Health Insurance and Youths' Unmet Health Care Needs: Using the 2016 National Survey of Children's Health to Inform Social Work Policy Advocacy

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Abstract: *This study examined the relationship between youth health insurance status, insurance type (public versus private), and youths' unmet health care needs. A secondary analysis was conducted using data from the 2016 National Survey of Children's Health, a nationally representative, cross-sectional survey of U.S. youth. The sample included data from caregivers of 40,723 Hispanic, non-Hispanic black, and non-Hispanic white youth (0-17 years old) and was 49% female. Mplus 8.2 was used and statistical models accounted for the complex survey design. Using unweighted and weighted descriptive statistics and weighted probit regression models, we found that youth without health insurance were significantly more likely to have unmet health care needs compared to those with either public or private health insurance. We further found no statistically significant difference in unmet needs between youth with public and private health insurance. Our findings suggest that increased access to health insurance coverage, regardless of insurance type, may be an important policy focus when addressing youths' unmet health care needs. Our findings can be used to guide future social work advocacy regarding health insurance policy.*

Keywords: *Health insurance; unmet health care needs; youth; social policy; ACA*

Poor health outcomes, disruptions in individual functioning, and complications with family finances have been found to be associated with youths' unmet health care needs (Glewwe, West, & Lee, 2018; Lindly, Chavez, & Zuckerman, 2016). Compared to youth with health insurance, the risk for having unmet health care needs is higher for youth without health insurance coverage (DeRigne, Porterfield, & Metz, 2009; Kreider et al., 2016; Miller, Nugent, Gaboda, & Russell, 2013). Legislators across the political spectrum have responded to this issue through federal health insurance policy reforms that aim to meet health care needs for all youth.

The current landscape of federal health insurance policy has largely been shaped by the Patient Protection and Affordable Care Act (ACA). Established by the Obama Administration in 2010 and implemented on a national scale in 2014, the ACA is a set of programs intended to expand access to health insurance, both in the public and private sectors (Blumberg, Holahan, Karpman, & Elmendorf, 2018). It aims to (a) increase the number of individuals with health insurance coverage through both Medicaid expansion and the establishment of a health insurance marketplace, (b) improve the affordability of health insurance plans through subsidies and tax credits, and (c) ensure that health care plans provide adequate coverage by mandating essential health care services (Feldman,

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Buysse, Hubner, Huffman, & Loe, 2015; Ortega et al., 2018). The ACA also prohibits insurance companies from denying enrollment and coverage based on pre-existing conditions, amount of care sought, or the cost of care (Fry-Bowers, 2015). In addition, the ACA allows young adults up to age 26 who do not qualify for employment-based insurance to remain on their parents' plan (Levitt, 2017b).

Despite its attempts to expand access to health insurance, debates on the ACA's efficacy remain. Some policymakers argue that repealing the ACA, with its individual and employer mandates, would allow individuals more autonomy over their own health care (Levitt, 2017b), thus promoting personal accountability and decreasing the prevalence of unmet health care needs. Conversely, others argue that, should it be repealed, participation in insurance plans would decrease, thus increasing premiums for those who remain insured and ultimately increasing the number of individuals with unmet health care needs (Eltorai & Eltorai, 2017; Mulligan, 2017). At the heart of both of these perspectives is a common goal—creating a policy structure for health insurance that can address the health care needs of people of all ages, including youth. To create the most effective policies to address youths' health care needs, nationally representative information is needed to examine whether private or public health insurance better meets youths' health care needs. Further, this information can offer an additional perspective to current debates surrounding the implementation of a fully-public, single-payer health care system.

The purpose of the present study was to address this ongoing debate by estimating youths' unmet health care needs by health insurance type and status, six years post-ACA enactment. This study addressed two research questions: "What is the prevalence of unmet health care needs among U.S. youth with public, private, and no health insurance six years post-ACA enactment?" and "Is there a difference in unmet health care needs by insurance type and status among U.S. youth six years post-ACA enactment?" Addressing these research questions will indicate which type of insurance coverage better meets youths' health care needs. Should one insurance type better meet youths' needs, then social workers can use this information to advocate for expansion of that type. If no differences are found between insurance types, then social workers can advocate for efforts that continue to expand youths' access to both types of insurance. Addressing the research questions will also indicate the degree to which having insurance improves the likelihood of children's needs being met. Results for this study will expand current knowledge on the individual-level impact of social policy, particularly the "hot-button" issue of health care reform.

Literature Review

Current State of Health Care Policy

In an often-heated political climate, few modern issues are as contentious as health care reform. Passed into law in 2010 and fully implemented in 2014, the Patient Protection and Affordable Care Act (ACA) aimed to increase low- and middle-income individuals' access to health insurance through both the expansion of Medicaid eligibility and the creation of a government-subsidized insurance marketplace (Levitt, 2017a). The implementation of the ACA reduced the number of uninsured individuals in the U.S. by

over 19 million between 2010 and 2017. Between 2015 and 2017, a total of 519,000 youth aged 0-17 acquired insurance coverage (Blumberg et al., 2018).

Despite the increase in individuals with insurance, ideological debates about the ACA continue. These disagreements have interrupted traditional problem-solving procedures between the legislative and executive branches, requiring judicial intervention (Bagley, 2016). In 2014, the House of Representatives sued the Obama administration over funding strategies for insurance plans under the ACA. Plaintiffs claimed a cost-sharing provision of the ACA violated the Appropriations Clause of the U.S. Constitution because the provision gave the Secretary of Health and Human Services the power to issue reimbursements to insurers without appropriations set aside by Congress for this purpose. In *U.S. House of Representatives v. Burwell* (2016), the U.S. District Court for the District of Columbia ruled in favor of the House, indicating that the Secretary could not issue reimbursements to insurers without Congressional appropriation. As a result, the choice to expand Medicaid had to be determined by each individual state (Eltorai & Eltorai, 2017).

Over time, despite the initial opposition of their governors, several states - including Idaho, Louisiana, Maine, and Nebraska - have expanded Medicaid through ballot initiatives and legislation, demonstrating a growing interest in expanding public insurance options. As of 2019, 37 states and the District of Columbia have chosen to participate in Medicaid expansion, whereas 13 states, primarily located in the South, have chosen not to expand. Currently, one southern state (Georgia) is considering expansion (Kaiser Family Foundation, 2019).

As the 2020 election draws nearer, a popular issue among Democratic candidates is the concept of Medicare for All (Wilensky, 2019). The most popular incarnation of this fully-public health insurance involves a government-run single-payer system through which all individuals in the U.S. would receive their insurance coverage. Should this legislation be implemented, it would dismantle the private health insurance market and fundamentally change how the entire health care field operates (Wilensky, 2019).

Insurance Type and Unmet Needs

Prior research has demonstrated that uninsured youth experience the highest rate of unmet needs (Clemans-Cope, Kenney, Waidmann, Huntress, & Anderson, 2015; Flores et al., 2017; Kreider et al., 2016). *Unmet need* refers to any instance in which a youth did not receive some or all of the care they required for their health (Miller et al., 2013). In one study, uninsured youth were 2.94 times more likely to have an unmet need than youth with insurance (DeRigne et al., 2009). Another study determined that uninsured youth with special health care needs were 2.7 times more likely to have an unmet need related to cost than youth with insurance (Miller et al., 2013). On average, families of uninsured youth spend $2,885.75 more out of pocket each year than families with insurance (Flores et al., 2017).

Unmet need also seems to be associated with the type of insurance a child receives, though previous research on this issue is inconclusive (Devoe et al., 2011). On one hand, families with private insurance have historically reported higher frequency of unmet need when compared to families with public insurance such as Medicaid or the Children's

Health Insurance Program (DeRigne et al., 2009; Miller et al., 2013). The reason for these findings may be increased out-of-pocket spending associated with private insurance (Kreider et al., 2016); research has indicated increases in families' out-of-pocket health care spending is associated with unmet health care needs for youth (Karaca-Mandic, Choi-Yoo, Lee, & Scal, 2014). On the other hand, some studies have indicated differences in unmet need and ability to access care for youth insured by various sources of public insurance (Kreider et al., 2016). Although publicly insured families have reported cost of care to be one third of that for families with private insurance, families with public insurance report two to three times more trouble finding a provider who will accept their insurance than families with private insurance (Miller et al., 2013). In a study by Clemans-Cope et al. (2015), parents of youth covered by the public Children's Health Insurance Program were equally likely to report an unmet need – including vision and dental care needs – as parents of youth covered by private plans. Because of this conflicting research (and the ongoing political debate), more information is needed to determine if private or public insurance more effectively reduces unmet need among U.S. youth.

Although previous studies have found differences in youths' unmet health care needs based on their insurance type, these findings cannot be generalized to most youth in the U.S., as most studies have focused solely on youth with special health care needs (e.g., DeRigne et al., 2009; Miller et al., 2013). To better understand how insurance type and status relate to the unmet needs of most youth in the U.S., both with and without special health care needs, our research used nationally representative data. In doing so, we aim to address the significant gaps in the literature to inform the policy advocacy efforts of social workers nationwide, so that the health care needs of youth may be better addressed.

Methods

Data Source

We conducted a secondary analysis using the 2016 National Survey of Children's Health (NSCH), which is a nationally representative dataset published by the Child and Adolescent Health Measurement Initiative (Child and Adolescent Health Measurement Initiative [CAHMI], 2018). NSCH is sponsored by the Maternal and Child Health Bureau, which is part of the U.S. Department of Health and Human Services. This survey focuses on youths' health and well-being and therefore contains data on a variety of health outcomes, as well as factors that may contribute to these outcomes. Like other nationally representative and publicly available datasets, the strengths of NSCH include the incorporation of data from many cases, timeliness of reporting, and the ability to compute national estimates (Blair, 2016). The use of the 2016 data in the current study is important because similar data are expected to be collected annually after this point in time (CAHMI, 2018).

NSCH is comprised of caregiver reports of non-institutionalized U.S. youth, ages 0-17 (CAHMI, 2018). Because of the random recruitment strategy employed, caregivers' data represent Hispanic, non-Hispanic black, and non-Hispanic white youth from all 50 states and the District of Columbia. If more than one eligible youth resided in the home, data were collected regarding one randomly selected youth in the home. Because individual

cases were deidentified and a secondary dataset used, this study was found exempt by the Institutional Review Board at Western Michigan University.

In the current study, we used a subpopulation of caregivers who completed the NSCH. In particular, we decided to include only data about Hispanic, non-Hispanic black, and non-Hispanic white youth because data from other racial/ethnic groups cannot be used for national estimates (CAHMI, 2018). To avoid misrepresenting the data, youth who have both private and public insurance were excluded; thus our analysis was conducted using data from youth who had only public, only private, or no insurance coverage for the entire 12 months prior to the study.

Measures

All measures were used in accordance with the 2016 NSCH guidelines (CAHMI, 2018). Consistent with previous research, we examined seven unmet needs: forgone health care, medical care, dental care, vision care, hearing care, mental health services, and other types of care (Kreider et al., 2016; Lindly et al., 2016). Forgone health care was assessed based on caregivers' answers to the question, "During the past 12 months, was there any time when this child needed health care, but it was not received?" Response options were dichotomized (*yes*, *no*). Caregivers who reported "yes*"* were then asked to indicate on a checklist which type of care was not received. The checklist included medical care, dental care, vision, hearing, mental health services, and other. If caregivers indicated yes to one of these items, youth were considered to have that unmet need. Thus, for each item on the checklist, dichotomized response options were created (*unmet need*, *received needed care*).

Insurance type and status were measured by combining two aspects of the survey. Caregivers first responded to the question, "During the past 12 months, was this child ever covered by any kind of health insurance or health coverage plan?" There were three response options (*Yes, this child was covered all 12 months*; Y*es, but this child had a gap in coverage*; and *No*). If caregivers responded "Yes, but this child had a gap in coverage," this case was excluded from the current study, as prior research indicates gaps in coverage can lead to a variety of outcomes depending on other factors not included in the current dataset (e.g., Federico, Steiner, Beaty, Crane, & Kempe, 2007). If caregivers responded "No*,*" this case was included in this study and coded as "no insurance coverage." If caregivers responded "Yes, this child was covered all 12 months," the caregiver indicated the type of health insurance. Consistent with coding recommended by CAHMI (2018), the types of insurance were then coded as *public* (Medicaid, Medical Assistance, or any kind of government assistance plan for those with low incomes or a disability); *private* (insurance through a current or former employer or union, insurance purchased directly from an insurance company, or TRICARE or other military health care or coverage through the Affordable Care Act or other private insurance); or *no current insurance*. These response options were combined with the first question above to create a variable that indicated insurance type and status (*12 months of only public insurance*, *12 months of only private,* and *12 months of no insurance coverage*). Using these response options, we then created three dichotomous variables (*12 months of only public insurance* versus *12 months of only private insurance, 12 months of only public insurance* versus *12 months of no*

insurance coverage, and *12 months of only private insurance* versus *12 months of no insurance coverage*).

We included the following covariates: gender, age, race/ethnicity, family structure, income (based on federal poverty level), caregivers' highest level of education, primary language spoken in the home, metropolitan statistical area status, and child has special health care needs. These were chosen for inclusion because previous research has shown an association between these covariates, unmet needs, and insurance status (e.g., Devoe et al., 2011; Kreider et al., 2016; Ortega et al., 2018), and because they are typically used in research conducted with this dataset (e.g., Butler, Weller, & Titus, 2015; Weller, Blanford, & Butler, 2018). We categorized race/ethnicity as Hispanic, non-Hispanic black, and non-Hispanic white because previous studies that both used this dataset and examined race and ethnicity applied these categories (e.g., Guerrero, Zhou, & Chung, 2018; Zickafoose & Davis, 2013).

Analysis

Analyses were conducted using Mplus 8.2 (Muthén & Muthén, 1998-2018). We accounted for the complex approach to data collection in the statistical models by including sampling weights as well as specifying stratification and clustering as recommended by the NSCH codebook (CAHMI, 2018). To address research question one, we obtained weighted and unweighted statistics. To address research question two, multivariate probit regression was used. Probit models were estimated using weighted least squares with mean and variance adjustment estimation (WLSMV) and specified theta parametrization. Estimates were considered significant if p-values were less than .05 and the 95% confidence interval excluded zero. Although findings from research question one indicated events per predictor variable were low (i.e., low counts of events compared to non-events), research indicates that regression models with categorical outcomes and WLSMV estimation can be used in these situations (Crone & Finlay, 2012; Hox & Maas, 2001; Vittinghoff & McCulloch, 2006). The number of covariates to include in the probit models was in alignment with recommendations by Vittinghoff and McCulloch (2006). Sensitivity analyses were conducted to examine probit models with the inclusion of various combinations of covariates. Missing data were addressed using the complete case method (Muthén & Muthén, 1998-2018).

Results

Results represent non-institutionalized Hispanic, non-Hispanic black, and non-Hispanic white youth in the U.S. between the ages of 0 and 17 (n=40,723). The prevalence of U.S. youth with public, private, and no health insurance in 2016 was 33.3%, 60.6%, and 6.1%, respectively. These weighted percentages indicate that private insurance plans remain the largest provider of insurance for youth in the U.S.

Table 1 presents sample characteristics by insurance type (private, public, and no coverage). As shown, based on p-values less than .05, some of the sample characteristics differed statistically by insurance type and status. For family status, poverty level, and education (all of which were collapsed to include three categorical options), we found

significant differences between public and private, public and no insurance, and private and no insurance. For child's age, which also had three categorical options, we found a significant difference between public and private insurance as well as public and no insurance. Further, for race, which also had three categorical options, we found a significant difference between public and private insurance as well as private and no insurance. See Table 1 for details about the response options of each sample characteristic.

For sample characteristics with two response options we also found some significant differences. Youth who resided in a metropolitan statistical area, defined as one or more counties that contain a community of 50,000 people or more with adjacent counties from which people commute into the larger community (U.S. Census Bureau, 2018), were significantly more likely to have public (14.5%) versus private (10.9%) insurance and no (14.7%) insurance versus private (10.9%) insurance. Compared to youth whose primary language was English, youth whose primary language was other than English were significantly more likely to have public (22.5%) versus private (5%) insurance, no (31.2%) versus public (22.5%) insurance, and no (31.2%) versus private (5%) insurance. Youth with special health care needs were more likely to have public (25%) versus private (16.5%) insurance, public (25%) versus no (12.7%) insurance, and private (16.5%) versus no (12.7%) insurance.

However, not all sample characteristics differed statistically by insurance type and status. For example, no significant difference was found between gender and insurance type and status; the percentage of females for public, private, and no insurance was 49.2%, 48.4%, and 54.1%, respectively.

Table 1. *Sample Demographics*

	Unweighted number (Weighted %)				p values[a]		
	Total Sample (n=40,723)	Public Insurance (n=7,542)	Private Insurance (n=31,780)	No Insurance (n=1,401)	Public vs. Private	Public vs. None	Private vs. None
Gender							
Female	19,769 (49.0)	3,628 (49.2)	15,433 (48.4)	708 (54.1)	0.56	0.12	0.06
Male	20,954 (51.0)	3,914 (50.8)	16,347 (51.6)	693 (45.9)			
Child's age							
0-5	11,594 (31.9)	2,322 (33.7)	8,958 (31.3)	314 (28.7)	<.001*	<.05*	0.5
6-11	12,098 (33.9)	2,470 (36.0)	9,213 (32.7)	415 (34.6)			
12-17	17,031 (34.1)	2,750 (30.4)	13,609 (36.0)	672 (36.7)			
Race/Ethnicity							
Hispanic	4,998 (26.8)	1,730 (40.0)	2,916 (17.6)	352 (46.0)	<.001*	0.071	<.001*
Non-Hispanic black	2,548 (13.6)	1,066 (21.3)	1,329 (9.0)	153 (17.8)			
Non-Hispanic white	33,177 (59.6)	4,746 (38.8)	27,535 (73.4)	896 (36.2)			
Family structure							
Two parent home	32,869 (75.9)	4,044 (57.5)	27,868 (86.9)	957 (65.0)	<.001*	<.01*	<.001*
One parent home	4,613 (15.3)	2,004 (26.6)	2,389 (8.8)	220 (18.8)			
Other	2,614 (8.8)	1,325 (15.9)	1,121 (4.3)	168 (15.3)			
Poverty level							
<100%	3,701 (20.6)	2,409 (42.8)	950 (6.0)	342 (44.2)	<.001*	<.05*	<.001*
100-199%	6,069 (21.3)	2,895 (36.7)	2,801 (12.3)	373 (27.1)			
200-399%	12,733 (27.4)	1,676 (15.7)	10,646 (34.8)	411 (18.8)			
400%+	18,220 (30.6)	562 (4.7)	17,383 (46.9)	275 (9.8)			
Caregiver highest level of education							
<High school grad.	815 (8.6)	523 (17.5)	132 (1.6)	160 (29.4)	<.001*	<.001*	<.001*
High school grad.	4,820 (19.9)	2,235 (35.7)	2,243 (10.8)	342 (31.6)			
>High school grad.	34,214 (71.5)	4,519 (46.8)	28,871 (88.2)	824 (38.8)			
Primary language							
Other than English	1,795 (12.4)	835 (22.5)	752 (5.0)	208 (31.2)	<.001*	<.01*	<.001*
MSA[b]	4,610 (12.4)	1,319 (14.5)	3,074 (10.9)	217 (14.7)	<.001*	0.95	<.05*
Has special health care needs	9,139 (19.1)	2,356 (25.0)	6,506 (16.5)	277 (12.7)	<.001*	<.001*	<.05*

*Indicated significant at a p-value less than .05.
[a]Weighted chi-square statistic. [b]MSA refers to metropolitan statistical area.

Table 2 presents the prevalence of unmet health care needs by public, private, and no health insurance among U.S. youth in 2016. As shown, 2.6% of the total sample had unmet health care needs. Across the various types of health care needs, dental care was the most prevalent unmet need (1.5%) followed by both mental health services (0.8%) and medical health care (0.8%). Further, 3.3% of youth with public insurance and 1.4% of youth with private health insurance reported overall unmet needs. Regardless of type of insurance, across the various types of health care needs, the most common unmet need was dental followed by mental health services. Approximately 10% of youth with no insurance coverage had unmet needs, with 8% reporting an unmet need for dental care and 4.3% forgoing needed medical care.

Table 2. *Prevalence of Unmet Health Care Needs Among U.S. Youth, 2016*

	Unweighted number (Weighted %)			
	Total Sample (n=40,723)	Public Insurance (n=7,542)	Private Insurance (n=31,780)	No Insurance (n=1,401)
Forgone Health Care				
Unmet need	834 (2.6)	288 (3.3)	415 (1.4)	131 (10.1)
Received needed care	39,802 (97.4)	7,224 (96.7)	31,317 (98.6)	1,261 (89.9)
Medical Health Care				
Unmet need	234 (0.8)	64 (0.9)	107 (0.4)	63 (4.3)
Received needed care	40,390 (99.2)	7,444 (98.1)	31,617 (99.6)	1,329 (95.7)
Dental Care				
Unmet need	377 (1.5)	134 (1.9)	160 (0.7)	83 (8.0)
Received needed care	38,750 (98.5)	7,041 (98.1)	30,439 (99.3)	1,270 (92.0)
Vision				
Unmet need	129 (0.5)	46 (0.6)	47 (0.2)	36 (3.5)
Received needed care	40,495 (99.5)	7,462 (99.4)	31,677 (99.8)	1,356 (96.5)
Hearing				
Unmet need	49 (0.3)	18 (.4)	19 (0.1)	12 (1.4)
Received needed care	40,575 (99.7)	7,490 (99.6)	31,705 (99.9)	1,380 (98.6)
Mental Health Care				
Unmet need	257 (0.8)	92 (1.0)	141 (0.5)	24 (1.7)
Received needed care	34,801 (99.2)	6,329 (99.0)	27,236 (99.5)	1,236 (98.3)
Other Health Care				
Unmet need	113 (0.4)	47 (0.6)	51 (0.2)	15 (.7)
Received needed care	40,511 (99.6)	7,461 (99.4)	31,673 (99.8)	1,377 (99.3)

Table 3 presents the probit results examining differences in unmet health care needs by insurance type and coverage. As shown, youth with public versus private insurance had no significant difference in any unmet health care needs. For example, youth who have forgone health care were equally likely to have public versus private insurance (B = .04, 95% CI [-.142, .227], p-value = .65). Similarly, no significant difference was found between youth with public versus private insurance for medical health care (B = -.01, 95% CI [-0.304, 0.281], p-value = .94).

Table 3. *Differences in unmet needs by insurance type and status among U.S. youth in 2016*

	Public vs. Private Insurance			Public vs. No Insurance			Private vs. No Insurance		
Unmet Need	B	*p*	95% CI	B	*p*	95% CI	B	*p*	95% CI
Forgone Health Care[a,b]	0.04	0.65	[-0.142, 0.227]	-0.67	<0.001*	[-0.893, -0.445]	-0.72	<0.001*	[-1.055, -0.381]
Unmet Vision Care[a]	0.17	0.38	[-0.212, 0.561]	-0.74	<0.001*	[-1.065, -0.422]	-0.71	<.01*	[-1.173, -0.251]
Unmet Other Health Care[a]	0.11	0.59	[-0.280, 0.492]	-0.17	0.305	[-0.495, 0.155]	-0.64	<.01*	[-1.053, -0.219]
Unmet Medical Health Care[a]	-0.01	0.94	[-0.304, 0.281]	-0.75	<0.001*	[-1.012, -0.477]	-0.72	<0.001*	[-1.074, -0.36]
Unmet Hearing Care[c]	-0.05	0.87	[-0.658, 0.556]	-0.62	<.05*	[-1.196, -0.049]	-0.89	<0.001*	[-1.317, -0.463]
Unmet Dental Care[a]	0.13	0.30	[-0.120, 0.384]	-0.74	<0.001*	[-1.000, -0.469]	-0.75	<.01*	[-1.232, -0.268]
Unmet Mental Health Care [a]	-0.1	0.45	[-0.325, 0.143]	-0.35	<.05*	[-0.665, -0.027]	-0.5	<.01*	[-0.786, -0.218]

[a] Model controlled for race/ethnicity, income, geographic region, and special health care needs.
[b] Health care need refers to any health care need (e.g., medical, dental, vision).
[c] Models for private vs. public and public vs. no insurance controlled for race/ethnicity, income, geographic region, and special health care needs. Model for private vs. no insurance controlled only for children with special health care needs due to the small cell size.
*p<.05, **p<.01, ***p<.001

Youth with no insurance were significantly more likely to have six of the seven unmet needs than youth with public health insurance. For example, youth with no insurance coverage were more likely than youth with public health insurance to have foregone care (B = -.67, 95% CI [-0.893, -0.445], p-value = <.001). Similarly, unmet needs for medical care were more likely for youth with no health insurance than youth with public health insurance (B = -.75, 95% CI [-1.012, -0.477], p-value = <.001). The only unmet need that did not differ significantly for youth without health insurance from youth with public insurance was "other" unmet need, which measured miscellaneous health care needs that did not fit the predetermined categories.

Youth with no insurance were significantly more likely than youth with private insurance to have unmet needs in all reported categories, including in the miscellaneous other health care category. Youth without insurance were more likely than youth with private insurance to forgo needed care (B = -.72, 95% CI [-1.055, -0.381], p-value = <.001) and experience an unmet medical need (B = -.72, 95% CI [-1.074, -0.36], p-value = <.001).

Discussion

The present study examined youths' unmet needs by insurance coverage and status, six years post-ACA enactment. Overall, the majority of U.S. youth had private, followed by public, health insurance, with a relatively small percentage of youth not having any insurance coverage. Among youth with either private or public insurance, few caregivers reported that their child had an unmet health care need and no significant differences were found between unmet needs and type of insurance. This finding confirms some prior research (Devoe et al., 2011), yet is contrary to other studies that did find a discrepancy between coverage types (e.g., DeRigne et al., 2009; Kreider et al., 2016). Similar to prior research, we found unmet health care needs were more likely among youth without health insurance coverage than youth with either public or private insurance (DeRigne et al., 2009; Miller et al., 2013).

Debates surrounding health insurance policy persist as liberal and conservative policymakers argue that public or private insurance is the preferable solution to the health care issues faced by individuals in the U.S. (Levitt, 2017b). Our research indicates this argument is inconsequential – both private and public insurance appear to be able to meet the needs of U.S. youth who have access to coverage. Indeed, we found no significant difference in unmet needs between youth with public and youth with private insurance. Moreover, youth with health insurance, regardless of the source, were more likely to have their health care needs met than youth without health insurance coverage.

Our findings suggest that increased access to health insurance may be a crucial factor in addressing youths' unmet health care needs. Therefore, important next steps include policy solutions that can increase the accessibility of health insurance for all youth. The ACA has increased access to both private and public health insurance across the U.S. (Blumberg et al., 2018); therefore, we posit that the ACA may be a valuable tool in meeting youths' health care needs. To reach the remaining population of uninsured youth in the U.S., our findings suggest further expansion of the ACA to support increased access to both the private and public insurance marketplaces. Further, because insurance coverage

appears to be a crucial factor in meeting youths' health care needs, our findings may offer support for a fully-public, single-payer health care system. In particular, a policy that ensures health insurance for all youth could eliminate the disparities between youth with no insurance and youth with insurance, thus more effectively meeting all youths' needs. However, as public and private insurance did not differ in their ability to meet youths' needs, our findings do not support for one type of insurance coverage over another.

Although this study contributes to the national debate on health insurance, further research is needed. Future studies should analyze youth who experience a gap in health insurance to examine how these gaps impact health care needs (Federico et al., 2007). Research is also needed to understand why a small percentage of youth with health insurance, either public or private, had unmet needs. Additionally, research needs to replicate the findings in this study both with later versions of this dataset to establish trends and using other nationally representative datasets such as the *National Health Interview Survey* (Centers for Disease Control and Prevention, 2019) and the *Fragile Family and Child Well-Being Study* (Princeton University, 2019). Lastly, because Hispanic and non-Hispanic black youth are less likely to be covered by health insurance than non-Hispanic white youth (Ortega et al., 2018), additional studies should examine differences in unmet health care needs and health insurance coverage by race/ethnicity.

Limitations

Although this study contributes to current research by providing an updated view of the health insurance status of youth in the U.S., it has several limitations. The cross-sectional nature of this study precludes comparisons across time, making it impossible to determine exactly which policies have had the most impact on access to health insurance. Further, because of changes to data collection procedures, results from this study cannot be compared to previous versions of the National Survey of Children's Health (CAMHI, 2018). Coding the insurance variable into a private versus public dichotomy ignores the potential differences between individual insurance companies. Moreover, the sample of U.S. youth used in this study excludes institutionalized youth and youth not identified as Hispanic, non-Hispanic white, or non-Hispanic black.

Conclusion

In sum, the purpose of this study was to address ongoing debates surrounding health policy, particularly access to health insurance and its influence on U.S. youth, by estimating and comparing youths' unmet health care needs by health insurance type and status. Results revealed no significant difference in unmet needs for youth with public versus private insurance but did support prior research in identifying differences between youth with and without insurance coverage. Results from this study can inform future policy advocacy efforts. In particular, our findings suggest that increased access to insurance coverage, regardless of type, may be a major factor in reducing youths' unmet health care needs; therefore, expanding access for all youth should be a priority for social work advocacy.

References

Bagley, N. (2016). A legal setback for the Affordable Care Act. *New England Journal of Medicine*, *374*(24), 2304-2307. doi: https://doi.org/10.1056/nejmp1606670

Blair, L. M. (2016). Publicly-available data and pediatric mental health: Leveraging big data to answer big questions for children. *Journal of Pediatric Health Care, 30*(1), 84-87. doi: https://dx.doi.org/10.1016%2Fj.pedhc.2015.08.001

Blumberg, L. J., Holahan, J., Karpman, M., & Elmendorf, C. (2018). *Characteristics of the remaining uninsured: An update*. Washington, D.C.: Urban Institute. Retrieved from https://www.urban.org/research/publication/characteristics-remaining-uninsured-update/view/full_report

Butler, A. M., Weller, B., & Titus, C. (2015). Relationships of shared decision making with parental perceptions of child mental health functioning and care. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(6), 767-774. doi: https://doi.org/10.1007/s10488-014-0612-y

Centers for Disease Control and Prevention. (2019). *About the National Health Interview Survey*. Retrieved from https://www.cdc.gov/nchs/nhis/about_nhis.htm

Child and Adolescent Health Measurement Initiative [CAHMI], Data Resource Center for Child and Adolescent Health. (2018). *2016 National Survey of Children's Health: Child and Family Health Measures and Subgroups, SPSS Codebook, Version 2.0*. Retrieved from www.childhealthdata.org

Clemans-Cope, L., Kenney, G., Waidmann, T., Huntress, M., & Anderson, N. (2015). How well is CHIP addressing health care access and affordability for children? *Academic Pediatrics*, *15*(3), S71-S77. doi: https://doi.org/10.1016/j.acap.2015.02.007

Crone, S. F., & Finlay, S. (2012). Instance sampling in credit scoring: An empirical study of sample size and balancing. *International Journal of Forecasting, 28*(1), 224-238. doi: https://doi:10.1016/j.ijforecast.2011.07.006

DeRigne, L. A., Porterfield, S., & Metz, S. (2009). The influence of health insurance on parent's reports of children's unmet mental health needs. *Maternal and Child Health Journal*, *13*(2), 176-186. doi: https://doi.org/10.1007/s10995-008-0346-0

Devoe, J. E., Tillotson, C. J., Wallace, L. S., Selph, S., Angier, H., Devoe, J. E., … Angier, H. (2011). Comparing types of health insurance for children: A public option versus a private option. *Medical Care*, *49*(9), 818-827. doi: https://doi.org/10.1097/mlr.0b013e3182159e4d

Eltorai, A. E. M., & Eltorai, M. I. (2017). The risk of expanding the uninsured population by repealing the Affordable Care Act. *Journal of the American Medical Association*, *317*(14), 1407-1408. doi: https://doi.org/10.1001/jama.2017.2042

Federico, S. G., Steiner, J. F., Beaty, B., Crane, L., & Kempe, A. (2007). Disruptions in insurance coverage: Patterns and relationship to health care access, unmet need, and utilization before enrollment in the state Children's Health Insurance Program.

Pediatrics, *120*(4), e1009-e1016. doi: https://doi.org/10.1542/peds.2006-3094

Feldman, H. M., Buysse, C. A., Hubner, L. M., Huffman, L. C., & Loe, I. M. (2015). Patient Protection and Affordable Care Act of 2010 and children and youth with special health care needs. *Journal of Developmental and Behavioral Pediatrics*, *36*(3), 207-217. doi: https://doi.org/10.1097/DBP.0000000000000151

Flores, G., Lin, H., Walker, C., Lee, M., Currie, J. M., Allgeyer, R., … Massey, K. (2017). The health and healthcare impact of providing insurance coverage to uninsured children: A prospective observational study. *BioMed Central Public Health*, *17*(1), 1-14. doi: https://doi.org/10.1186/s12889-017-4363-z

Fry-Bowers, E. K. (2015). The ACA and insurance implications for children with special health care needs. *Journal of Pediatric Health Care, 29,* 212-215. doi: https://doi.org/10.1016/j.pedhc.2014.11.002

Glewwe, P., West, K. L., & Lee, J. (2018). The impact of providing vision screening and free eyeglasses on academic outcomes: Evidence from a randomized trial in Title I elementary schools in Florida. *Journal of Policy Analysis and Management*, *37*(2), 265-300. doi: https://doi.org/10.1002/pam.22043

Guerrero, A. D., Zhou, X., & Chung, P. J. (2018). How well is the medical home working for Latino and Black children? *Maternal and Child Health Journal*, *22*(2), 175-183. doi: https://doi.org/10.1007/s10995-017-2389-6

Hox, J. J., & Maas, C. J. M. (2001). The accuracy of multilevel structural equation modeling with pseudobalanced groups and small samples. *Structural Equation Modeling: A Multidisciplinary Journal, 8*(2), 157-174. doi: https://doi.org/10.1207/s15328007sem0802_1

Kaiser Family Foundation. (2019). *Status of state action on the Medicaid expansion decision*. San Francisco, CA. Retrieved from www.kff.org

Karaca-Mandic, P., Choi-Yoo, S. J., Lee, J., & Scal, P. (2014). Family out-of-pocket health care burden and children's unmet needs or delayed health care. *Academic Pediatrics*, *14*(1), 101-108. doi: https://doi.org/10.1016/j.acap.2013.10.005

Kreider, A. R., French, B., Aysola, J., Saloner, B., Noonan, K. G., & Rubin, D. M. (2016). Quality of health insurance coverage and access to care for children in low-income families. *JAMA Pediatrics*, *170*(1), 43-51. doi: https://doi.org/10.1001/jamapediatrics.2015.3028

Levitt, L. (2017a). Is the Affordable Care Act imploding? *Journal of the American Medical Association*, *317*(20), 2051-2052.

Levitt, L. (2017b). What might an ACA replacement plan look like? *Journal of the American Medical Association*, *317*(8), 795-796. doi: https://doi.org/10.1001/jama.2017.0661

Lindly, O. J., Chavez, A. E., & Zuckerman, K. E. (2016). Unmet health services need among US children with developmental disabilities: Associations with family

impact and child functioning. *Journal of Developmental and Behavioral Pediatrics*, *37*(9), 712-723. doi: https://doi.org/10.1097/DBP.0000000000000363

Miller, J. E., Nugent, C. N., Gaboda, D., & Russell, L. B. (2013). Reasons for unmet need for child and family health services among children with special health care needs with and without medical homes. *PLoS ONE*, *8*(12), 1-11. doi: https://doi.org/10.1371/journal.pone.0082570

Mulligan, J. (2017). The problem of choice: From the voluntary way to Affordable Care Act health insurance exchanges. *Social Science and Medicine*, *181*, 34-42. doi: https://doi.org/10.1016/j.socscimed.2017.03.055

Muthén, L. K., & Muthén, B. O. (1998-2018). *Mplus user's guide* (8th ed.). Los Angeles, CA: Authors.

Ortega, A. N., McKenna, R. M., Chen, J., Alcalá, H. E., Langellier, B. A., & Roby, D. H. (2018). Insurance coverage and well-child visits improved for youth under the Affordable Care Act, but Latino youth still lag behind. *Academic Pediatrics*, *18*(1), 35-42. doi: https://doi.org/10.1016/j.acap.2017.07.006

Princeton University. (2019). *About the Fragile Families and Child Well-Being Study*. Retrieved from https://fragilefamilies.princeton.edu/about

U.S. Census Bureau. (2018). *2016 National Survey of Children's Health methodology report.* Washington, DC. Retrieved from www.childheathdata.org

U.S. House of Representatives v. Burwell, 185 F. Supp. 3d 165 (D.D.C. 2016).

Vittinghoff, E., & McCulloch, C. E. (2006). Relaxing the rule of ten events per variable in logistic and Cox regression. *American Journal of Epidemiology, 165*(6), 710-718. doi: https://doi.org/10.1093/aje/kwk052

Weller, B. E., Blanford, K. L., & Butler, A. M. (2018). Estimated prevalence of psychiatric comorbidities in U.S. adolescents with depression by race/ethnicity, 2011-2012. *Journal of Adolescent Health*, *62*(6), 716-721. doi: https://doi.org/10.1016/j.jadohealth.2017.12.020

Wilensky, G. R. (2019). Medicare for all. *The Milbank Quarterly, 97*(2), 391-394. doi: https://doi.org/10.1111/1468-0009.12389

Zickafoose, J. S., & Davis, M. M. (2013). Medical home disparities are not created equal: Differences in the medical home for children from different vulnerable groups. *Journal of Health Care for the Poor and Underserved*, *24*(3), 1331-1343. doi: https://doi.org/10.1353/hpu.2013.0117

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