



**Journal of Health Disparities Research and Practice**  
**Volume 11, Issue 4, Winter 2018, pp. 1-13**

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School of Community Health Sciences  
University of Nevada, Las Vegas

## **Disparities in Access to Primary Care and Emergency Department Utilization in a Large Medicaid Program**

Natasha Parekh, MD, MS, University of Pittsburgh Division of General Internal Medicine  
Marian Jarlenski, PhD, MPH, University of Pittsburgh

David Kelley, MD, Pennsylvania Department of Human Services

*Corresponding Author:* Natasha Parekh MD, MS, University of Pittsburgh Division of General Internal Medicine, parekhn@upmc.edu

### **ABSTRACT**

Identifying and eliminating disparities are priorities for State Medicaid programs, especially in the context of increased enrollment through Medicaid expansion. We assessed racial, ethnic, regional, and managed care organization (MCO) differences, as well as time trends before and after Medicaid expansion, in primary care and emergency department (ED) utilization in a large Medicaid program. We performed a cross-sectional evaluation of data from Pennsylvania Medicaid from 2011-2015. Three primary care outcomes included: 1) adult access to primary care; 2) adolescent access to primary care; and 3) pediatric access to dental care. Our fourth outcome reflected ED utilization. We observed significant racial and regional disparities in access to primary care and ED utilization. In the context of Medicaid Expansion, adult primary care and ED utilization had wide racial disparities but were stable over time, while adolescent access to primary care worsened and pediatric access to dental care improved. Hispanic enrollees had higher primary care access compared with non-Hispanics. We additionally identified high and low-performing MCOs, and racial disparities within MCOs. In conclusion, disparity-reducing interventions should address region and MCO in addition to race, and should focus on post-Expansion trends. The state Medicaid program should consider these results in MCO recommendations and contracts.

**Keywords:** Disparities, Access to Care, Medicaid, Vulnerable Populations

### **INTRODUCTION**

Primary care improves health outcomes and reduces healthcare costs (Friedberg, Hussey, & Schneider, 2010; Kim, Mortenson, & Eldridge, 2015; Pourat, Davis, Chen, Vrungos, & Kominski, 2015; Starfield, Shi, & Macinko, 2005). Given the value of primary care, the Centers for Medicare and Medicaid Services (CMS) emphasize the importance of strengthening access to primary care among adults, and Healthy People 2020 goals include ensuring that children have at

least one comprehensive well-care and one dental visit annually (Office of Disease Prevention and Health Promotion, 2017).

Unfortunately, wide racial and ethnic disparities exist in primary care, dental care, and emergency department (ED) utilization. For example, relative to their counterparts, blacks and Hispanics have higher ED utilization (Agarwal et al, 2016; Brown et al, 2012; Oster & Bindman, 2003; Tang, Stein, Hsia, Maselli, & Gonzales, 2010) and are less likely to have ongoing primary care (Oster et al, 2003; Shi, Tsai, Higgins, & Lebrun, 2009). These disparities in access to primary care and dental care persist among both adults and children (Abdus, Mistry, & Selden, 2015; Pourat & Finocchio, 2010). Disparities adversely affect the health of racial and ethnic minorities, limit overall improvements in population health, and result in unnecessary costs (Laveist, Gaskin, & Richard, 2010).

Medicaid expansion under the Affordable Care Act aimed to strengthen access to care through offering insurance coverage to millions of low-income people who were previously ineligible. However, concerns arose that Medicaid enrollees would have difficulty accessing primary care, ED utilization would increase, and disparities would widen due to decreased capacity of the healthcare system and because providers would not accept new Medicaid patients (Abdus, et al, 2015). Survey-based studies have shown mixed results on changes in primary care and ED utilization in the context of Medicaid expansion (Polsky et al., 2015; Shartzter, Long, & Anderson, 2016; Sommers, Blendon, Orav, & Epstein, 2016; Wherry & Miller, 2016) but limited data exist on assessing changes in primary care and ED utilization using *population-based data*.

Assessing trends and disparities in primary care and ED utilization are particularly important for state Medicaid programs since enrollment dramatically increased with Medicaid expansion, Medicaid has disproportionate enrollment of racial and ethnic minorities, and Medicaid enrollees have higher ED utilization and lower primary care than other insurers (Oster, et al, 2003). We therefore sought to assess differences in access to primary care and ED utilization among various Pennsylvania Medicaid groups in the context of Medicaid expansion.

## **METHODS**

### Design

We performed a cross-sectional evaluation of continuously enrolled members of the HealthChoices Program, which consists of all Pennsylvania Medicaid managed care organizations (MCOs) and accounts for 70% of Pennsylvania Medicaid beneficiaries (Kaiser Family Foundation, 2016).

### Data Source

The HealthChoices MCOs are required to submit Healthcare Effectiveness Data and Information Set (HEDIS®) member-level data for several audited outcome measures to an External Quality Review Organization, which validates the data per National Committee for Quality Assurance HEDIS® standards. As part of the submission, MCOs are required to populate indicators for race (white, black, Asian, other/not volunteered), ethnicity (Hispanic/non-Hispanic), and region. We focused on data from HEDIS® 2013, 2014, 2015, and 2016, which equates to calendar years 2012, 2013, 2014, and 2015.

Of note, Pennsylvania Medicaid divides the state into five geographic regions: Southeast, Southwest, Lehigh/Capital, Northwest, and Northeast. The Northeast region was developed in 2014 so its data were available for only 2014 and 2015. Regional populations were mostly

concentrated in Philadelphia within the Southeast, Pittsburgh within the Southwest, and Harrisburg within Lehigh/Capital. There were eight HealthChoices MCOs from 2012-2013, and after two MCOs merged, seven MCOs from 2014-2015.

#### Covariates and Outcomes of Interest

Independent variables of interest included race, ethnicity, region, year, and MCO. The outcome measures were 4 HEDIS® quality measures (AHRQ, 2015). Primary care outcomes were age-specific and included: 1) adult access to primary care, or proportion of members age  $\geq 20$  years with  $\geq 1$  ambulatory or preventive care visit during the measurement year; 2) adolescent access to primary care, or proportion of members age 12-21 years with  $\geq 1$  comprehensive well-care visit with a primary care physician or obstetrician/gynecologist during the measurement year; and 3) pediatric access to dental care, or proportion of members 2-21 years who had  $\geq 1$  dental visit during measurement year from 2012-2014, and proportion of members 2-20 years who had  $\geq 1$  dental visit in 2015. Our ED utilization measure was 4) ED visits/1000 member-months during the respective measurement year.

#### Statistical Analysis

Since data for each year were separately submitted for race and ethnicity stratified by region and MCO, we created 2 multivariable models for each outcome: one included race, region, year, and MCO, and the other included ethnicity, region, year, and MCO. We analyzed disparities for adult access to primary care, adolescent access to primary care, and pediatric access to dental care using frequency-weighted multivariable logistic regression. We analyzed disparities in ED visits using frequency-weighted negative binomial regression. We report average predicted probabilities associated with each outcome, and *p*-values to demonstrate significance of differences between select comparison groups. We performed additional subgroup analyses to assess racial (black-white) disparities within MCOs. Within-patient correlation was accounted for using robust standard error estimation. We performed analyses using Stata version 14 (StataCorp LP, College Station, TX, USA).

## **RESULTS**

Complete data were available for 1,668,297 people for the adult access to primary care measure; 14,232 people for the adolescent access to primary care measure; 2,690,997 for the pediatric access to dental care measure; and 72,531,325 member-months for the ED visits measure. Table 1 represents the demographics for adult access to primary care, and these demographics are similar across outcome measures. Thirty-one percent of the population was black and 12% was Hispanic. The Southeast region was the most-represented (42%). The largest MCOs by enrollment were plans D, G, F, and C.

**Table 1: Demographics, % (N= 1,668,297 for Adult Access to Primary Care)<sup>a</sup>**

a- Table 1 demographics based on data from Adult Access to Primary Care, but demographics for other outcomes were similar

<b>Race</b>	White	54
	Black	31
	Asian	2.6
	Other	12
<b>Ethnicity</b>	Hispanic	12
	Non-Hispanic	87
<b>Region</b>	Southeast	42
	Southwest	25
	Lehigh/Capital	18
	Northwest	6.9
	Northeast	7.0
<b>Year</b>	2012	20
	2013	23
	2014	25
	2015	32
<b>Managed Care Organization</b>	A	10
	B	5.8
	C	14
	D	21
	E	0.93
	F	17
	G	18
	H	7.4
	I	1.9
	J	4.1

### Disparities by Race

Table 2 shows average predicted probabilities from multivariable models to demonstrate disparities. Compared to whites, blacks had significantly lower adult (84% vs. 86%,  $p < 0.001$ ) and adolescent access to primary care (54% vs. 57%,  $p = 0.005$ ). Blacks had higher ED visits (86 visits vs. 74 visits per 1000 member-months,  $p < 0.001$ ) and pediatric access to dental care (57% vs. 56%,  $p < 0.001$ ).

**Table 2: Average Predicted Probabilities (95% CI) for Adult Access to Primary Care, Adolescent Access to Primary Care, Annual Dental Visits, and Emergency Department Visits by Race, Ethnicity, Region, and Year<sup>a</sup>**

	Adult Access N= 1,668,297		Adolescent Access N= 14,232		Pediatric Dental N= 2,690,997		ED Visits/1000 m-m N= 72,531,325 m-m	
<b>Race</b>		<i>p</i>		<i>p</i>		<i>p</i>		<i>p</i>
<b>White</b>	86 (86, 86)	ref	57 (56, 58)	ref	56 (56, 56)	ref	74 (72, 77)	ref
<b>Black</b>	84 (84, 84)	<0.001	54 (53, 56)	0.005	57 (57, 57)	<0.001	86 (83, 88)	<0.001
<b>Asian</b>	87 (86, 87)	<0.001	60 (55, 65)	0.35	64 (63, 64)	<0.001	40 (38, 41)	<0.001
<b>Ethnicity</b>								
<b>Non- Hisp</b>	85 (85, 85)	ref	56 (55, 57)	ref	56 (56,56)	ref	78 (75, 80)	ref
<b>Hispanics</b>	87 (87, 87)	<0.001	60 (58, 62)	0.001	66 (66,66)	<0.001	79 (77, 81)	0.41
<b>Region</b>								
<b>Southeast</b>	82 (82, 82)	ref	54 (51, 56)	ref	60 (59, 60)	ref	56 (54, 59)	ref
<b>Southwest</b>	87 (87, 88)	<0.001	60 (57, 63)	0.001	57 (57, 57)	<0.001	70 (68, 73)	<0.001
<b>L/C</b>	88 (88, 88)	<0.001	54 (51, 56)	0.99	56 (56, 57)	<0.001	66 (64, 69)	<0.001
<b>Northwest</b>	87 (87, 88)	<0.001	60 (56, 64)	0.006	55 (55, 55)	<0.001	92 (89, 96)	<0.001
<b>Northeast</b>	91 (91, 91)	<0.001	63 (58, 69)	0.008	59 (58, 60)	0.11	62 (56, 68)	0.10
<b>Year</b>								
<b>2012</b>	85 (85, 85)	ref	57 (55, 58)	ref	54 (54, 54)	ref	68 (66, 71)	ref
<b>2013</b>	86 (86, 86)	<0.001	58 (56, 60)	0.27	57 (57, 57)	<0.001	70 (68, 73)	0.24
<b>2014</b>	86 (86, 86)	<0.001	57 (56, 59)	0.58	59 (59, 59)	<0.001	69 (67, 71)	0.57
<b>2015</b>	85 (85, 85)	<0.001	54 (53, 56)	0.07	61 (60, 61)	<0.001	69 (67, 71)	0.61

Abbreviations: Adult Access, Adult Access to Primary Care; Adolescent Access, Adolescent Access to Primary Care; Pediatric Dental, Pediatric Access to Dental Care; ED, Emergency Department; m-m, member-months; Non-Hisp, non-Hispanic enrollees; L/C, Lehigh-Capital (region)

a- Average predicted probabilities are derived from multivariable models with race, region, year, and MCO

### Disparities by Region

The Southeast had significantly lower adult access to primary care (82%), adolescent access to primary care (54%), and ED visits (56 visits per 1000 member-months), and significantly higher pediatric access to dental care than most other regions (60%; Tables 2). The Northeast had significantly higher adult (91%) and adolescent access to primary care (63%) compared with other regions. The Northwest had the highest ED visits with a predicted rate of 92 ED visits/1000 member-months.

### Differences by Year

Though average predicted probabilities for adult access to primary care and ED visits appeared stable over time, adolescent access to primary care worsened over time (from 58% in 2013 to 54% in 2015), while pediatric access to dental care improved with time (from 54% to 61%) (Table 2).

### Disparities by Ethnicity

In ethnicity-based models, Hispanic enrollees had significantly higher adult access to primary care (87% vs. 85%), adolescent access to primary care (60% vs. 56%), and pediatric access to dental care (66% vs. 56%) compared to non-Hispanics. There was no significant difference in ED visits between Hispanic and non-Hispanic enrollees, though in secondary exploratory analyses, Hispanic enrollees had significantly higher ED visits in Lehigh/Capital and Northwest regions (83 vs. 68 visits/1000 member-months ( $p < 0.001$ ) and 109 vs. 91 ED visits/1000 member-months ( $p < 0.001$ ), respectively), and significantly lower ED visits in the Southeast (67 vs. 72 visits/1000 member-months ( $p = 0.049$ )), Southwest (66 vs. 82 visits/1000 member-months ( $p < 0.001$ )), and Northeast (67 vs. 73 visits/1000 member-months ( $p < 0.001$ )). Regional and time differences observed in the ethnicity-based models were similar in magnitude and direction as race-based models reported above.

Differences between MCOs

Figure 1 shows the average predicted probabilities of MCOs in order from best-performing to worst-performing by measure. Overall, the best-performing MCOs included plans D, C, G, and H, and the worst-performing MCOs included plans E, I, and B. Plans C and H were among the best-performing in adult and pediatric access measures but had some of the highest ED utilization.

**Figure 1: Average Predicted Probabilities<sup>a</sup> (95% CI) for Managed Care Organizations from Best to Worst-Performing by Measure**

Measure	BEST → WORST									
Adult Access	C- 90 (89, 90)	D- 89 (89, 89)	G- 86 (86, 86)	H- 84 (84, 85)	J- 84 (83, 84)	F- 83 (83, 84)	A- 81 (81, 81)	E- 79 (78, 79)	I- 78 (77, 79)	B- 76 (76, 76)
Adolescent Access	C- 65 (63, 68)	D- 64 (61, 67)	H- 60 (57, 63)	F- 58 (55, 60)	A- 55 (53, 58)	G- 53 (49, 56)	B- 50 (48, 53)	I- 50 (43, 57)	J- 49 (42, 57)	E- 48 (45, 52)
Pediatric Dental	C- 63 (63, 63)	D- 62 (62, 63)	H- 58 (57, 58)	A- 56 (56, 57)	F- 56 (56, 56)	G- 55 (55, 56)	J- 54 (53, 55)	B- 52 (51, 52)	I- 52 (51, 53)	E- 45 (44, 46)
ED Visits/ 1000 m-m	D- 67 (64, 69)	J- 68 (65, 69)	A- 71 (68, 74)	G- 71 (69, 74)	B- 73 (70, 76)	I- 77 (75, 80)	C- 80 (77, 82)	E- 81 (78, 83)	F- 83 (80, 86)	H- 84 (82, 86)

Better-performing plans: D, C, G, H

Worse-performing plans: E, I, B

Abbreviations: Adult Access, Adult Access to Primary Care; Adolescent Access, Adolescent Access to Primary Care; Pediatric Dental, Pediatric Access to Dental Care; ED, Emergency; m-m, member-months

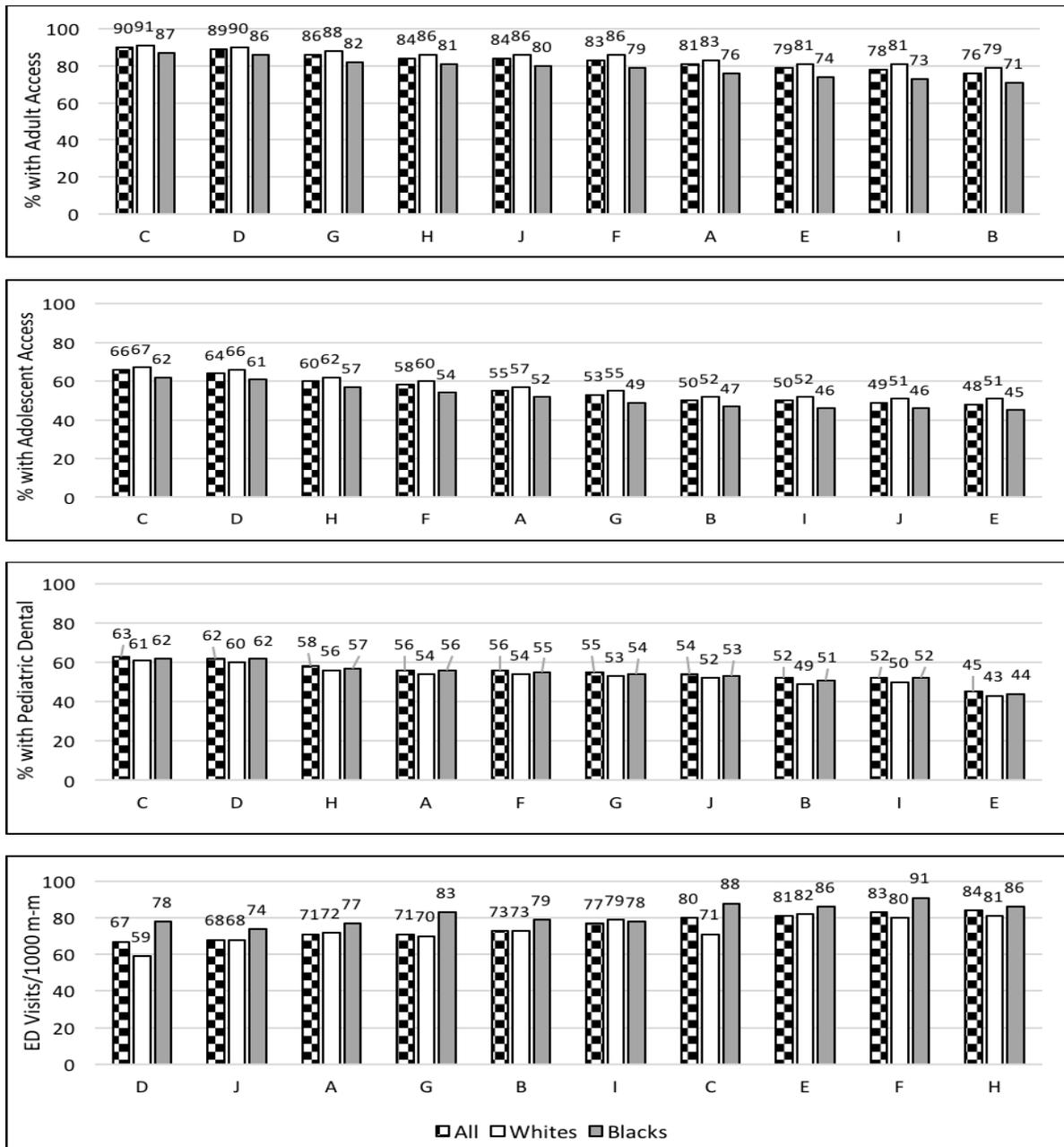
<sup>a</sup>Average predicted probabilities derived from multivariable logistic regression including race, region, year, and managed care organization.

Racial Disparities within MCOs

Figure 2 depicts average predicted probabilities for all enrollees, whites only, and blacks only within each MCO in order from highest-performing to poorest-performing. Notably, as MCOs performed worse in adult access to primary care, disparities between blacks and whites

within each plan also worsened. For adolescent access to primary care, all plans had 5-6% difference between blacks and whites. For pediatric access to dental care, blacks had slightly higher rates than whites within all MCOs (1-2%). For ED visits, the differences between blacks and whites widely varied by plan. The widest black-white disparities in ED visits were in plans D (difference of 19 visits/1000 member-months) and C (difference of 17 visits/1000 member-months), both of which operated only in the Southeast.

**Figure 2: Average Predicted Probabilities<sup>a</sup> for All, Whites, and Blacks by MCO**



Abbreviations: Adult Access, Adult Access to Primary Care; Adolescent Access, Adolescent Access to Primary Care, Pediatric Dental, Pediatric Access to Dental Care; ED, Emergency Department

<sup>a</sup>Average predicted probabilities derived from multivariable models with race, region, year, and MCO

## DISCUSSION

In Pennsylvania Medicaid, we found large and statistically significant racial, regional, time, between-MCO, and within-MCO differences in access to care and ED utilization. Our access to care measures and ED visit rates were both higher than the 2016 HEDIS® national medians for Medicaid, suggesting higher healthcare utilization overall in Pennsylvania (NCQA, 2016). Our findings are unique in that we identify disparities using *population-based* data, we explore regional and MCO differences in addition to racial and ethnic disparities, and we focus on Medicaid during a pivotal period of healthcare reform.

### Disparities by Race

Our finding states that blacks enrolled in Medicaid in Pennsylvania had lower adult and adolescent primary care utilization and higher ED utilization, which is consistent with trends published in literature (Oster, et al., 2003; Agarwal, et al., 2016; Basu & Phillips, 2016). Importantly, the disparity between blacks and whites is smaller than those noted in previous literature (Agarwal, et al., 2016). This could be secondary to improvement in disparities with time, lower disparities in our managed care population compared with fee-for-service populations, and decreased disparities in Pennsylvania compared with other states. Nevertheless, disparities persisted despite having the same health insurance and qualifying income status for Medicaid eligibility. This finding is consistent with the Institute of Medicine Unequal Treatment Report that demonstrated disparities in health care delivery for minority populations, even when accounting for health insurance coverage and income (Smedley, et al., 2003).

There are many potential reasons for our observed racial disparities. First, blacks might have more social determinants of health-related barriers to obtaining care such as transportation and childcare needs, though studies suggest that there are no racial disparities in getting to primary care (Brown, et al, 2012). Other potential reasons for observed racial disparities include uncontrolled chronic conditions resulting in more health emergencies (LaCalle & Rabin, 2010), decreased primary care availability in respective residential areas (Brown, Polsky, Barbu, Seymour, & Grande, 2016), disparities in health literacy about optimal sites for healthcare utilization (IOM, 2011), distrust in primary care (Musa, Schulz, Harris, Silverman, & Thomas, 2009), and anticipated expediency in the ED.

Importantly, we observed that blacks had higher pediatric dental access than whites, which is inconsistent with previous literature (Pourat & Finocchio, 2010). One potential reason for this “reverse disparity” is that newer Medicaid programs charged with improving dental care for children across the state could have led to narrowing of disparities secondary to targeted initiatives (CMS, 2011).

### Disparities by Ethnicity

Second, we showed that Hispanic enrollees had significantly higher adult and pediatric primary care access compared to non-Hispanics. We also showed that Hispanic enrollees had significantly higher ED visits in some regions and lower ED visits in others. Our results are inconsistent with literature suggesting that Hispanic patients have higher ED visits and decreased primary care and dental care access than their counterparts (Agarwal, et al., 2016; Shi, et al., 2009; Pourat & Finocchio, 2010). It is unclear why access to care is improved among Hispanic enrollees

in our sample and why utilization differs for Hispanic enrollees residing in different state regions. One potential explanation includes differing cultural norms by region (perhaps some Hispanic communities might use primary care more and the ED less than others), though this will need to be further investigated.

#### Disparities by Region

Third, we showed significant geographic disparities in Pennsylvania. The Southeast had the lowest utilization overall, with the lowest adult and adolescent access to primary care and ED visits, but highest pediatric access to dental care. Potential reasons for decreased primary care in the Southeast include regional barriers in accessing care such as high public transportation costs in the Southeast, regional variation in health literacy, and increased difficulty contacting patients for care coordination. It is unlikely that the Southeast's poorer access to primary care is due to poor performance of Southeast-only MCO's, Plans C and D, which performed well relative to other MCOs. The Southeast region's high performance in pediatric dental care could be attributed to a high proportion of Federally Qualified Health Centers that offer dental services, 2 dental schools, and several pediatric dental fellowship programs in the area.

The Northeast region had the highest adult and adolescent access to primary care, and second highest pediatric access to dental care. Its positive outcomes could be related to high performance of a nationally recognized MCO based in the Northeast.

#### Differences by Year

Fourth, we observed that average predicted probabilities of both adult access to primary care and ED utilization were generally stable across years, while adolescent access to primary care worsened and pediatric access to dental care improved. Our results differ from survey and interview-based studies suggesting increased self-reported access to primary care (Sommers, et al., 2016; Wherry & Miller, 2016; Tipirmenini, et al., 2015) and decreased self-reported ED utilization after Medicaid expansion (Sommers, et al., 2016). Potential explanations for these differences are Pennsylvania-specific variation in trends for utilization, our restriction to managed care enrollees, and our focus on claims for the entire Medicaid Managed Care population (rather than sample-based self-report surveys). Importantly, Medicaid expansion occurred in 2015, and Pennsylvania enrolled 559,851 new individuals by December 2015 (Pennsylvania Department of Human Services, 2017). With a substantial increase in the population, it is reassuring that adult primary care access did not significantly decrease and ED visits did not increase after expansion. This could be potentially explained by increased primary care reimbursement in Medicaid from 2013-2014 (Polsky, et al., 2015; Decker, 2013).

Our observed decrease in adolescent access to primary care in 2015 may be explained by Pennsylvania Medicaid's addition of 2 pediatric access measures that measured well-child visits in the first 15 months and third through sixth years of life, respectively. It is possible that with additional pediatric access measures for plans to focus on, emphasis on adolescent well-child visits diluted. Additionally, with Medicaid expansion in 2015, some children previously enrolled in Children's Health Insurance Program whose parents were newly eligible for Medicaid had to change pediatric providers as a result, which also potentially contributed to the decrease (Levy, 2014).

Finally, the improvement in pediatric access to dental care could in part be explained by CMS Oral Health Strategy for Medicaid initiatives, whose goal was increasing pediatric annual

dental visit rates by 10% in 5 years (CMS, 2011). As a result, the state Medicaid program mobilized resources and incentivized MCOs to improve access to pediatric dental care.

#### Differences between and Disparities within MCOs

Finally, we showed wide variation between MCOs. Compared with the highest-performing MCOs, the poorest-performing MCOs had 18%, 35%, and 40% less adult access to primary care, adolescent access to primary care, and pediatric access to dental care, respectively, and 34% more ED visits. Plans D, C, G, and H were the highest-performing, while plans E, I, and B were the lowest-performing. Interestingly, plans C and H seemed to have high utilization overall with high access to care *and* ED utilization. We additionally observed racial disparities within all MCOs for all measures except pediatric access to dental care. The widest racial disparities were observed in ED visits among the Southeast-only plans. These results suggest an opportunity for MCOs to target their approaches to address specific outcome gaps and disparities.

It is unclear what features inform plan performance. Hypotheses include differential populations served by plans (though all members were enrolled in Medicaid, and results are adjusted for differing racial and ethnic demographics), aggressive utilization management initiatives in some plans compared to others, and inherent regional variations not accounted for by model adjustment. The highest-performing plans had disparity-reducing initiatives focused on identifying frequent ED utilizers and assisting with optimizing utilization, arranging primary care appointments for patients upon hospital discharge, helping enrollees establish usual source of care, requiring staff cultural sensitivity training, and offering public health dental hygienist services at physician offices.

Notably, plans C, D, and G are among the largest plans and are regional plans that serve specific state regions. They performed well, potentially because of increased understanding of barriers to care compared with national plans, experience with regional populations, organizational commitment to their respective populations, and collaboration with community-based organizations.

#### Implications

Given the concurrent forces of Medicaid expansion and growth in managed care across the country, state Medicaid policies for MCOs can be an optimal vehicle to operationalize the reduction of disparities and improvement in utilization (Nerenz, 2005). This is of particular interest to the Pennsylvania State Medicaid program since most of its population is enrolled in MCOs and almost half are racial and/or ethnic minorities.

Identifying disparities is the first step in comprehensive efforts aimed at reducing disparities. The state Medicaid program should consider our MCO disparity and utilization results to reduce disparities via administrative and financial incentives, shared comparisons of disparities with plans, and MCO performance evaluation and contract requirements (Chin, 2016; Moskowitz, Guthrie, & Bindman, 2012).

#### Limitations

Because our study data were cross-sectional and aggregated, we were not able to directly link individual outcomes with covariates of interest and were not able to establish causality for disparities. Second, though quantifying primary care access is important when assessing adequacy of primary care, we could not measure the actual quality of the visits. Third, our most recent available data was HEDIS® 2016, which represents calendar year 2015. Our post-expansion data are therefore limited to 1 year after expansion and may not represent more delayed effects of

expansion on access and utilization. Finally, race and ethnicity data submitted by MCOs were variably obtained in the past; however, statewide quality improvement projects have now standardized and improved race and ethnicity reporting.

## CONCLUSION

We identified significant racial and regional disparities in primary care and ED utilization. Adult access to primary care and ED utilization had wide racial disparities but were stable with time. Adolescent access to primary care worsened with time and ED visits were higher than the national median, both of which are concerning and suggest opportunity for improvement. We additionally identified high and low-performing MCOs for each access measure, and racial disparities within MCOs. Our results suggest that disparity-reducing interventions should address race, region, and MCO in equity-promoting measures.

## ACKNOWLEDGEMENTS

### Funding

NP's time was supported by the HRSA NRSA T32 for Primary Medical Care Research (T32NP22240). This work was supported in part by an inter-governmental agreement between the Pennsylvania Department of Human Services and the University of Pittsburgh.

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