

Racial and Ethnic Differences in Access to Care and Service Use for Children with Coverage through Medicaid and the Children's Health Insurance Program

*Genevieve M. Kenney, Christine Coyer,
and Nathaniel Anderson*

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CONTENTS

Executive Summary	1
Methods	4
Results	12
Conclusion	19
Notes	25
References	27

EXECUTIVE SUMMARY

Medicaid and CHIP have come to play an increasingly important role in covering children, particularly among members of certain racial and ethnic minority groups. By 2010, Medicaid and CHIP covered 36 percent of all children and over half of all Hispanic and black children. Increased coverage over the past decade for children under Medicaid and CHIP has been associated with reductions in uninsurance and a narrowing of racial and ethnic differentials in uninsured rates. This paper examines racial and ethnic patterns with respect to measures of health care access, quality, and service use among children covered by Medicaid and CHIP, drawing on data from three household surveys. Understanding how well Medicaid and CHIP are providing access to care for black and Hispanic children is important, because so many rely on public health insurance programs. With full implementation of the Affordable Care Act, more are expected to rely on them in the future.

While there are some exceptions, the three groups of children served by Medicaid we examine in this analysis (i.e., white, black, and Hispanic children) appear to have high levels of access to care. A high proportion of children covered by Medicaid/CHIP in all three groups reportedly have had a health care provider visit in the prior year, a usual place they go for health care, and a doctor who usually or always listens. These findings are consistent with recent analysis showing that, with a few exceptions, children with Medicaid/CHIP coverage experienced access and use comparable to children with employer-sponsored coverage.

Black and Hispanic children with Medicaid/CHIP coverage may have more problems accessing care, relative to their white counterparts, in two areas: specialty and mental health care. This analysis finds that, of children covered by Medicaid and CHIP, both Hispanic and black children are substantially

less likely than white children to receive these services, even taking into account observed differences in health care needs as reported by their families. This suggests that specialty and mental health care are being provided at different rates to Hispanic and black children relative to white children who have the same reported health needs. A priori, it is not clear whether these services are being underprovided to black and Hispanic children or overprovided to white children; nor is it clear if these differentials have consequences for children's health and functioning. However the magnitude of these differences indicates that further study is merited to explore both the causes and the potential implications of these patterns. To the extent that these differences reflect an underprovision of mental health and specialty services to Hispanic and black children covered by Medicaid/CHIP, they could have adverse consequences for social and emotional development and performance in school.

More analysis is needed to assess how patterns of care differ for children covered in different state Medicaid and CHIP programs and whether there are systematic racial and ethnic differences in access to care across states. Moreover, given anticipated increases in Medicaid and CHIP coverage it will be important to track changes in access to care and attendant consequences for health and functioning among covered children, particularly those in minority groups that disproportionately receive public coverage.

RACIAL AND ETHNIC DIFFERENCES IN ACCESS TO CARE AND SERVICE USE FOR CHILDREN WITH COVERAGE THROUGH MEDICAID AND THE CHILDREN'S HEALTH INSURANCE PROGRAM

Eligibility for public health insurance coverage has expanded dramatically for children over the past two decades. Since the 1980s, all states have expanded their public health insurance programs for children through both Medicaid and the Children's Health Insurance Program (CHIP); currently, half of all states offer coverage to children with incomes up to 250 percent of the federal poverty level or higher (Heberlein et al. 2012). Medicaid was expanded for children beginning in the late 1980s, and CHIP was initially created in 1997 and reauthorized in 2009 through the Children's Health Insurance Program Reauthorization Act (CHIPRA). In addition to these eligibility expansions, states have adopted policy and programmatic changes aimed at improving enrollment and retention among eligible children (Kenney and Chang 2004; Kenney and Yee 2007).

As a consequence, Medicaid and CHIP have come to play an increasingly important role in covering children, particularly among certain racial and ethnic minority groups. By 2010, Medicaid and CHIP covered over a third of all children and over half of all Hispanic and black children (Coyer and Kenney 2013). Increased coverage for children under Medicaid and CHIP has been associated with reductions in uninsurance over the past decade and narrowing racial and ethnic differentials in uninsurance rates (Blavin, Holahan, Kenney, and Chen 2012; Blavin, Holahan, Kenney, and McGrath 2012). Over the same period, uninsurance was rising among parents and other nonelderly adults (Blavin, Holahan, Kenney, and Chen 2012). Looking ahead to full implementation of the Affordable Care Act (ACA), Medicaid and CHIP are expected to play an even larger role in covering children. Coverage under Medicaid/CHIP is projected under the ACA to increase by 12.8 percent among children, with even greater increases projected for Hispanic and black children (Kenney et al. 2011).

This paper examines racial and ethnic patterns for several measures of health care access, quality, and service use among the children covered by Medicaid and CHIP, drawing on data from three household surveys. Understanding how well Medicaid and CHIP are providing access to care for black and Hispanic children is important because so many currently rely on public health insurance programs, and more are expected to rely on them in the future.

Past studies have found that black and Hispanic children are more likely than white children to have problems accessing health care,¹ but fewer studies have considered how access differs by race and ethnicity for children covered through Medicaid or CHIP (Berdahl et al. 2010; Weech-Maldonado et al. 2003). This analysis adds to prior literature by assessing (1) whether surveys find consistent racial and ethnic differences in Medicaid/CHIP access and service use and (2) whether these differences hold up when controlling for racial and ethnic variation in characteristics that can affect access and service use.

The analytic approach used in this paper derives from the Institute of Medicine (IOM) framework developed for assessing racial and ethnic disparities in health care access (IOM 2002). We consider the extent to which black-white and Hispanic-white differentials in access to care and service use cannot be explained by differences in health status and in other factors that should affect the need for care. We further examine how socioeconomic factors may contribute to racial and ethnic differences in access to care and consider the extent to which differences in primary language and citizenship status contribute to observed differences in health care access.

Black, Hispanic, and white children differ in several factors that may affect their access to care and service use (Coyer and Kenney 2013). For example, white children with Medicaid/CHIP coverage are significantly less likely to live in a metropolitan statistical area (MSA) than black or Hispanic children with Medicaid/CHIP (approximately 65 compared with 86 and 92 percent, respectively). In addition, among children with Medicaid/CHIP coverage, white children have parents with higher levels of education and family incomes. Moreover, earlier studies have found that access for Hispanic children varies with the primary language spoken at home and citizenship status (Flores and Tomany-Korman 2008a; Waidmann and Ku 2003).

The following section describes the data and methods used to assess service use and access patterns for children covered by Medicaid and CHIP. Subsequent sections present results and discuss their implications.

Methods

Data

The analysis draws on data from three national household surveys: the National Health Interview Survey (NHIS), the Medical Expenditure Panel Survey (MEPS), and the National Survey of Children's Health (NSCH). The NHIS is designed to collect health information on the U.S. civilian noninstitutionalized population through personal household interviews; it is administered by the National Center for Health Statistics within the Centers for Disease Control and Prevention. The MEPS Household Component (HC) collects information on health care use and spending among the civilian noninstitutionalized population, also through personal household interviews, and is administered in five rounds over a two-year period by the Agency for Healthcare Research and Quality. The NSCH collects information on physical, emotional, and behavioral indicators of health and measures children's experiences with the health care system through a random-digit-dialed telephone interview, which is a module of the State

and Local Area Integrated Telephone Survey program sponsored by the Maternal and Child Health Bureau of the Health Resources and Services Administration.

The NHIS Sample Child Core component and the NSCH collect detailed information on one randomly selected child in each household, whereas the MEPS provides information on all children within the household. The households selected for each panel of the MEPS-HC are drawn from a subsample of households participating in the previous year's NHIS. For each survey, responses are collected from a single adult (typically a parent or guardian) who is familiar with the child's health and health care.

We restrict our samples to children age 0 to 17 with full-year health insurance coverage. The MEPS asks respondents about health insurance coverage status and coverage type during the previous year. On the MEPS, the Medicaid/CHIP population is defined as children with full-year Medicaid/CHIP or other public coverage. The NHIS and the NSCH ask about health insurance coverage status during the previous year and coverage type at the time of the survey. Therefore, on the NHIS and NSCH, the Medicaid/CHIP populations are defined as children with full-year health insurance coverage who have Medicaid/CHIP at the time of the survey. In the NHIS, Medicaid/CHIP includes Medicaid and CHIP, other government or public coverage, and private coverage either partially paid or obtained through the government. The NSCH asks a single question about both Medicaid and CHIP based on state-specific program names for each type of coverage. Children who report more than one type of health insurance coverage at the time of the survey are assigned to a single coverage category based on a hierarchy of employer-sponsored insurance, Medicaid/CHIP, and other coverage, with the exception of children dually enrolled in Medicaid and Medicare who are categorized as having other coverage.

We focus on three racial and ethnic subgroups: white non-Hispanic children (i.e., white); black non-Hispanic children (i.e., black); and Hispanic children. Guidelines for collecting racial and ethnic information on national surveys are set by the Office of Management and Budget (OMB). The OMB standards allow respondents to indicate more than one race group. On the NHIS and the MEPS, "other race" and "unspecified multiple race" are treated as missing and race is imputed for those cases. If race and ethnicity are not reported on the MEPS, the data are obtained from the NHIS. On the NSCH, "other race" responses are backcoded where possible based on a verbatim response. Due to small sample sizes on the NHIS and the MEPS and to restrictions on publicly available data on the NSCH, we do not provide separate analysis of the children who report more than one race ("multiple race") or of children who report "other race," including Asian, American Indian or Alaska Native, and Native Hawaiian or Other Pacific Islander.

We assess a range of access and use measures from the three household surveys. Table 1 describes the measures and provides the associated question wording from each survey. Most measures are available on all three surveys or on two of the three surveys, though not always defined the same way. The exceptions are the measures that describe the accessibility and characteristics of the usual source of care, which are available only on the MEPS. We examine whether the child has a usual place to go when sick or needing advice about his/her health and what kind of place that is (i.e., a doctor's office or health maintenance organization [HMO]). On all three surveys, we recode those who report not going to one place most often or relying on the emergency room as not having a usual source of care. We also assess whether the usual source of care has night or weekend hours and whether the usual source of care is difficult to get to or to contact over the telephone or after hours. We examine unmet needs, delays in getting needed health care, and health care use over the previous 12 months, including any office or outpatient visit; any preventive or well-child visit; any visit to a specialist, a dentist, or a mental health professional; and emergency room visits. Finally, we assess the following patient-centered measures derived from the

TABLE 1. Access and Service Use Measures from the National Health Interview Survey, the Medical Expenditure Panel Survey, and the National Survey of Children's Health

Measure	Descriptions
Had a usual source of care (USC), past 12 months	NHIS: =1 if the person had a place (excluding "hospital emergency room" and "doesn't go to one place most often") he/she usually goes when sick or needing advice about his/her health (age 0 to 17) MEPS: =1 if the person had a particular medical person, doctor's office, clinic, health center, or other place he/she would usually go if sick or needing advice about his/her health (excluding "hospital emergency room" and "more than 1 usual source of care") (0 to 17) NSCH: =1 if the person had a place he/she could go when sick or needing advice (0 to 17)
USC is doctor's office or HMO	NHIS: =1 if the person had doctor's office or HMO as his/her usual source of care, conditional on having a usual source of care (0 to 17) MEPS: =1 if the person had an office (not a hospital) as his/her usual source of care, conditional on having a usual source of care (0 to 17) NSCH: =1 if the person had doctor's office as his/her usual source of care, conditional on having a usual source of care (0 to 17)
USC has night/weekend hours	MEPS: =1 if the usual source of care has night or weekend hours, conditional on having a usual source of care (excluding "hospital emergency room") (0 to 17)
USC is difficult to access by travel	MEPS: =1 if it was very difficult or somewhat difficult to get to the usual source of care, conditional on having a usual source of care (excluding "hospital emergency room") (0 to 17)
USC is difficult to access by phone	MEPS: =1 if it was very difficult or somewhat difficult to contact the usual source of care during regular business hours over the telephone about a health problem, conditional on having a usual source of care (excluding "hospital emergency room") (0 to 17)
USC is difficult to access after hours	MEPS: =1 if it was very difficult or somewhat difficult to contact the usual source of care after regular hours in case of urgent medical needs, conditional on having a usual source of care (excluding "hospital emergency room") (0 to 17)
Any delayed or unmet need for care, past 12 months	MEPS: =1 if during the past 12 months, the person was unable to get or delayed receiving necessary medical care, tests, or treatments; dental care, tests, or treatments; or prescription medication (0 to 17) NSCH: =1 if during the past 12 months, the person was unable to get or delayed receiving necessary medical, dental, or mental care (0 to 17)
Any unmet need because of costs, past 12 months	NHIS: =1 if during the past 12 months, the person had any unmet need for medical care, dental care, prescription drugs, mental health care or counseling, or vision care because of costs (0 to 17) MEPS: =1 if during the past 12 months, the person had unmet need for medical care, dental care, or prescription drugs because he/she "could not afford care"
Any delayed medical care, past 12 months	NHIS: =1 if during the past 12 months, the person delayed medical care because he/she was worried about the cost, he/she couldn't get an appointment soon enough, the clinic/doctor's office wasn't open when he/she could get there, the wait was too long to see the doctor, he/she didn't have transportation, or he/she couldn't get through on the telephone (0 to 17) MEPS: =1 if during the past 12 months, the person delayed necessary medical care, tests, or treatments; dental care, tests, or treatments; or prescription medication (0 to 17)
Any delayed medical care because of costs, past 12 months	NHIS: =1 if during the past 12 months, the person delayed medical care because of worry about the cost (0 to 17) MEPS: =1 if during the past 12 months, the person delayed necessary medical care, tests, or treatments; dental care, tests, or treatments; or prescription medication because he/she "could not afford care" (0 to 17)

TABLE 1. Access and Service Use Measures from the National Health Interview Survey, the Medical Expenditure Panel Survey, and the National Survey of Children's Health (Continued)

Measure	Descriptions
Any office visit, past 12 months	NHIS: =1 if during the past 12 months, the person saw a doctor or other health care provider about his/her health at a doctor's office, a clinic, or some other place, excluding those times he/she was hospitalized overnight, visits to ED, telephone calls, or dental visits (0 to 17) MEPS: =1 if during the past 12 months, the person saw a doctor or other health care provider about his/her health at a doctor's office, a clinic, or some other place, excluding those times he/she was hospitalized overnight, visits to ED, telephone calls, or dental visits (0 to 17)
Any preventive care visit, past 12 months	NSCH: =1 if during the past 12 months, the person saw a doctor, nurse, or other health care provider for preventive medical care, such as a physical exam or well-child check-up (0 to 17)
Any well-child visit, past 12 months	NHIS: =1 if during the past 12 months, the child received a well-child checkup (0 to 17)
Any dental visit, past 12 months	NHIS: =1 if during the past 12 months, the person saw or talked to a dentist, such as an orthodontist, an oral surgeon, or any other dental specialist, as well as a dental hygienist (2 to 17) MEPS: =1 if during the past 12 months, the person saw or talked to a dentist, such as an orthodontist, an oral surgeon, or any other dental specialist, as well as a dental hygienist (2 to 17) NSCH: =1 if during the past 12 months, the person saw a dentist for preventive dental care such as a check-up or dental cleaning (0 to 17)
Any specialist visit, past 12 months	NHIS: =1 if during the past 12 months, the person saw or talked to a medical doctor who specializes in a particular medical disease or problem, including an obstetrician/gynecologist (0 to 17) MEPS: =1 if during the past 12 months, the person saw or talked to a medical doctor who specializes in a particular medical disease or problem, including an obstetrician/gynecologist (0 to 17) NSCH: =1 if during the past 12 months, the person saw a specialist such as a surgeon, heart doctor, allergy doctor, or skin doctor (other than a mental health professional) (0 to 17)
Any mental health professional visit, past 12 months	NHIS: =1 if during the past 12 months, the person saw or talked to a mental health professional such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker (2 to 17) MEPS: =1 if during the past 12 months, the person saw or talked to a mental health professional such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker (2 to 17) NSCH: =1 if during the past 12 months, the person received any treatment from a mental health professional such as a psychiatrist, a psychologist, a psychiatric nurse, or a clinical social worker (2 to 17)
Any emergency department (ED) visit, past 12 months	NHIS: =1 if during the past 12 months, the person went to a hospital emergency department about his/her health, including emergency department visits that resulted in a hospital admission (0 to 17) MEPS: =1 if during the past 12 months, the person went to a hospital emergency department about his/her health, including emergency department visits that resulted in a hospital admission (0 to 17)
Two or more ED visits	NHIS: =1 if during the past 12 months, the person went to a hospital emergency department two or more times about his/her health, including emergency department visits that resulted in a hospital admission (0 to 17) MEPS: =1 if during the past 12 months, the person went to a hospital emergency department two or more times about his/her health, including emergency department visits that resulted in a hospital admission (0 to 17)

(continued)

TABLE 1. *Access and Service Use Measures from the National Health Interview Survey, the Medical Expenditure Panel Survey, and the National Survey of Children's Health (Continued)*

Measure	Descriptions
Three or more ED visits	NHIS: =1 if during the past 12 months, the person went to a hospital emergency department three or more times about his/her health, including emergency department visits that resulted in a hospital admission (0 to 17) MEPS: =1 if during the past 12 months, the person went to a hospital emergency department three or more times about his/her health, including emergency department visits that resulted in a hospital admission (0 to 17)
Doctor usually listens carefully	MEPS: =1 if doctors or other health providers usually or always listened carefully to the parent, conditional on having at least one visit to a doctor's office or clinic for health care (1 to 17) NSCH: =1 if during the past 12 months, doctors or other health providers always or usually listened carefully (1 to 17)
Doctor usually spends enough time with child	MEPS: =1 if doctors or other health providers usually or always spent enough time with the child, conditional on having at least one visit to a doctor's office or clinic for health care (1 to 17) NSCH: =1 if during the past 12 months, doctors or other health providers always or usually spent enough time with the child (1 to 17)

Consumer Assessment of Healthcare Providers and Systems: whether the child's doctor always or usually listens carefully or spends enough time with the child.

The analysis relies on two years of pooled data from the NHIS and the MEPS (the 2007 and 2008 MEPS, and the 2008 and 2009 NHIS) due to the small sample sizes of children enrolled in Medicaid/CHIP for the three key analytic subgroups of interest. The 2007 NSCH has a sufficiently large sample of children with Medicaid/CHIP to use a single year of data for national analyses, but the sample sizes are not large enough to analyze racial/ethnic differences by state. The NSCH sample size also allows us to examine whether racial and ethnic access patterns vary for children who live in different areas of the country.

Statistical Analysis

In this analysis, we report both unadjusted and regression-adjusted racial and ethnic differences in access to care and service use. Multiple sets of adjusted estimates are presented based on an approach developed by the Institute of Medicine for assessing access to care (IOM 2002). The first is designed to make the racial/ethnic groups more comparable in their observed health needs, which is accomplished by estimating regression models that control for age, gender, health status, and other information on health conditions. The second is also designed to account and control for other factors, such as socioeconomic characteristics, that differ across the groups and that might also affect access and receipt of health care but that should not directly affect need for care. Therefore the second regression model controls both for characteristics that should affect health needs (the same as those included in the first model) and those that should *not* directly affect health needs but may affect access, such as citizenship status, primary language, family composition, parents' education, household work status, income, and region/state. We also estimate a variant on the second regression model that excludes the citizenship and language variables to assess the extent to which those factors affect the findings for Hispanic children.

Table 2 shows the means for the control variables that are included in the multivariate models estimated for each survey. In all three surveys, we find similar distributions for the samples by health status and age: approximately 74 percent of the sample population reports excellent or very good health, and approximately 23 percent of the sample population is between the ages of 13 and 17 for all three surveys. However, certain characteristics, such as income, vary somewhat; for example, the NSCH has a noticeably smaller proportion of children below the federal poverty level covered by Medicaid/CHIP than the other surveys.

The multivariate models estimated for each survey reflect the IOM approach: (1) controlling for factors that should affect access to health care and then (2) making the racial/ethnic groups more comparable in both their health needs and their socioeconomic characteristics. However, the models vary somewhat across the three surveys to account for differences in the available measures and survey designs.

On the NHIS, the following health-related measures are included in the first regression model: age, sex, health status (good and fair/poor), and diagnosed health conditions (including arthritis, asthma, autism, blindness, cerebral palsy, cystic fibrosis, deafness, diabetes, Down syndrome, congenital heart problems, mental retardation, muscular dystrophy, other developmental delays, and sickle cell anemia). The additional demographic and socioeconomic factors included in the second regression model are citizenship status, household citizenship status (whether the child's health insurance unit, or HIU, includes any noncitizens), whether the household's primary language is not English (the survey being administered in a language other than English is a proxy), parent composition (single mother and other, not a two-parent household), highest level of parental education (less than high school and more than high school), household work status (two full-time workers, part-time-only workers, or unemployed), any fair/poor health status in the HIU, any physical limitations in the HIU, census region, and household income. We also include an indicator for children in an HIU without at least one parent.

On the MEPS, the factors included in the first regression model are age, sex, health status (fair/poor and good), mental health status (fair/poor and good), any health limitations, and diagnosed asthma. The demographic and socioeconomic characteristics included in the second model are citizenship status, household citizenship status (whether the HIU includes any noncitizen), whether the primary language is not English, parent composition (single mother and other, not a two-parent household), highest level of parental education (less than high school and more than high school), household work status (two full-time workers, part-time-only workers, and unemployed), household health status (any members of the HIU in fair/poor health), any health limitations in the HIU, MSA by census region (MSA, Midwest, South, West, MSA and Midwest, MSA and South, MSA and West), and household income. We also include an indicator for children in an HIU without at least one parent.

On the NSCH, the factors included in the first regression model are age, sex, health status (fair/poor and good), dental health status (fair/poor and good), and diagnosed asthma. Additional demographic and socioeconomic characteristics include citizenship status (the respondent not being born in the United States was used as a proxy for noncitizen status), parental citizenship status (any parent not born in the United States), parent composition (single mother and other, not a two-parent household), highest level of parental education (less than high school and more than high school), household employment status (any member not employed full-year), parental health status (any fair/poor), parental mental health status (any fair/poor), MSA by census region (MSA, Midwest, South, West, MSA and Midwest, MSA and South, and MSA and West), and household income. We also included an indicator for children in an HIU without at least one parent and reset their indicators of parent composition, parent education, and parental health and mental health status to zero (nonmissing). Due to the larger sample sizes available

TABLE 2. *Health, Demographic, Socioeconomic, and Residential Characteristics of Children with Full-Year Medicaid/CHIP Coverage (percent)*

	NHIS	MEPS	NSCH
Age			
0 to 1	15.3	14.8	13.7
2 to 3	13.8	12.8	12.0
4 to 6	17.4	17.6	18.2
7 to 12	31.2	32.1	31.6
13 to 17	22.4	22.6	24.5
Sex			
Male	51.0	52.0	50.4
Female	49.0	48.0	49.6
Health status			
Excellent/very good	73.5	75.5	74.4
Good	23.3	20.3	19.1
Fair/poor	3.2	4.2	6.5
Dental health status			
Excellent/very good	NA	NA	53.0
Good	NA	NA	27.3
Fair/poor	NA	NA	12.3
Dental health status missing			7.44
Mental health status			
Excellent/very good	NA	76.5	NA
Good	NA	20.0	NA
Fair/poor	NA	3.5	NA
Limitations			
Limited because of physical, mental, or emotional problems	11.6	13.6	NA
Diagnosed health condition			
Arthritis	0.1	NA	NA
Asthma	16.0	12.0	16.8
Autism	0.9	NA	NA
Blindness	0.1	NA	NA
Cerebral palsy	0.3	NA	NA
Cystic fibrosis	0.0	NA	NA
Deafness	0.2	NA	NA
Diabetes	0.3	NA	NA
Down syndrome	0.2	NA	NA
Heart condition	1.3	NA	NA
Mental retardation	1.2	NA	NA
Muscular dystrophy	0.0	NA	NA
Developmental delay	5.7	NA	NA
Sickle cell anemia	0.4	NA	NA
Citizenship^a			
Noncitizen	2.2	2.1	2.7
Noncitizen missing		21.1	
Any noncitizen in HIU	23.8	23.2	27.7
Any noncitizen in HIU missing		2.4	
Primary language			
Not English	18.3	27.0	22.9
Not English missing		2.8	

TABLE 2. *Health, Demographic, Socioeconomic, and Residential Characteristics of Children with Full-Year Medicaid/CHIP Coverage (percent) (Continued)*

	NHIS	MEPS	NSCH
Family composition			
Two parents	46.9	47.1	53.7
Single mother, no father present	43.0	46.3	35.9
Other	10.1	6.6	10.4
No parents	6.7	4.4	6.5
Parent education^b			
Less than high school	26.9	26.5	19.8
High school	31.2	40.4	37.0
More than high school	35.2	28.7	36.7
Employment in HIU			
Two full-time workers	7.9	8.9	NA
One full-time worker	46.4	47.5	NA
Part time	12.1	15.2	NA
Unemployed/not working	30.9	26.7	25.2
Family health			
Anyone in HIU with fair/poor health	21.2	26.7	NA
Anyone in HIU limited because of physical, mental, or emotional problems	30.0	21.4	NA
Anyone in HIU limited because of physical, mental, or emotional problems missing		4.5	
Parents with fair/poor health	NA	NA	22.0
Parents with fair/poor mental health	NA	NA	14.5
Metropolitan statistical area^c	NA	81.4	73.7
Metropolitan statistical area missing			7.5
Census region			
Northeast	15.4	16.2	16.1
Midwest	22.7	20.0	20.1
South	37.6	40.3	41.2
West	24.3	23.5	22.6
Household income			
Less than 100% of FPL	54.5	51.3	45.9
100–150% of FPL	20.3	19.8	21.4
150–200% of FPL	11.4	12.4	12.8
200–300% of FPL	9.2	11.4	12.1
300–400% of FPL	2.9	2.9	3.9
More than 400% of FPL	1.7	2.2	3.8
Sample size	5,865	6,407	15,117

Sources: 2008–09 National Health Interview Survey (NHIS), 2007–08 Medical Expenditure Panel Survey (MEPS), and 2007 National Survey of Children's Health (NSCH).

Notes: Children are age 0 to 17. Health insurance coverage is defined as full-year Medicaid/CHIP coverage on the MEPS. On the NHIS and NSCH, health insurance coverage is defined as full-year health insurance coverage with Medicaid/CHIP at the time of the survey.

FPL = federal poverty level

HIU = health insurance unit

NA = question was not included in that particular survey

a. "Child not born in the United States" is used as a proxy for citizenship on the NSCH.

b. Defined among children with parent(s) in the household.

c. On the NSCH, MSA is defined only in states where the total population for all MSA and non-MSA areas was greater than 500,000 people each.

on the NSCH, we also estimated a fixed-effects model that controlled for MSA and state (not census region), to test the model's sensitivity to the geographic specification; we found results did not change meaningfully when we estimated that specification (data not shown).

All estimates are derived from linear probability models using Stata 11 "svy" procedures to account for the complex survey designs of the NHIS, the MEPS, and the NSCH. Both the NHIS and the NSCH include multiple imputations of income, which we account for using the Stata 11 "mi" procedures.

Limitations

The analysis has a number of limitations. First, the estimates are based on reports provided by an adult living in the household with the child, which may introduce measurement error, particularly for estimates that pertain to adolescents. Second, the information provided by respondents on health status and health conditions may not track with clinical assessments. Third, each racial and ethnic group is heterogeneous (for example, parents of the Hispanic children in immigrant families have different countries of origin), which may limit the usefulness of generalizations about ethnic differences (Berdahl et al. 2010; Borders et al. 2004). Fourth, while we control for state in the NSCH and region in the MEPS and NHIS, the analysis does not take into account the residential distribution of children within each state, which may contribute to differences in access and service use. Fifth, previous literature finds evidence of significant differences in reported levels of delayed and unmet need for care across the three surveys (Coyer and Kenney 2013). We note observed differences across the surveys but don't address their underlying cause. And finally, differences in recall periods and wording of questions across the surveys may also affect the results in a meaningful way.

Results

Differences in Access and Service Use between White and Black Children Covered by Medicaid/CHIP

Table 3 shows the means for black and white children covered by Medicaid and CHIP for the access and use measures we analyzed.² Consistent with recent findings for Medicaid/CHIP overall (Kenney and Coyer 2012), we find high levels of access for both white and black children along several dimensions. For example, for both black and white children, the share with a usual source of care was close to 90 percent, as was the share saying that the doctor listens carefully. The share of children delaying care due to cost was under 2 percent.

Black children covered by Medicaid and CHIP may be experiencing more problems than white children accessing specialty and mental health care (table 4). While the precise magnitude of the estimated difference does vary, all three surveys find consistent evidence that black children are approximately 25 percent less likely than white children to have visited a specialist in the prior year, even when controlling for differences in health status and related factors. Adjusting for observed differences in health care needs, the black-white difference in the receipt of specialty care was 4.0 percentage points on the NHIS, 6.1 percentage points on the MEPS, and 4.8 percentage points on the NSCH, indicating that black children with Medicaid/CHIP coverage were, respectively, 26, 28, and 21 percent less likely than their white counterparts to have visited a specialist. The size of the differential remains large in both percentage and percent terms, and the magnitude does not change consistently when we control for socioeconomic factors.

TABLE 3. *Health Care Access and Service Use for White and Black Children with Full-Year Medicaid/CHIP Coverage (percent)*

	White			Black		
	NHIS	MEPS	NSCH	NHIS	MEPS	NSCH
Had a usual source of care (USC), past 12 months	96.5	93.6	94.4	96.6	89.9	90.6
USC is a doctor's office or an HMO	72.9	89.2	81.4	63.6	78.3	69.9
USC has night/weekend hours	NA	46.2	NA	NA	44.5	NA
USC is difficult to access by travel	NA	4.3	NA	NA	4.5	NA
USC is difficult to access by phone	NA	10.3	NA	NA	12.3	NA
USC is difficult to access after hours	NA	29.0	NA	NA	36.3	NA
Any delayed or unmet need for care, past 12 months	NA	6.0	8.3	NA	3.9	7.1
Any unmet need because of costs, past 12 months	7.4	1.4	NA	7.5	0.8	NA
Any delayed medical care, past 12 months	12.2	4.4	NA	14.0	2.3	NA
Any delayed medical care because of costs, past 12 months	1.6	0.8	NA	1.5	0.5	NA
Any office visit, past 12 months	95.6	78.5	NA	93.9	66.3	NA
Any preventive care visit, past 12 months	NA	NA	91.3	NA	NA	93.4
Any well-child visit, past 12 months	81.5	NA	NA	85.2	NA	NA
Any dental visit, past 12 months ^a	72.6	41.4	76.3	74.1	35.8	79.7
Any specialist visit, past 12 months	16.2	21.6	22.5	13.1	15.7	18.7
Any mental health professional visit, past 12 months ^a	14.1	6.6	16.1	8.9	4.7	10.5
Any emergency department (ED) visit, past 12 months	32.4	16.9	NA	27.5	16.1	NA
Two or more ED visits	12.2	5.0	NA	11.0	3.5	NA
Three or more ED visits	3.0	1.7	NA	2.0	1.0	NA
Patient-centered measures, past 12 months						
Doctor always or usually listens carefully ^b	NA	94.4	90.0	NA	95.5	86.2
Doctor always or usually spends enough time with child ^b	NA	93.6	82.7	NA	91.6	69.1

Sources: 2008–09 National Health Interview Survey (NHIS), 2007–08 Medical Expenditure Panel Survey (MEPS), and 2007 National Survey of Children's Health (NSCH).

Notes: Children are age 0 to 17. Health insurance coverage is defined as full-year Medicaid/CHIP coverage on the MEPS. On the NHIS and NSCH, health insurance coverage is defined as full-year health insurance coverage with Medicaid/CHIP at the time of the survey. "White" and "black" groups represent white, non-Hispanic, and black, non-Hispanic, respectively.

NA = question was not included in that particular survey

a. Defined among children age 2 to 17.

b. Defined among children age 1 to 17.

Two of the three surveys (the NHIS and the NSCH) find evidence that black children are also less likely to have received a mental health visit, and that this differential persists when we take into account differences in the observed need for care and other characteristics of the child and his/her family. Adjusting for observed differences in health care needs, the black-white difference in the receipt of mental health care was 4.2 percentage points on the NHIS and 6.9 percentage points on the NSCH, indicating that black children with Medicaid/CHIP coverage were, respectively, 30 and 43 percent less likely than their white counterparts to have had a mental health visit. As with the differential in specialty care, the size of the black-white differential in visiting a mental health provider remains large in both percentage and percent terms, and the magnitude does not change consistently when we control for socioeconomic factors.

As indicated earlier, on all three surveys, the vast majority of both black and white children are reported to have a usual source of care. On both the MEPS and the NSCH, however, black children were about

TABLE 4. *Unadjusted and Regression-Adjusted Differences in Health Care Access and Service Use between White and Black Children with Full-Year Medicaid/CHIP Coverage (percentage point difference)*

	NHIS				MEPS				NSCH			
	D1	D2	D3	D4	D1	D2	D3	D4	D1	D2	D3	D4
Had a usual source of care (USC), past 12 months	—	—	—	—	-3.7*	-3.7*	-3.5*	-3.3*	-3.8*	-3.8*	-3.2*	-2.7*
USC is a doctor's office or an HMO	-9.4*	-9.5*	-10.5*	-10.3*	-10.9*	-10.9*	-13.5*	-13.0*	-11.4*	-10.7*	-12.5*	-11.8*
USC has night/weekend hours	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
USC is difficult to access by travel	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
USC is difficult to access by phone	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
USC is difficult to access after hours	NA	NA	NA	NA	—	7.2*	—	—	NA	NA	NA	NA
Any delayed or unmet need for care, past 12 months	NA	NA	NA	NA	—	—	-3.1*	-3.1*	—	—	—	—
Any unmet need because of costs, past 12 months	—	—	—	—	—	—	—	—	NA	NA	NA	NA
Any delayed medical care, past 12 months	—	—	—	—	-2.2*	-2.2*	-3.2*	-3.2*	NA	NA	NA	NA
Because of costs	—	—	—	—	—	—	—	—	NA	NA	NA	NA
Any office visit, past 12 months	—	—	—	—	-12.2*	-12.9*	-11.8*	-11.5*	NA	NA	NA	NA
Any preventive care visit, past 12 months	NA	NA	NA	NA	NA	NA	NA	NA	2.1*	2.3*	2.5*	2.7*
Any well-child visit, past 12 months	3.7*	4.0*	4.6*	4.7*	NA	NA	NA	NA	NA	NA	NA	NA
Any dental visit, past 12 months ^a	—	—	—	—	—	—	-6.4*	-6.3*	3.4*	—	—	—

Any specialist visit, past 12 months	—	-4.0*	-3.4*	-3.4*	-5.9*	-6.1*	-5.6*	-5.4*	-3.8*	-4.8*	-5.4*	-5.0*
Any mental health visit, past 12 months ^a	-5.2*	-4.2*	-4.1*	-4.0*	—	—	—	—	-5.6*	-6.9*	-9.1*	-9.1*
Any emergency department (ED) visit, past 12 months	-4.9*	-5.9*	-8.1*	-8.1*	—	—	—	—	NA	NA	NA	NA
Two or more ED visits	—	—	-3.7*	-3.8*	—	-1.8*	-2.4*	-2.4*	NA	NA	NA	NA
Three or more ED visits	—	—	-1.9*	-1.9*	—	—	-1.3*	-1.3*	NA	NA	NA	NA
Patient-centered measures, past 12 months												
Doctor always or usually listens carefully ^b	NA	NA	NA	NA	—	—	—	—	-3.8*	-2.9*	-3.5*	-3.6*
Doctor always or usually spends enough time with child ^b	NA	NA	NA	NA	—	—	—	—	-13.6*	-12.2*	-11.0*	-10.8*

Sources: 2008–09 National Health Interview Survey (NHIS), 2007–08 Medical Expenditure Panel Survey (MEPS), and 2007 National Survey of Children's Health (NSCH).

Notes: Children are age 0 to 17. Health insurance coverage is defined as full-year Medicaid/CHIP coverage on the MEPS. On the NHIS and NSCH, health insurance coverage is defined as full-year health insurance coverage with Medicaid/CHIP at the time of the survey. "White" and "black" groups represent white, non-Hispanic, and black, non-Hispanic, respectively.

a. Defined among children age 2 to 17.

b. Defined among children age 1 to 17.

* Unadjusted differences are significantly different from zero at the .05 level, using a two-tailed test.

"—" = Estimates are not significantly different from zero at the .05 level, using a two-tailed test.

NA = question was not included in that particular survey

D1: Unadjusted differences model

D2: Regression-adjusted differences derived from multivariate regression models that control for age, gender, health status, and health conditions

D3: Regression-adjusted differences derived from multivariate regression models that control for age, gender, health status, health conditions, family composition, parents' education, household employment status, metropolitan statistical area, and census region

D4: Regression-adjusted differences derived from multivariate regression models that control for age, gender, health status, health conditions, citizenship status, household citizenship status, primary language, family composition, parents' education, household employment status, metropolitan statistical area, and census region

3 percentage points less likely than white children to have a usual source of care, whether or not we include controls for underlying health needs and other factors. While not necessarily indicative of an access problem, all three surveys suggest that black children with Medicaid and CHIP coverage are getting care from a different mix of providers than their white counterparts: black children are about 10 percentage points less likely than white children to have a usual source of care that is a doctor's office or HMO.

Despite the black-white differences in type of usual source of care, only one access measure suggests a possible black-white differential in access to the usual source of care: when controlling for health status, black parents were 7.2 percentage points more likely than white parents to say accessing their child's usual source of care was difficult after hours. Rates of delays getting needed care and unmet needs are similar among white and black Medicaid/CHIP beneficiaries. The only significant difference between these two groups appeared in the MEPS measure of any delayed medical care, which shows black children with a lower level of delayed care than white children (2.3 versus 4.4 percent, table 3) but low rates of unmet needs for both groups.

For some measures, such as receipt of preventive care and well-child visits, access to care may be slightly higher for black children on Medicaid/CHIP compared to the white children served by those programs. According to the NSCH and the NHIS, black children were about 2 percentage points more likely than white children to have received a preventive care visit and about 4 percentage points more likely to have received a well-child visit, respectively, whether or not we adjust for differences in observed health care needs or other characteristics of the child and his/her family.

There is no clear pattern of differences between black and white children with Medicaid/CHIP coverage in general office visits. According to the NHIS, there is no statistically significant difference between black and white children in the likelihood of visiting a medical office, whereas, according to the MEPS, black children are about 12 percentage points less likely than white children to visit an office.

The two surveys that examine families' perspectives on their care experiences provide different evidence on the extent of black-white differentials. The MEPS shows no statistically significant differences between black and white children for whether the child's doctor listens carefully or spends enough time with the child, whereas the NSCH finds statistically significant differences for both measures. In particular, parents of black children were over 10 percentage points less likely than parents of white children to report that the doctor usually or always spent enough time with their child, whether or not we control for differences in health status and other factors.

Likewise, while it is not clear how to interpret this finding, both surveys that measure emergency room use (the NHIS and the MEPS), find that black children are less likely than white children to have visited the emergency room. This finding could indicate that white children with Medicaid and CHIP coverage have more difficulties accessing needed outpatient care, raising their reliance on emergency rooms, or it could reflect that the groups have different care-seeking behavior.

In some instances, the magnitude of the black-white difference in access varies according to whether the differences are adjusted for the children's and families' underlying characteristics. Generally, however, the changes tend to be small with no clear pattern to their direction when additional controls are added. This suggests that other factors, beyond those included in the regression models, are contributing to the differences in access observed between white and black children.

Differences in Access and Service Use between White and Hispanic Children Covered by Medicaid/CHIP

Table 5 shows the means for white and Hispanic children covered by Medicaid and CHIP for the access and use measures we analyzed.³ Consistent with the findings described above, we find high levels of access to care for both white and Hispanic children along several dimensions. For example, the share of both groups with a usual source of care was close to 90 percent, and a high proportion is receiving primary care: according to the NSCH and the NHIS, respectively, around 90 percent of white and Hispanic children with Medicaid and CHIP coverage reported a preventive care visit and approximately 80 percent a well-child visit.

Comparing the pattern of findings across tables 4 and 6, the addition of factors unrelated to health, such as income, citizenship, education, and geographic location, have a more consistent effect on

TABLE 5. *Health Care Access and Service Use for White and Hispanic Children with Full-Year Medicaid/CHIP Coverage (percent)*

	White			Hispanic		
	NHIS	MEPS	NSCH	NHIS	MEPS	NSCH
Had a usual source of care (USC), past 12 months	96.5	93.6	94.4	95.1	91.8	87.7
USC is a doctor's office or an HMO	72.9	89.2	81.4	46.8	72.4	46.3
USC has night/weekend hours	NA	46.2	NA	NA	39.3	NA
USC is difficult to access by travel	NA	4.3	NA	NA	7.4	NA
USC is difficult to access by phone	NA	10.3	NA	NA	16.7	NA
USC is difficult to access after hours	NA	29.0	NA	NA	43.2	NA
Any delayed or unmet need for care, past 12 months	NA	6.0	8.3	NA	2.7	6.6
Any unmet need because of costs, past 12 months	7.4	1.4	NA	8.1	0.7	NA
Any delayed medical care, past 12 months	12.2	4.4	NA	22.4	2.0	NA
Because of costs	1.6	0.8	NA	2.0	0.5	NA
Any office visit, past 12 months	95.6	78.5	NA	93.5	70.0	NA
Any preventive care visit, past 12 months	NA	NA	91.3	NA	NA	91.5
Any well-child visit, past 12 months	81.5	NA	NA	79.4	NA	NA
Any dental visit, past 12 months ^a	72.6	41.4	76.3	74.5	44.2	78.4
Any specialist visit, past 12 months	16.2	21.6	22.5	9.3	12.7	16.3
Any mental health professional visit, past 12 months ^a	14.1	6.6	16.1	5.2	1.9	6.7
Any emergency department (ED) visit, past 12 months	32.4	16.9	NA	25.1	12.1	NA
Two or more ED visits	12.2	5.0	NA	9.4	3.0	NA
Three or more ED visits	3.0	1.7	NA	2.3	0.7	NA
Patient-centered measures, past 12 months						
Doctor always or usually listens carefully ^b	NA	94.4	90.0	NA	92.9	82.3
Doctor always or usually spends enough time with the child ^b	NA	93.6	82.7	NA	87.6	61.9

Sources: 2008–09 National Health Interview Survey (NHIS), 2007–08 Medical Expenditure Panel Survey (MEPS), and 2007 National Survey of Children's Health (NSCH).

Notes: Children are age 0 to 17. Health insurance coverage is defined as full-year Medicaid/CHIP coverage on the MEPS. On the NHIS and NSCH, health insurance coverage is defined as full-year health insurance coverage with Medicaid/CHIP at the time of the survey. "White" represents white, non-Hispanic.

NA = question was not included in that particular survey

a. Defined among children age 2 to 17.

b. Defined among children age 1 to 17.

the comparisons for Hispanic and white children than those for black and white children. Differences in access and service use between Hispanic and white children tend to narrow when these controls are added. For example, for the NHIS and the NSCH, the difference between whites and Hispanics for mental health visits falls from 8.8 to 4.2 percentage points and from 9.4 to 6.6 percentage points, respectively, as more controls are added. This pattern suggests that other characteristics of Hispanic children covered under Medicaid and CHIP contribute to some observed Hispanic-white differences in access and use. The findings also suggest that certain Hispanic subgroups, such as those in mixed-immigrant-status families, may have different patterns of care than other Hispanic children.

As with black children covered by Medicaid and CHIP, Hispanic children are less likely than their white counterparts to visit specialists and mental health practitioners (table 6). All three surveys suggest that Hispanic children are less likely than white children to have visited a specialist in the prior year, even when controlling for differences in health status and related factors. When adjusting for observed differences in health care needs, the Hispanic-white difference in receipt of specialty care was 6.0 percentage points on the NHIS, 8.0 percentage points on the MEPS, and 6.6 percentage points on the NSCH, indicating that Hispanic children with Medicaid/CHIP coverage were 37, 37, and 29 percent, respectively, less likely than their white counterparts to have visited a specialist. This indicates that Hispanic children are less likely than white children with Medicaid/CHIP coverage to receive specialty care even when they have similar reported health needs. However, on both the NHIS and the MEPS, the differential is no longer statistically significant when we control for socioeconomic factors, suggesting that factors such as education, income, or geographic location are contributing to these differentials.

All three surveys show evidence that Hispanic children are also less likely to have visited a mental health practitioner, even controlling for differences in the child's observed health care needs; for both the NHIS and the NSCH, a statistically significant differential persists but narrows when we consider other differences in the child's and family's characteristics. When adjusting for observed differences in health care needs, the Hispanic-white difference in receipt of mental health care was 5.7 percentage points on the NHIS, 3.2 percentage points on the MEPS, and 10.1 percentage points on the NSCH, indicating that Hispanic children with Medicaid/CHIP coverage were 40, 48, and 63 percent less likely than their white counterparts to have visited a mental health practitioner. Thus, while the absolute and relative magnitude of the Hispanic-white difference in the likelihood of receiving any mental health care differs across the three surveys and is sensitive to the characteristics for which we are controlling, the percentage difference is 40 percent or higher in all three, controlling for differences in health status and in socioeconomic and related factors.

Both surveys that measure experiences with care indicate that compared to white children, Hispanic children get less time with their doctors than their families wish, whether or not we control for differences in health care need or children's and families' other characteristics. The Hispanic-white differential in this measure is larger on the NSCH than on the MEPS (18.2 percentage points versus 5.7 percentage points in the models that control for differences in health needs). The pattern of change in the magnitude of the differential also differs when we include other sets of control variables. The NSCH, one of the two surveys that includes that measure, also finds evidence that Hispanic children's health care providers are less likely to listen carefully; that difference appears to be totally explained by differences between Hispanic and white children in socioeconomic and residential factors, citizenship, and language.

Only one of the three surveys (the NSCH) finds Hispanic children are less likely to have a usual source of care than white children. The difference can be explained by such factors as citizenship and language. As with black children, all three surveys indicate that Hispanic children with Medicaid/CHIP coverage are less likely than white children to rely on a doctor's office or HMO as their usual source of care. The survey data indicate that Hispanic children are even less likely than black children with Medicaid/CHIP coverage to rely on a doctor's office or HMO. The difference between Hispanic and white children in usual source of care varies across the three surveys; this is likely due in part to the different categories the surveys used to define the usual source of care. Yet in all three cases, the difference is much smaller when we consider the child's and family's citizenship status and language, suggesting that among the Hispanic children covered by Medicaid and CHIP, those in immigrant families whose primary language is not English are less likely to rely on a doctor's office or HMO as their usual source of care.

The MEPS provides evidence that the Hispanic children covered by Medicaid/CHIP are less likely than the white children to have access to their usual source of care after hours, even when controlling for factors unrelated to health. In addition, Hispanic children report experiencing more problems than white children accessing their usual source of care, including contacting the usual source of care by phone or after hours or traveling to the usual source of care, with raw differences of 6.4, 14.1, and 3.2 percentage points, respectively. When accounting for differences in observed demographic and socioeconomic factors, the Hispanic-white differential falls a few percentage points in ability to access the usual source of care after hours but increases slightly in the other two categories.

According to the two surveys that measure frequency of office visits (the NHIS and the MEPS), Hispanic children were less likely than white children to have visited a medical provider, controlling for observed differences in health care needs between the two groups, though the difference was smaller on the NHIS and did not hold up when we controlled for factors unrelated to health.

Similar to comparisons between black and white children with Medicaid/CHIP coverage, both surveys measuring emergency room use (also the NHIS and the MEPS) find evidence that Hispanic children are less likely than white children to visit emergency rooms, overall and when controlling for observed differences in health care needs. Compared to white children, Hispanic children visited the emergency room significantly less often, though the size of the differential was larger on the NHIS than on the MEPS.

The differences between Hispanic and white children with Medicaid/CHIP coverage show no clear pattern in delay of needed care or unmet needs (table 5). When controlling for observed differences in health care needs, both the MEPS and the NSCH find Hispanic children 3 percentage points less likely than white children either to have delayed needed care or to have had an unmet health need; on the NHIS, Hispanic children were 10.2 percentage points more likely to have experienced a delay getting needed care. Overall, 22.4 percent of Hispanic children had experienced a delay in getting needed care. The Hispanic-white differences are especially pronounced in delays resulting from long wait times to see a doctor, not having transportation to get there, and not being able to get an appointment (data not shown).

Conclusion

With some exceptions, white, black, and Hispanic children served by Medicaid appear to have high levels of access to care based on the measures assessed in this analysis. A high proportion of children covered by Medicaid/CHIP in all three groups reportedly had some type of office visit in the prior year, a

TABLE 6. *Unadjusted and Regression-Adjusted Differences in Health Care Access and Service Use between White and Hispanic Children with Full-Year Medicaid/CHIP Coverage (percentage point difference)*

	NHIS				MEPS				NSCH			
	D1	D2	D3	D4	D1	D2	D3	D4	D1	D2	D3	D4
Had a usual source of care (USC), past 12 months	—	—	—	—	—	—	—	—	-6.7*	-6.0*	-3.7*	—
USC is a doctor's office or an HMO	-26.1*	-25.5*	-17.4*	-9.3*	-16.8*	-17.2*	-16.6*	-13.9*	-35.1*	-31.6*	-25.8*	-13.0*
USC has night/weekend hours	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
USC is difficult to access by travel	NA	NA	NA	NA	3.2*	3.3*	—	4.6*	NA	NA	NA	NA
USC is difficult to access by phone	NA	NA	NA	NA	6.4*	5.9*	—	6.7*	NA	NA	NA	NA
USC is difficult to access after hours	NA	NA	NA	NA	14.1*	13.3*	11.9*	10.3*	NA	NA	NA	NA
Any delayed or unmet need for care, past 12 months	NA	NA	NA	NA	-3.3*	-3.0*	-3.0*	—	—	-3.0*	—	—
Any unmet need because of costs, past 12 months	—	—	—	—	—	—	—	—	NA	NA	NA	NA
Any delayed medical care, past 12 months	10.2*	10.2*	9.0*	6.6*	-2.5*	-2.2*	—	—	NA	NA	NA	NA
Because of costs	—	—	—	—	—	—	—	—	NA	NA	NA	NA
Any office visit, past 12 months	-2.1*	-2.2*	—	—	-8.5*	-9.6*	-5.8*	-6.4*	NA	NA	NA	NA
Any preventive care visit, past 12 months	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	—
Any well-child visit, past 12 months	—	—	—	—	NA	NA	NA	NA	NA	NA	NA	NA
Any dental visit, past 12 months ^a	—	3.9*	7.3*	6.2*	—	—	—	—	—	4.8*	5.5*	—

Any specialist visit, past 12 months	-6.9*	-6.0*	—	—	-9.0*	-8.0*	-5.4*	—	-6.2*	-6.6*	—	—
Any mental health professional visit, past 12 months ^a	-8.8*	-5.7*	-4.7*	-4.2*	-4.7*	-3.2*	—	—	-9.4*	-10.1*	-8.2*	-6.6*
Any emergency department (ED) visit, past 12 months	-7.4*	-7.7*	-4.7*	-5.0*	-4.8*	-5.6*	—	—	NA	NA	NA	NA
Two or more ED visits	-2.8*	-3.3*	—	—	-2.0*	-2.4*	—	—	NA	NA	NA	NA
Three or more ED visits	—	—	—	—	-0.9*	-1.1*	-1.2*	—	NA	NA	NA	NA
Patient-centered measures, past 12 months												
Doctor always or usually listens carefully ^b	NA	NA	NA	NA	—	—	—	—	-7.8*	-6.1*	-3.9*	—
Doctor always or usually spends enough time with the child ^b	NA	NA	NA	NA	-6.0*	-5.7*	-6.0*	-7.6*	-20.9*	-18.2*	-15.5*	-9.4*

Sources: 2008–09 National Health Interview Survey (NHIS), 2007–08 Medical Expenditure Panel Survey (MEPS), and 2007 National Survey of Children's Health (NSCH).

Notes: Children are age 0 to 17. Health insurance coverage is defined as full-year Medicaid/CHIP coverage on the MEPS. On the NHIS and NSCH, health insurance coverage is defined as full-year health insurance coverage with Medicaid/CHIP at the time of the survey. "White" represents white, non-Hispanic.

NA = question was not included in that particular survey

a. Defined among children age 2 to 17.

b. Defined among children age 1 to 17.

* Unadjusted differences are significantly different from zero at the .05 level, using a two-tailed test.

"—" = Estimates are not significantly different from zero at the .05 level, using a two-tailed test.

D1: Unadjusted differences model

D2: Regression-adjusted differences derived from multivariate regression models that control for age, gender, health status, and health conditions

D3: Regression-adjusted differences derived from multivariate regression models that control for age, gender, health status, health conditions, family composition, parents' education, household employment status, metropolitan statistical area, and census region

D4: Regression-adjusted differences derived from multivariate regression models that control for age, gender, health status, health conditions, citizenship status, household citizenship status, primary language, family composition, parents' education, household employment status, metropolitan statistical area, and census region

usual place they go for health care, and a doctor who usually or always listens. These findings are consistent with recent analysis showing that children with Medicaid/CHIP coverage generally had comparable access to and experiences with health care to children with employer-sponsored coverage, along several dimensions (Kenney and Coyer 2012).

Black and Hispanic children with Medicaid/CHIP coverage may have more problems accessing care, relative to their white counterparts, in two areas: specialty and mental health care. This analysis finds that of those covered by Medicaid and CHIP, both Hispanic and black children are substantially less likely than white children to receive these services, even taking into account observed differences in health care needs as reported by their families. This suggests that specialty and mental health care are being provided at different rates to Hispanic and black children relative to white children who have the same reported health needs. A priori, it is not clear whether these services are being underprovided to black and Hispanic children or overprovided to white children; nor is it clear if these differentials have consequences for these children's health and functioning. However, the magnitude of these differences indicates that further study is merited to explore both the causes and the potential implications of these patterns, especially since prior studies have indicated that black and Hispanic children are less likely to meet the definition of having a special health care need despite being less likely to be in excellent or very good health (Shenkman et al. 2001; Stein and Jessop 1989). To the extent that these differences reflect the underprovision of mental health and specialty services to Hispanic and black children with Medicaid/CHIP coverage, they could have adverse consequences for these children's social and emotional development and their performance in school.

Even controlling for observed differences in health status, the findings suggest that white children covered by Medicaid and CHIP use the emergency room more frequently than their Hispanic and black counterparts. This analysis does not shed light on why white children use the emergency room at higher rates; as indicated below, this does not appear to reflect that white children have less access to outpatient care after hours and on the weekends, as the reverse pattern is found. With the publicly available data, it is not possible to assess whether these patterns would hold up if we were able to control for the specific local area and state in which the child lives (the higher rates of emergency room use persist when we control for differences in region and for whether the child lives in an MSA). In addition, to understand the cause of these findings, we need more information on the reasons for emergency room visits: whether these visits were for conditions that could have been avoided had the child received more effective outpatient care and whether he or she could have been treated in another setting.

All three surveys indicate systematic differences in the types of providers serving Medicaid/CHIP-covered children from different racial and ethnic backgrounds, which may affect their access to care and the quality of the care they receive. White children are more likely than black and Hispanic children with Medicaid/CHIP coverage to rely on a doctor's office or HMO as their usual source of care; of the three groups, Hispanic children with Medicaid/CHIP coverage, particularly those in immigrant families and those whose family's primary language is not English, are least likely to have a doctor's office or HMO as their usual source of care. Both black and Hispanic children are less likely than white children to have a usual source of care with nighttime and weekend hours. Hispanic children's parents report greater difficulties accessing their usual source of care along several dimensions, including by phone, in person, and after hours; they also are more likely to report that the doctor does not spend enough time with the child or listen carefully.

For some outcomes, such as receipt of mental health services, controlling for differences in socioeconomic and other variables unrelated to health affected the size of Hispanic-white differences and the

extent to which the differences were statistically significant at conventional levels. This indicates that factors unrelated to health, such as the family's primary language, parental education, and geographic location, contribute to some observed differences between Hispanic and white children with Medicaid/CHIP coverage. The underlying models suggest that children in families whose primary language is not English, who have a noncitizen status, or who have parents with a high school education or less are more likely to experience access problems than other children with Medicaid/CHIP coverage. To address these access gaps, we need more understanding of their root causes.

Since CHIPRA was passed in 2009, Medicaid and CHIP have had an unprecedented focus on measuring quality and access to care for children. An initial core set of quality measures, which draws largely on Medicaid claims and encounter data, is being implemented in several states (AHRQ 2012a). Additional measures that draw on other data sources and methodologies are also being proposed as are methods to track differences by race and ethnicity (AHRQ 2012b). The findings presented here suggest that it will be particularly important to monitor, by race and ethnicity, the extent to which children are receiving the specialty and mental health services recommended for them. The findings also indicate the importance of going beyond the administrative data on which the core set of measures was based to reflect the experiences and perceptions of the families whose children are receiving care under Medicaid and CHIP.

This analysis has explored national patterns of care. Existing data sources do not have sufficient sample sizes to support precise annual state-level estimates for racial and ethnic groups of children covered by Medicaid and CHIP. Such information will be critical for assessing whether systematic differences in access to care exist across states, whether the national racial and ethnic gaps are found in some or all states, and whether and how they relate to differences in state policy and factors such as Medicaid and CHIP payment rates and the structure of the state's service delivery systems.

With implementation of the major coverage provisions of the Affordable Care Act, the distribution of health insurance coverage will change substantially beginning in January 2014. As a consequence, uninsurance rates among children are expected to fall by approximately 40 percent, with much of the reduction due to increased Medicaid and CHIP coverage among children already eligible for such coverage (Kenney et al. 2011). Under the ACA, Medicaid and CHIP could play even larger roles covering children, with even higher proportions of black and Hispanic children relying on public coverage than do so today. Given these anticipated shifts, it will be important to track changes in access to care and any attendant consequences for children's health and functioning, particularly those in minority groups that disproportionately receive public coverage.

NOTES

1. See Flores and Tomany-Korman (2008b); Garrett and Yemane (2006); Heck and Parker (2002); Herrod and Chang (2007); Newacheck, Hughes, and Stoddard (1996); Shone et al. (2003); Smith et al. (2007); and HHS (2008, 2011a, 2011b).
2. Prior studies have assessed the differences in health insurance coverage and service use across the NHIS and the MEPS (Cohen, Makuc, and Ezzati-Rice 2007; Rhoades, Cohen, and Machlin 2010). Consistent with these studies, we found significantly different estimates of reported office, dental, and specialist visits, and any emergency department visits. Reports of any unmet or delayed need for care were also significantly greater on the NHIS than the MEPS. These differences may be attributable to the longer NHIS recall period (three to six months on the MEPS versus 12 months on the NHIS) or survey fatigue from the number of additional questions asked on the MEPS for ambulatory service use. More analysis is needed to understand the differences in the estimates derived from the NHIS, the MEPS, and the NSCH (IOM 2011).
3. Similar to the differences noted in table 3 (see note 1), we see significant differences in reported office, dental, and specialist visits, and any emergency department visits across the NHIS and the MEPS. Reports of any unmet or delayed need for care are also significantly greater on the NHIS than on the MEPS.

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