightarrow$  If No, go to #17
- $\Box$  Not sure

**9.** Did you have any health insurance **immediately before** you enrolled in this plan?

- □ Yes
- 🛛 No

**10.** How **long** have you had your **current Medicaid** insurance?

- $\Box$  0 3 months
- $\Box$  4 6 months
- $\Box$  7 9 months
- $\Box$  10 12 months
- $\Box$  Over 12 months

# **11.** What did you use your **current Medicaid** insurance for, if at all? (CHECK ALL THAT **APPLY**)

- □ Get a check-up
- □ See a provider because I was sick
- □ See a specialist doctor
- □ Prescription medications
- $\Box$  See a dentist
- $\Box$  A surgery
- □ Lab or radiology tests
- □ To go to the emergency room or be hospitalized
- $\Box$  Other (specify):
- $\square \quad \text{None of the above}$

**12.** Compared to how you thought it would be, using your **current Medicaid** insurance **to get medical care** was:

- $\Box$  Much easier
- □ Easier
- $\Box$  The same as I thought it would be
- □ Harder
- $\Box$  Much harder

**13.** Compared to how you thought it would be, **the overall quality of the care** you received with your **current Medicaid** insurance was:

- $\Box$  Much better
- □ Better
- $\Box$  The same as I thought it would be
- □ Worse
- $\Box$  Much worse

**14.** Since you received your **current Medicaid** insurance, have you been **unable** to obtain medical care, tests or treatment you or a doctor believed necessary?

- □ Yes
- $\Box \text{ No} \rightarrow \text{If No, go to #16}$

**15.** Which of these best describes the **main** reason you were unable to get medical care, tests or treatment (including medications) you or a doctor believed necessary? (CHECK ALL THAT APPLY)

- □ Couldn't afford care, even though I had insurance
- □ Insurance company wouldn't approve, cover or pay for care
- Doctor didn't take my insurance plan
- □ Pharmacy didn't take my insurance plan
- □ Problems getting to doctor's office
- □ Couldn't get time off work
- □ Didn't know where to get care
- □ Couldn't get child care
- □ Didn't have time or took too long

# **16. Overall**, how **satisfied** are you with your **current Medicaid** insurance?

- □ Verv satisfied
- □ Satisfied
- □ Neither satisfied nor unsatisfied
- □ Unsatisfied
- □ Very unsatisfied

### Your Health Care

Since you got your **current Medicaid insurance plan**, please rate each of the following on a scale of Very Easy to Very Difficult if you have done any of the following:

	Very Easy	Easy	Not easy or difficult	Difficult	Very Difficult	Not applicable
<b>17. Finding</b> a doctor or provider						
<ul><li>18. Getting an appointment on a day and time that was convenient for you</li></ul>						
<b>19. Getting to</b> a doctor's office						
<b>20.</b> Getting covered by your insurance company to <b>see a doctor</b>						
<b>21.</b> Getting <b>covered</b> by your insurance company for a <b>test</b> ordered by a doctor (for example, an X-ray or lab test)						
<b>22.</b> Getting <b>covered</b> by your insurance company to see a <b>specialist</b> (for example, a heart or diabetes doctor)						
<b>23.</b> Getting <b>covered</b> by your insurance company for a <b>prescription</b>						
24. Getting the medical care, tests or treatment you needed overall						

#### **DENTAL Clinic Location**

**25.** A **regular dentist** is the one you would go to for check-ups and cleanings or when you have a cavity or tooth pain. Do you have a regular dentist or dental clinic?

 $\Box \text{ No} \rightarrow \text{ if No, go to #26}$ 

□ Yes

25a. What is the name of the dental clinic where you usually get your dental care? (Please print):

25b. What is the address of the dental clinic where you usually get your dental care? (if you do not

remember, write the name of a nearby intersection or cross-street)? (Please print)

**25c.** How do you usually **get** to the **dental** clinic where you usually get your dental care? (CHECK ALL THAT APPLY)

- □ Bus, SEPTA, train, or other public transportation
- $\Box$  Drive myself
- □ A shared van service like LogistiCare or Paratransit
- Driven by someone else (including family, friends or a taxi)
- □ Walk
- $\Box$  Some other way

25d. How long does it take you to get to the dental clinic where you usually get your dental care?

- $\Box$  Less than 15 minutes  $\rightarrow$  Go to #27
- $\Box \quad 15-30 \text{ minutes} \rightarrow \textbf{Go to #27}$
- $\Box$  31 60 minutes (1 hour)  $\rightarrow$  Go to #27
- $\square$  61 90 minutes  $\rightarrow$  Go to #27
- $\square$  91 120 minutes (2 hours)  $\rightarrow$  Go to #27
- $\Box \quad \text{More than 2 hours} \rightarrow \text{Go to #27}$
- 26. What is the main reason you do not have a usual source of dental care? (CHECK ONE)
  - $\Box$  Seldom or never need it
  - □ Recently moved into area
  - □ Don't know where to go for dental care
  - □ Regular place for dental care in this area is no longer available
  - □ Can't find a provider who speaks my language
  - □ Like to go different places for different health needs
  - □ Just changed insurance plans / Just got my insurance / I haven't selected a dentist yet
  - Don't use dentists, I treat myself
  - $\Box$  Cost of dental care, even with insurance
- 27. In general, how would you rate the overall condition of your teeth and gums?
  - □ Excellent
  - □ Very good
  - □ Good
  - □ Fair
  - □ Poor

#### **Your Dental Care**

Since you got your **current Medicaid insurance plan**, please rate each of the following on a scale of Very Easy to Very Difficult if you have done any of the following:

	1					1
	Very Easy	Easy	Not easy or difficult	Difficult	Very Difficult	Not applicable
<b>28. Finding</b> a dentist						
<b>29.</b> Getting an <b>appointment</b> on a day and time that was convenient for you						
<b>30. Getting to</b> a dentist's office						
<b>31.</b> Getting <b>covered</b> by your insurance company to <b>see a dentist</b>						
<b>32.</b> Getting <b>covered</b> by your insurance company for a <b>test or procedure</b> ordered by a dentist (for example, an X-ray or root canal)						
<b>33.</b> Getting <b>covered</b> by your insurance company for a <b>prescription</b> written by a dentist						
<b>34.</b> Getting the dental care, tests or treatment you needed <b>overall</b>						

#### **Other Challenges**

**35.** Within the past 12 months, have you cancelled a doctor's appointment or not scheduled one when you needed it because of transportation problems?

- □ Yes
- □ No
- □ I have not needed an appointment

**36.** Within the past 12 months, have you worried whether food would run out before you got money to buy more?

- □ Yes
- □ No

**37.** Within the past 12 months, has the food you bought not lasted and you didn't have money to get more?

- □ Yes
- □ No

**38.** During the last 12 months, was there a time when you and your family were not able to pay your mortgage, rent or utility bills?

- □ Yes
- □ No

**39.** During the last 12 months, did you or your children move in with other people even for a little while because you could not afford to pay your mortgage, rent or utility bills?

- □ Yes
- □ No

**40.** At the end of the month do you generally have more than enough, just enough, or not enough money to pay your bills?

- $\Box$  More than enough
- □ Just enough
- $\Box$  Not enough

#### About You

- **41.** What is your age?
  - $\square$  18 to 24 years
  - □ 25 to 34
  - □ 35 to 44
  - □ 45 to 54
  - □ 55 to 64
  - □ 65 to 74
  - $\Box$  75 or older
- 42. What is your sex?
  - □ Male
  - □ Female

**43.** What is the highest grade or level of school that you have completed?

- $\square$  8<sup>th</sup> grade or less
- □ Some high school, but did not receive a high school diploma
- □ High school graduate or GED
- □ Vocational, technical or trade school training
- □ Some college or 2-year degree
- $\Box$  4-year college or above
- 44. Are you Hispanic, Latino/a, or of Spanish origin?
  - □ Yes
  - □ No

# **45.** What is your race? (CHECK ALL THAT **APPLY**)

- □ American Indian or Alaska Native
- $\Box$  Asian
- □ Black or African American
- □ Native Hawaiian or other Pacific Islander
- □ White
- $\Box$  Other (specify):

**46.** What is your total household income (the total of all the income earned by all members of your household) before taxes last year?

□ <\$15,000

□ \$15,000 to \$24,999

- □ \$25,000 to \$34,999
- □ \$35,000 to \$49,999
- □ \$50,000 to \$74,999
- □ \$75,000 to \$99,999
- □ >\$100,000
- 47. What is your employment at this time? (CHECK

### ALL THAT APPLY)

- □ Student
- □ Working full-time
- □ Working part-time
- $\Box$  Unemployed and looking for work
- □ Temporarily laid off
- $\Box$  On sick or other leave
- □ Disabled
- □ Retired
- □ Homemaker
- $\Box$  Other (specify):

48. Your input is very important. Please let us know if you are willing to be contacted in the future about your experience using your health insurance or getting health care:

- □ Yes
- □ No

#### THANK YOU VERY MUCH FOR YOUR PARTICIPATION

If you have comments about this survey, or about your insurance and health care experience, please share them with us. Enclose a note or include your comments on the back of this form so that we can learn how to improve the experience for people enrolling in Medicaid health insurance in the future.

## Please return the completed survey in the postage-paid envelope. No stamp is required. Simply place the envelope in any mailbox.