The Composition of Children Enrolled in Medicaid and CHIP

Variation over Time and by Race and Ethnicity

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CONTENTS

EXECUTIVE SUMMARY

Over the past 25 years, children's eligibility for public health insurance coverage has grown substantially. In 2010, as many as 40 million children had coverage through Medicaid and CHIP at some point during the year (MACPAC 2012). This paper relies on information from multiple household surveys to examine changes over the past decade in the racial and ethnic composition of children covered by Medicaid/CHIP and in the insurance distribution of children in different racial and ethnic groups; it also assesses whether the composition of Medicaid/CHIP enrollees varies for children in different racial and ethnic groups by geographic location, income, and other factors.

- Medicaid and CHIP have grown in importance over the past decade, particularly among minority children. The two programs covered over a third of all children in 2010, over a fifth of white children, and more than half of all Hispanic and black children.
- Children covered by Medicaid/CHIP in each of the three racial and ethnic groups examined tend to live in different areas of the country:
    - White children covered by Medicaid/CHIP are much more likely than their Hispanic and black counterparts to live outside metropolitan statistical areas (MSAs)—over 33 percent of the white children covered by Medicaid or CHIP live outside an MSA, compared with approximately 15 and 8 percent, respectively, of their black and Hispanic counterparts.
    - White children covered by Medicaid/CHIP are more likely than black and Hispanic children to live in the Midwest; they are less likely than black children to live in the South and less likely than Hispanic children to live in the West. Overall, between 50 and 60 percent of black children

covered by Medicaid or CHIP live in the South, while around 45 percent of the Hispanic children covered by Medicaid or CHIP live in the West.

- The picture of health status is complex. White children with Medicaid/CHIP coverage are more likely to be characterized as being in excellent or very good health, but also more likely to meet the definition of having a special health care need. Black children covered by Medicaid or CHIP in 2010 were more likely to have been diagnosed with ADHD/ADD or asthma than black children in those programs in 2000.

This analysis indicates how important state and federal Medicaid and CHIP policies are for children, particularly for the large and growing share of black and Hispanic children who rely on public health insurance coverage. Given their geographic location, white and black children covered by Medicaid and CHIP will be most affected by policies implemented by states in the Midwest and South (with the South being relatively more important for black children and the Midwest for white children), whereas policies implemented by states in both the South and the West will have the greatest potential impact for Hispanic children.

The differences in the residential distribution of children of different races and ethnicities covered by Medicaid and CHIP may also affect their access to care and service use patterns. Full implementation of the Affordable Care Act (ACA) is projected to lead to further increases in Medicaid and CHIP coverage for children due to the combination of the new outreach and enrollment efforts, the expansion of Medicaid eligibility, and the individual requirement to have health insurance coverage. However, some states have indicated that they may not implement the Medicaid expansion; other states may not be as aggressive about their ACA-related outreach and enrollment efforts. Moreover, the future of CHIP, and of public coverage for children more generally, is uncertain beyond 2015. In addition, federal budget issues have led some to call for block grants in Medicaid.

These possible changes make it all the more important to monitor how federal and state policies affect children overall, especially black and Hispanic children who rely heavily on Medicaid and CHIP coverage.

THE COMPOSITION OF CHILDREN ENROLLED IN MEDICAID AND CHIP

Over the past 25 years, eligibility for public health insurance coverage has grown substantially for children. In the 1980s and early part of the 1990s, Medicaid was expanded through a combination of federally mandated expansions that affected all states and waivers implemented in a handful of states. Then, in 1997, Congress created the State Children's Health Insurance Program (CHIP), which led to expansions in eligibility for public coverage and in enrollment, despite being an optional program (Dubay et al. 2007; Kenney and Yee 2007). As a consequence of these policy changes, public coverage was expanded to include children with incomes above the federal poverty level (FPL) in all states. Half of all states now offer Medicaid/CHIP coverage to children with incomes at or above 250 percent of FPL (Heberlein et al. 2012), and just four states have maximum eligibility thresholds below 200 percent of FPL (North Dakota has the lowest threshold, at 160 percent).

In 2010, as many as 40 million children had coverage through Medicaid and CHIP at some point during the year (Medicaid and CHIP Payment and Access Commission [MACPAC] 2012). While a number of studies have documented the growth in Medicaid and CHIP coverage for children over the past decade, there has been little attention given to the composition of children covered by Medicaid and CHIP, particularly with respect to race and ethnicity. This paper examines changes in the racial and ethnic composition of children covered by Medicaid and CHIP, changes in the insurance distribution of children in different racial and ethnic groups, and whether the composition of Medicaid/CHIP enrollees varies for children in different racial and ethnic groups. This analysis could shape attempts to assess variation in access to care for children covered by Medicaid and CHIP from different racial and ethnic backgrounds.

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 information on the health of the U.S. civilian noninstitutionalized population through personal household interviews and is administered by the National Center for Health Statistics within the Centers for Disease Control and Prevention. The MEPS Household Component (HC) also collects information on health care use and spending among the civilian noninstitutionalized population 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 of 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) familiar with the child's health and health care.

Results

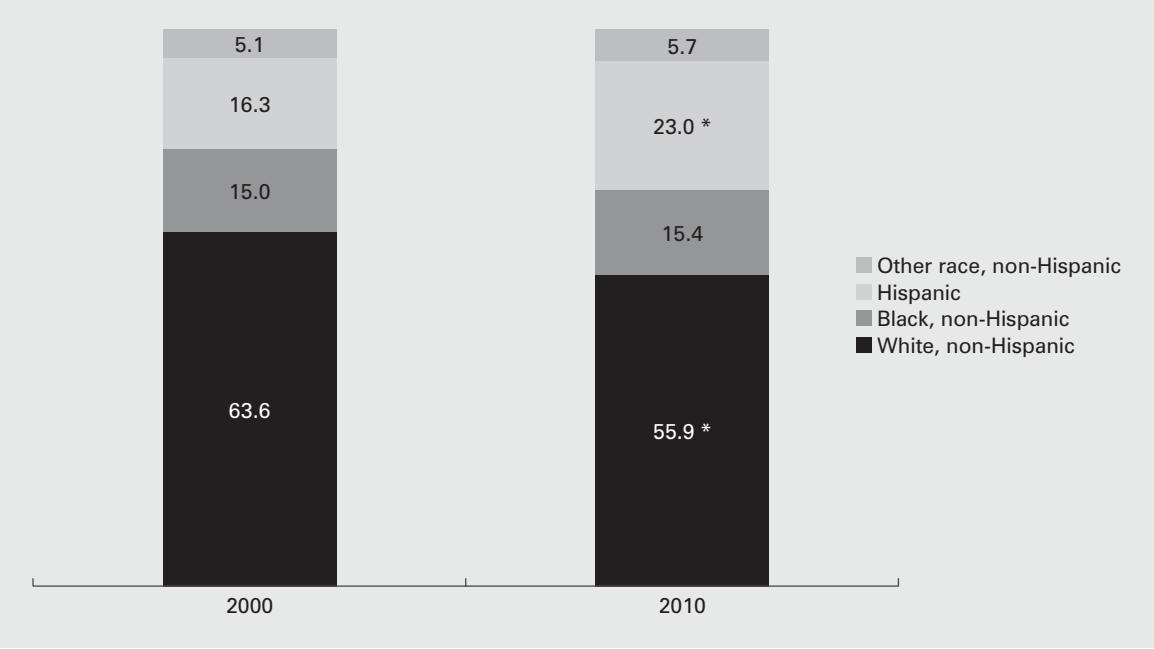
Changes in the Characteristics of All Children

The racial/ethnic composition of children changed significantly over the past decade (figure 1). White children remained the largest racial/ethnic group, but their share of the total population declined by 7.7 percentage points over the same period (from 63.6 percent to 55.9 percent). The shares of black and non-Hispanic other-race children remained relatively unchanged at approximately 15 and 5 percent, respectively, of the total population. The share of Hispanic children increased by 6.7 percentage points overall, from 16.3 percent in 2000 to 23.0 percent in 2010.

The characteristics of children shifted along a number of other dimensions over the past decade, most notably family structure, income, and region (table 1). While the share of children who are noncitizens remained relatively unchanged at approximately 3 percent, the share of children with a noncitizen family member increased by 3.6 percentage points, from 12.7 to 16.3 percent. This change likely reflects the increase in the number of foreign-born noncitizens in the United States over the same period.[1] Two-parent households remained the majority in 2010 (68.8 percent), but their share of the total population had decreased by 3.7 percentage points from 72.5 percent in 2000. Single-mother households experienced the largest increase (2.3 percentage points) from 21.8 percent in 2000 to 24.2 percent in 2010. The level of parent education also increased with 66.6 percent of parents having more than a high school education in 2010, up 4.2 percentage points from 62.4 percent in 2000.

Between 2000 and 2010, the share of children living below the federal poverty level (FPL) increased notably, which is likely attributable in large part to the economic downturn occurring in the latter part of the decade. The share of children with household incomes less than 100 percent of FPL increased by 6.3 percentage points from 19.3 percent in 2000 to 25.6 percent in 2010. The increase in the share of children living in poverty was accompanied by a decline in the share of children with household incomes greater than 200 percent of FPL.

FIGURE 1. Racial/Ethnic Composition of U.S. Children, 2000 and 2010 (percent)



Sources: 2000 and 2010 National Health Interview Survey.

Notes: Children are age 0–17. Health insurance coverage is full-year health insurance coverage with Medicaid/CHIP at the time of the survey. Other race includes Asian, American Indian/Native Alaskan, and other.

* Difference between 2000 and 2010 is statistically significant at the .05 level, using a two-tailed test.

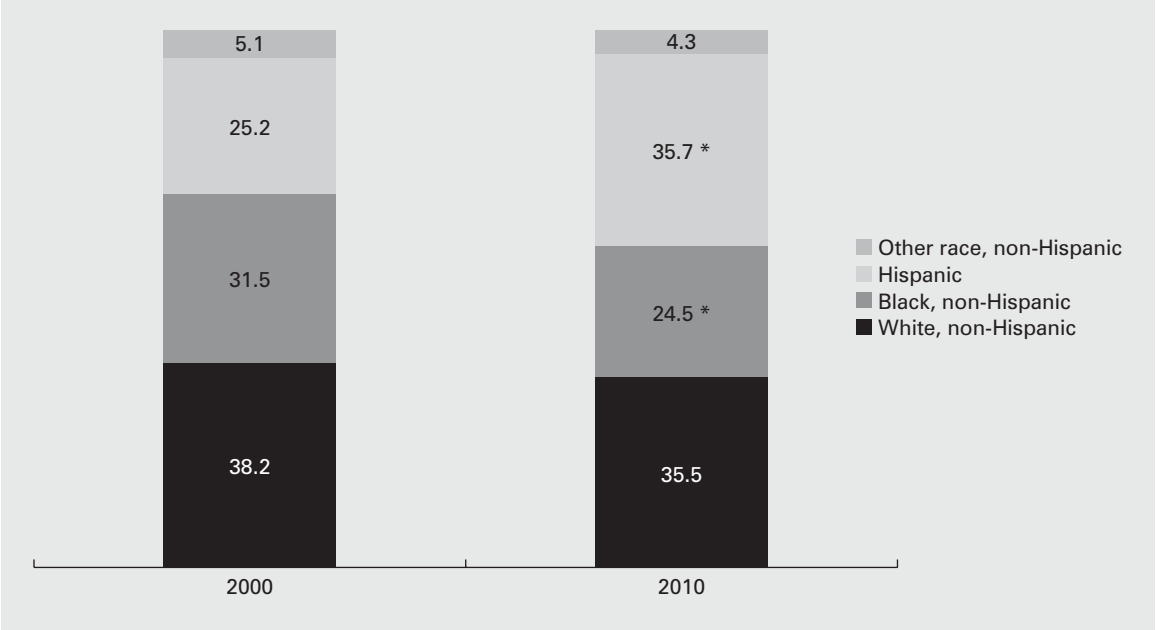
There was also a shift in the regional distribution of children: while the largest share of children (approximately 35 percent) resided in the South in both 2000 and 2010, during that period, there was a 3.0 percentage point decrease in the share of children living in the Northeast and a 3.4 percentage point increase in the share of children living in the West.

Most children were reported to be in excellent or very good health at both the beginning and the end of the last decade (82.8 percent in 2000 and 81.8 percent in 2010). However, the share of children reported to be in fair or poor health increased slightly, from 1.8 percent in 2000 to 2.3 percent in 2010. Diagnoses of specific health conditions among children also increased between 2000 and 2010, including ADHD/ADD, asthma, autism, and developmental delays. It is unclear whether that reflects greater rates of diagnosed conditions or increased prevalence.

Changes in the Characteristics of Children with Medicaid/CHIP

Some changes in the underlying racial and ethnic composition of all children between 2000 and 2010 were consistent with the compositional changes observed among children covered by Medicaid or CHIP. Consistent with the compositional changes observed among all children, the share of children enrolled in Medicaid/CHIP who were Hispanic increased between 2000 and 2010, rising from 25.2 to 35.7 percent, while the share of children with Medicaid/CHIP coverage who were white decreased from 31.5 to 24.5 percent (figure 2). While the proportion of all children who are black did not change over the period, the share of children with Medicaid/CHIP coverage who were black decreased between 2000 and 2010 from 31.5 percent to 24.5 percent (DeNavas-Walt, Proctor, and Smith 2011).

FIGURE 2. Racial/Ethnic Composition of Medicaid/CHIP-Covered Children, 2000 and 2010 (percent)



Sources: 2000 and 2010 National Health Interview Survey (NHIS).

Notes: Children are age 0–17. Health insurance coverage is full-year health insurance coverage with Medicaid/CHIP at the time of the survey. Other race includes Asian, American Indian/Native Alaskan, and other.

* Difference between 2000 and 2010 is statistically significantly at the .05 level, using a two-tailed test.

In addition, the share of Medicaid/CHIP children with a noncitizen family member also increased significantly over that period, from 17.0 percent to 25.4 percent, particularly among Hispanic children: more than half reported at least one noncitizen family member in 2010 (57.9 percent). The family composition of children with Medicaid/CHIP changed significantly over the decade both overall and among black and Hispanic children in particular (see table 1). While the share of two-parent households decreased among all children between 2000 and 2010, the share of Medicaid/CHIP children in two-parent households increased 5.9 percentage points from 42.8 to 48.7 percent. The increase was significant for both black children (5.3 percentage points) and Hispanic children (11.2 percentage points). There was also a 5.8 percentage point decrease in the share of children with Medicaid/CHIP living in households headed by single mothers. The decrease was largest among Hispanic children with Medicaid/CHIP coverage, who were 9.1 percent less likely to be living in a household headed by a single mother in 2010 than in 2000.

Parent education levels increased substantially between 2000 and 2010 for all children with Medicaid/CHIP and for the three racial/ethnic groups. Among all children with Medicaid/CHIP, the share of children whose parents had less than a high school education decreased 7.0 percentage points between 2000 and 2010, and the share of children whose parents had more than a high school education increased 9.4 percentage points between 2000 and 2010. The increase in parental educational attainment was greatest among black children with Medicaid/CHIP; the share of children whose parents had less than a high school education decreased by 10.8 percentage points, and the share of children whose parents had more than a high school education increased 17.7 percentage points. While parent education also improved for Hispanic children with Medicaid/CHIP between 2000 and 2010, Hispanic children were

more likely than children in other racial/ethnic groups to have parents with less than a high school education in both periods (at 55.8 and 45.3 percent, respectively). Household income remained relatively constant between 2000 and 2010 for children with Medicaid/CHIP. The only statistically significant change in income was a 5.4 percentage point decrease in the share of Hispanic children with Medicaid/CHIP coverage and incomes below the poverty level.

While there was also relatively little change in the geographic distribution of children with Medicaid/CHIP overall and among black children, the distribution of white and Hispanic children with full-year Medicaid/CHIP shifted considerably across census regions. The share of white children with Medicaid/CHIP living in the Northeast and South decreased by 4.9 and 6.5 percentage points, respectively, and increased by 11.3 percentage points in the Midwest. In 2010, roughly equal shares of white children with Medicaid/CHIP (approximately 35 percent) lived in the Midwest and the South. Additionally, while the majority of Hispanic children with Medicaid/CHIP (approximately 45 percent) lived in the West in both 2000 and 2010, the share of Hispanic children living in the Northeast decreased by 8.9 percentage points (from 23.8 percent to 14.9 percent) and increased in the South by 12.4 percentage points (from 20.8 percent to 33.2 percent).

The majority of children with Medicaid/CHIP (approximately 70 percent) was also reported to be in excellent or very good health at both the beginning and end of the decade, but the share was approximately 10 percentage points lower than for the overall population of children. The only statistically significant change found for children with Medicaid/CHIP concerning a general health status measure was a 2.4 percentage point decrease in the share of white children reporting fair or poor health, from 5.9 percent in 2000 to 3.5 percent in 2010. Diagnoses of ADHD/ADD and asthma experienced the largest increase among children with Medicaid/CHIP in the past decade. The share of Medicaid/CHIP children overall who have ever been told they had ADHD/ADD increased 3.4 percentage points (from 7.8 percent in 2000 to 11.2 percent in 2010), and the share of black children who had ever been diagnosed with ADHD/ADD increased 6.8 percentage points (from 7.3 percent in 2000 to 14.1 percent in 2010). Relative to white and Hispanic children, black children were reported to have the highest levels of asthma among children with Medicaid/CHIP, and they experienced a 5.0 percentage point increase in asthma during that time (from 18.4 to 23.4 percent).

Changes in the Insurance Distribution, Overall and by Race and Ethnicity

Uninsurance decreased among all children by 4.3 percentage points, dropping from 12.2 percent in 2000 to 7.9 percent in 2010 (table 2). Decreases in uninsurance occurred for children in each of the three racial/ethnic groups examined, with declines of 2.5, 5.3, and 13.1 percentage points occurring among white, black, and Hispanic children, respectively. Uninsurance differentials narrowed across racial and ethnic groups over the past decade, though Hispanic children remained at a greater risk of being uninsured than white and black children. In 2010, the uninsurance rate ranged from 5.9 percent among white children to 12.9 percent among Hispanic children.

Children were much more likely to have Medicaid/CHIP coverage at the end of the decade and less likely to have employer-sponsored insurance (ESI), with more pronounced changes occurring for black and Hispanic children than for white children. In 2010, over a fifth of white children and over half of black and Hispanic children had Medicaid/CHIP coverage at a point in time.[2] The growing reliance on Medicaid/CHIP coverage among children over the past decade stems from several factors, including a secular

TABLE 1. Change in Characteristics of All Children and among Those with Insurance through Medicaid/CHIP by Race/Ethnicity, 2000 and 2010

	Overall			Full-Year Medicaid/CHIP											
				Total			White, non-Hispanic			Black, non-Hispanic			Hispanic		
	2000 (%)	2010 (%)	Difference (% point)	2000 (%)	2010 (%)	Difference (% point)	2000 (%)	2010 (%)	Difference (% point)	2000 (%)	2010 (%)	Difference (% point)	2000 (%)	2010 (%)	Difference (% point)
Sex															
Female	48.8	48.9	0.0	50.1	48.9	–1.2	49.0	48.9	–0.1	49.9	49.6	–0.3	51.7	49.1	–2.6
Male	51.2	51.1	0.0	49.9	51.1	1.2	51.0	51.1	0.1	50.1	50.4	0.3	48.3	50.9	2.6
Citizenship															
Noncitizen	3.3	3.0	–0.4	2.3	3.4	1.2*	1.5	1.5	0.0	0.9	2.4	1.5	4.0	4.6	0.7
Anyone in HIU noncitizen[a]	12.7	16.3	3.6*	17.0	25.4	8.3*	4.4	4.3	–0.1	3.9	6.3	2.3	46.2	57.9	11.7*
Family composition															
Two parents	72.5	68.8	–3.7*	42.8	48.7	5.9*	54.3	50.2	–4.1	19.5	24.8	5.3*	50.0	61.2	11.2*
Single mother, no father present	21.8	24.2	2.3*	47.3	41.4	–5.8*	34.8	35.8	0.9	69.2	64.5	–4.8	42.7	33.5	–9.1*
Other	5.7	7.1	1.4*	9.9	9.9	0.0	10.8	14.0	3.2	11.3	10.7	–0.5	7.3	5.3	–2.0
Parent education[b]															
Less than high school	13.6	12.9	–0.7	34.8	27.8	–7.0*	21.3	14.0	–7.4*	33.6	22.8	–10.8*	55.8	45.3	–10.5*
High school	24.0	20.5	–3.5*	34.2	31.8	–2.4	37.5	36.0	–1.4	36.2	29.3	–6.9*	26.0	29.8	3.8
More than high school	62.4	66.6	4.2*	31.0	40.4	9.4*	41.2	50.0	8.8*	30.2	47.9	17.7*	18.2	24.9	6.7*
Household income															
Less than 100% of FPL	19.3	25.6	6.3*	57.9	56.6	–1.3	47.0	47.4	0.4	65.0	65.6	0.6	65.4	60.0	–5.4*
100–150% of FPL	10.4	11.4	1.0	19.1	19.0	–0.1	21.1	20.2	–0.9	17.8	16.9	–0.9	17.6	19.7	2.1

150–200% of FPL	10.2	9.6	–0.6	10.5	10.8	0.3	13.8	13.0	–0.8	7.9	8.2	0.3	9.2	10.3	1.2
200–300% of FPL	17.3	15.3	–2.0*	7.5	8.5	1.0	10.6	11.7	1.1	5.5	6.4	0.9	5.7	6.8	1.2
300–400% of FPL	14.6	11.7	–2.9*	3.0	2.6	–0.3	4.1	3.8	–0.3	2.8	1.7	–1.1	1.3	1.8	0.5
More than 400% of FPL	28.2	26.4	–1.9*	2.0	2.4	0.4	3.5	4.0	0.4	1.0	1.2	0.2	0.9	1.4	0.5
Census region															
Northeast	18.6	15.6	–3.0*	20.4	15.1	–5.3*	19.9	15.0	–4.9*	18.2	15.0	–3.2	23.8	14.9	–8.9*
Midwest	24.7	23.7	–1.1	19.8	22.6	2.9	24.2	35.5	11.3*	21.9	25.0	3.1	9.4	9.0	–0.4
South	35.2	35.9	0.7	37.5	37.6	0.1	40.2	33.6	–6.5*	51.8	52.5	0.7	20.8	33.2	12.4*
West	21.5	24.9	3.4*	22.3	24.7	2.3	15.7	15.9	0.2	8.1	7.5	–0.6	45.9	42.9	–3.0
Health status															
Excellent/very good	82.8	81.8	–1.1	69.5	71.9	2.4	72.0	75.1	3.1	67.7	66.2	–1.5	69.7	72.8	3.1
Good	15.3	16.0	0.6	25.6	23.7	–1.8	22.1	21.4	–0.7	27.3	27.6	0.3	26.5	23.3	–3.2
Fair/poor	1.8	2.3	0.5*	5.0	4.4	–0.6	5.9	3.5	–2.4*	4.9	6.2	1.2	3.8	3.9	0.1
Ever told child has															
ADHD/ADD[c]	6.2	7.8	1.6*	7.8	11.2	3.4*	11.7	16.1	4.4	7.3	14.1	6.8*	3.5	5.0	1.4
Asthma	12.4	13.6	1.3*	16.7	17.1	0.4	17.7	17.6	0.0	18.4	23.4	5.0*	13.9	12.7	–1.2
Cerebral palsy	0.6	0.2	–0.4*	1.2	0.4	–0.8*	1.3	0.6	–0.8	1.4	0.3	–1.1*	0.8	0.3	–0.5
Congenital heart disease	1.3	1.2	–0.2	1.8	1.4	–0.3	1.8	1.9	0.1	1.4	1.5	0.1	2.0	0.7	–1.3
Down syndrome	0.1	0.2	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.3	0.1	–0.2	0.3	0.3	0.0
Mental retardation	0.7	0.6	–0.1	1.8	0.9	–0.9*	2.2	1.6	–0.6	1.9	0.8	–1.1	1.1	0.5	–0.6
Other developmental delay	3.1	4.4	1.3*	5.3	5.9	0.6	6.8	8.5	1.7	5.8	5.3	–0.5	2.6	3.7	1.1
Sample size	13,376	11,277		2,401	3,934		698	978		679	1,004		939	1,762	

Sources: 2000 and 2010 National Health Interview Surveys (NHIS).

Notes: Children are age 0 to 17. Health insurance coverage is full-year coverage under Medicaid/CHIP at the time of the survey.

* Significantly different from zero at the .05 level, using a two-tailed test.

[a] HIU stands for health insurance unit, which is similar to the nuclear family and defined as the members of the family who are generally eligible for the same private health insurance plan.

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

[c] Question only asked for children age 2 to 17.

TABLE 2. Change in Health Insurance Coverage of Children by Race/Ethnicity, 2000 and 2010

	Overall			White, Non-Hispanic			Black, Non-Hispanic			Hispanic		
	2000 (%)	2010 (%)	Difference (% point)	2000 (%)	2010 (%)	Difference (% point)	2000 (%)	2010 (%)	Difference (% point)	2000 (%)	2010 (%)	Difference (% point)
ESI	65.1	52.6	–12.5*	75.3	66.6	–8.8*	46.9	34.9	–12.0*	43.0	29.0	–13.9*
Medicaid/CHIP	19.0	35.9	16.9*	11.9	22.9	11.1*	39.2	56.5	17.3*	28.9	56.1	27.2*
Other	3.7	3.6	–0.1	4.4	4.7	0.2	1.8	1.8	0.0	2.1	1.9	–0.2
Uninsured	12.2	7.9	–4.3*	8.4	5.9	–2.5*	12.1	6.8	–5.3*	26.1	12.9	–13.1*
Sample size	13,376	11,277		6,993	4,911		2,171	2,020		3,622	3,518	

Sources: 2000 and 2010 National Health Interview Surveys (NHIS).

Notes: Children are age 0–17. Health insurance coverage is defined at the time of the survey. Employer-sponsored insurance (ESI) is defined as those who report coverage through an employer (including self-employed), union, or the military (TRICARE/CHAMPVA). Medicaid/CHIP includes Medicaid and CHIP, other government or public coverage, and private coverage that the government either helped pay for or that was obtained through the government. 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 ESI, Medicaid/CHIP, and other coverage, except children dually enrolled in Medicaid and Medicare, who are categorized as having other coverage.

* Significantly different from zero at the .05 level, using a two-tailed test.

decline in ESI, the downturn in the economy at the end of the decade, and expansions of Medicaid/CHIP eligibility for children (Blavin et al. 2012).

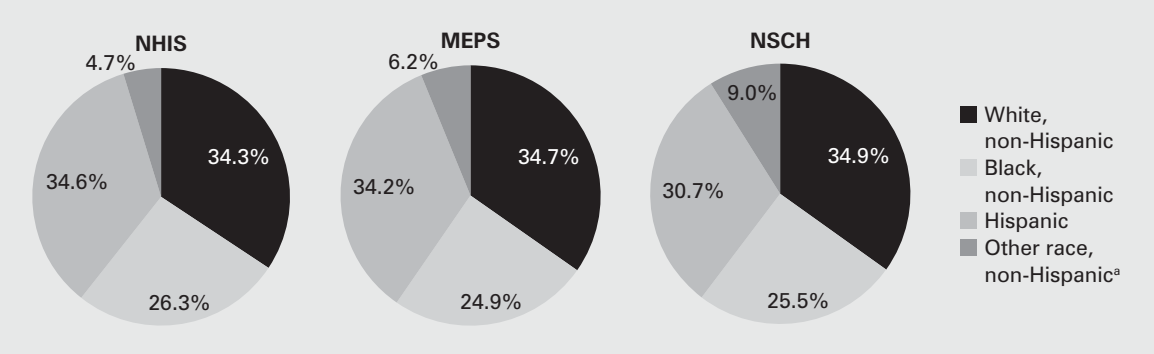
Variation in the Characteristics of Children with Medicaid/CHIP by Race and Ethnicity

According to recent estimates from three national surveys, white and Hispanic children each account for roughly a third of the Medicaid/CHIP child population (figure 3). The share of black children is slightly smaller, accounting for approximately a quarter of the total Medicaid/CHIP child population. The remaining beneficiaries include non-Hispanic children of other races, including Asian and Native American children, or children in the multiple race category. As described in the data and methods section, differences in the collection and processing of racial and ethnic information vary slightly across the three surveys, particularly in how the "other race/ethnicity" category is defined.

While the characteristics of the children covered by Medicaid and CHIP differ within each racial/ethnic group, the patterns are relatively robust across the three surveys. Table 3 compares the characteristics of the white and black children covered by Medicaid/CHIP, while table 4 examines those same characteristics for white and Hispanic children.

The most striking differences between the white and black children who are covered by Medicaid/CHIP are in their family composition, their income, their geographic location, and their residential location. Across all three surveys, black children with Medicaid/CHIP are more likely than their white counterparts to live with a single mother and significantly more likely to have incomes below the poverty level than white children. Between 50 and 60 percent of black children with Medicaid/CHIP coverage have household incomes less than 100 percent of FPL, compared with approximately 35 to 45 percent of white children. There is some variation in the distribution of income across the three surveys for the other income breaks, but black children with Medicaid/CHIP are significantly less likely to have income between 200 and 300 percent of FPL than white children, according to the estimates from all three surveys. While

FIGURE 3. Racial/Ethnic Composition of Children Insured All Year with Medicaid/CHIP



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 0–17. Health insurance coverage is full-year Medicaid/CHIP coverage on the MEPS; on the NHIS and NSCH, it is full-year coverage with Medicaid/CHIP at the time of the survey.

a. NSCH includes multiracial, non-Hispanic.

TABLE 3. Characteristics of White, Non-Hispanic and Black, Non-Hispanic Children with Full-Year Medicaid/CHIP Coverage

	White, Non-Hispanic (%)			Black, Non-Hispanic (%)			Difference between Black, Non-Hispanic and White, Non-Hispanic (% point)		
Full-Year Medicaid/CHIP	**NHIS**	**MEPS**	**NSCH**	**NHIS**	**MEPS**	**NSCH**	**NHIS**	**MEPS**	**NSCH**
Sex									
Female	49.1	47.4	49.4	48.3	48.7	49.4	–0.8	1.2	0.0
Male	50.9	52.6	50.6	51.7	51.3	50.6	0.8	–1.2	0.0
Citizenship[a]									
Noncitizen	0.6	0.9	0.5	1.3	1.6	1.7	0.7	0.7	1.2*
Family composition									
Two parents	51.5	56.2	59.0	23.6	21.3	29.8	–27.9*	–35.0*	–29.2*
Single mother, no father present	35.7	36.1	29.3	64.8	69.5	55.1	29.0*	33.4*	25.8*
Other	12.8	7.7	5.4	11.7	9.3	3.3	–1.1	1.6	–2.0*
Parent education[b]									
Less than high school	13.3	13.3	10.8	21.2	19.0	15.1	7.8*	5.7*	4.3*
High school	38.8	51.5	40.1	35.1	44.7	42.5	–3.6	–6.8	2.4
More than high school	47.9	35.2	49.1	43.7	36.3	42.4	–4.2	1.1	–6.7*
Household income									
Less than 100% of FPL	46.9	43.2	35.7	58.8	61.2	50.9	11.8*	18.0*	15.2*
100–150% of FPL	19.2	18.3	23.2	20.4	18.6	18.7	1.2	0.2	–4.5*
150–200% of FPL	13.8	13.9	14.9	10.0	10.3	13.0	–3.8*	–3.6	–1.9
200–300% of FPL	12.4	16.6	15.1	8.0	6.9	10.8	–4.4*	–9.7*	–4.4*
300–400% of FPL	4.9	4.1	5.3	1.4	1.9	3.4	–3.5*	–2.2	–1.9*
More than 400% of FPL	2.8	3.9	5.8	1.5	1.2	3.3	–1.3	–2.7*	–2.5*
Metropolitan statistical area (MSA)[c]	–	65.9	64.0	–	87.9	85.4	–	22.0*	21.4*
Census region									
Northeast	15.6	21.6	18.9	15.8	14.4	13.9	0.2	–7.2	–5.1*
Midwest	34.2	28.8	28.2	24.9	19.9	21.9	–9.3*	–8.9*	–6.2*
South	35.7	35.0	38.2	53.2	59.5	56.7	17.5*	24.4*	18.5*
West	14.5	14.6	14.7	6.1	6.2	7.5	–8.4*	–8.3*	–7.2*
Health status									
Excellent/very good	78.2	77.9	82.5	71.1	76.6	76.4	–7.1*	–1.3	–6.1*
Good	19.6	18.3	13.4	24.2	18.5	16.9	4.5*	0.2	3.5*
Fair/poor	2.2	3.8	4.0	4.7	4.9	6.7	2.5*	1.1	2.7*
Ever told child has									
Asthma	15.9	10.8	16.5	22.6	17.2	21.4	6.7*	6.4*	4.9*
Children with special health care needs (CSHCN)	32.6	25.8	30.2	25.9	24.8	26.8	–6.7*	–1.0	–3.4
Sample size	1,559	1,433	7,991	1,598	1,948	3,610			

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 0–17. Health insurance coverage is full-year Medicaid/CHIP coverage on the MEPS; on the NHIS and NSCH, it is full-year health insurance coverage with Medicaid/CHIP at the time of the survey.

* Significantly different from zero at the .05 level, using a two-tailed test.

[a] On the NSCH, "child not born in the U.S." is used as a proxy for citizenship.

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

[c] On the NSCH, MSA is defined only in states that meet the 500,000 threshold.

TABLE 4. Characteristics of White, Non-Hispanic and Hispanic Children with Full-Year Medicaid/CHIP Coverage

	White, Non-Hispanic (%)			Hispanic (%)			Difference between Hispanic and White, Non-Hispanic (% point)		
Full-Year Medicaid/CHIP	**NHIS**	**MEPS**	**NSCH**	**NHIS**	**MEPS**	**NSCH**	**NHIS**	**MEPS**	**NSCH**
Sex									
Female	49.1	47.4	49.4	49.3	48.2	49.5	0.2	0.8	0.1
Male	50.9	52.6	50.6	50.7	51.8	50.5	–0.2	–0.8	–0.1
Citizenship[a]									
Noncitizen	0.6	0.9	0.5	4.7	5.1	6.0	4.0*	4.2*	5.5*
Family composition									
Two parents	51.5	56.2	59.0	60.2	56.2	67.8	8.7*	–0.1	8.8*
Single mother, no father present	35.7	36.1	29.3	33.7	40.3	27.4	–2.0	4.1	–1.9
Other	12.8	7.7	5.4	6.1	3.6	2.5	–6.7*	–4.1*	–2.8*
Parent education[b]									
Less than high school	13.3	13.3	10.8	49.2	48.1	37.5	35.9*	34.8*	26.7*
High school	38.8	51.5	40.1	27.0	31.4	36.5	–11.8*	–20.1*	–3.6
More than high school	47.9	35.2	49.1	23.8	20.5	26.0	–24.1*	–14.7*	–23.1*
Household income									
Less than 100% of FPL	46.9	43.2	35.7	58.8	53.1	54.1	11.8*	9.9*	18.3*
100–150% of FPL	19.2	18.3	23.2	21.3	22.0	21.4	2.1	3.6	–1.8
150–200% of FPL	13.8	13.9	14.9	10.1	12.1	10.1	–3.8*	–1.7	–4.8*
200–300% of FPL	12.4	16.6	15.1	6.8	9.3	9.7	–5.6*	–7.4*	–5.5*
300–400% of FPL	4.9	4.1	5.3	2.1	2.3	2.7	–2.7*	–1.8	–2.6*
More than 400% of FPL	2.8	3.9	5.8	0.9	1.3	2.0	–1.9*	–2.7*	–3.8*
Metropolitan statistical area (MSA)[c]	–	65.9	64.0	–	92.4	92.3	–	26.4*	28.3*
Census region									
Northeast	15.6	21.6	18.9	15.1	12.0	14.5	–0.5	–9.5*	–4.4*
Midwest	34.2	28.8	28.2	9.8	11.0	9.2	–24.4*	–17.9*	–19.0*
South	35.7	35.0	38.2	27.2	31.2	31.9	–8.5*	–3.8	–6.3*
West	14.5	14.6	14.7	48.0	45.8	44.4	33.4*	31.2*	29.8*
Health status									
Excellent/very good	78.2	77.9	82.5	70.1	72.2	62.7	–8.1*	–5.7*	–19.9*
Good	19.6	18.3	13.4	26.5	23.8	28.2	6.9*	5.5*	14.8*
Fair/poor	2.2	3.8	4.0	3.4	4.0	9.1	1.2*	0.2	5.1*
Ever told child has									
Asthma	15.9	10.8	16.5	11.0	9.6	13.7	–4.9*	–1.2	–2.8
Children with special health care needs (CSHCN)	32.6	25.8	30.2	15.6	12.4	15.0	–17.0*	–13.4*	–15.2*
Sample size	1,559	1,433	7,991	2,786	3,082	3,713			

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 0–17. Health insurance coverage is full-year Medicaid/CHIP coverage on the MEPS; on the NHIS and NSCH, it is full-year health insurance coverage with Medicaid/CHIP at the time of the survey.

* Significantly different from zero at the .05 level, using a two-tailed test.

[a] On the NSCH, "child not born in the U.S." is used as a proxy for citizenship.

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

[c] On the NSCH, MSA is defined only in states that meet the 500,000 threshold.

these patterns are likely driven in part by differences in the underlying income distribution of children in different racial and ethnic groups, it also may be explained in part by regional and cross-state differences in eligibility thresholds for Medicaid/CHIP coverage.

There are noticeable geographic and residential differences between black and white children with Medicaid and CHIP. Nearly 90 percent of the black children with Medicaid/CHIP coverage live in an MSA, compared with approximately 65 percent of white children with Medicaid/CHIP coverage. In addition, black children with Medicaid/CHIP are also significantly more likely to live in the South than white children and significantly less likely to live in the Midwest or West.

Consistent with their lower incomes, black children covered by Medicaid/CHIP are less likely to be reported as being in excellent or very good health and more likely to be reported in fair/poor or good health on both the NHIS and the NSCH (similar patterns are found on the MEPS, but they are not statistically significant, and the differentials are much smaller). On all three surveys, black children with Medicaid/CHIP coverage were more likely than white children to have been diagnosed with asthma. The pattern concerning special health care needs goes in the opposite direction; white children are more likely to meet that definition than black children, but the difference is statistically significant in only one of the three surveys.

The most noticeable differences between the white and Hispanic children covered by Medicaid/CHIP are in the educational attainment of their parents, their family income, their geographic location, and their residential location. Nearly 50 percent of Hispanic children have parents with less than a high school education compared with approximately 13 percent of white children. Hispanic children with Medicaid/CHIP are also much more likely to live below the poverty level than white children, although the size of the difference varies across the surveys, ranging from 9.9 percentage points on the MEPS to 18.3 percentage points on the NSCH. While most white and Hispanic children with Medicaid or CHIP reside in two-parent households, according to both the NHIS and the NSCH, Hispanic children with Medicaid/CHIP coverage are approximately 9 percentage points more likely to reside in a two-parent household than white children. Additionally, Hispanic children with Medicaid/CHIP coverage are significantly more likely to be noncitizens than white children, although noncitizens account for less than 6 percent of the total Hispanic Medicaid/CHIP child population.

Similar to the pattern observed among white and black children, white children are significantly less likely to live in MSAs than Hispanic children—over 25 percentage points less so. Hispanic children with Medicaid/CHIP are significantly less likely to live in the Midwest and much more likely to live in the West than their white counterparts.

The health status indicators are somewhat more varied across the three surveys among Hispanic children than among white or black children. According to the NSCH, 62.7 percent of Hispanic children were reported to be in excellent or very good health, versus 70.1 and 72.2 percent, respectively, on the NHIS and the MEPS. While white children were more likely than Hispanic children to be in excellent/very good health on all three surveys, the differential was far greater on the NSCH than on either the MEPS or the NHIS. Despite Hispanic children with Medicaid/CHIP being less likely to be in excellent or very good health, they are less likely to meet the definition of having special health care needs; in all three surveys, Hispanic children are about half as likely as white children to qualify as having a special health care need, based on the information available in the survey.

Data and Methods

We restrict our samples to children age 0 to 17. When assessing changes between 2000 and 2010 in the insurance distribution of children, we consider four different insurance categories based on coverage status at the time of the survey: employer-sponsored insurance (ESI), Medicaid/CHIP, other, and uninsured. ESI is defined as those children receiving coverage through an employer (including self-employed), union, or the military (TRICARE/CHAMPVA). Medicaid/CHIP includes Medicaid and CHIP, other government or public coverage, and private coverage that the government either helped pay for or that was obtained through the government. Other coverage includes non-ESI private health insurance and Medicare. Uninsured children are defined as those without insurance coverage at the time of the survey. 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 ESI, Medicaid/CHIP, and other coverage, except children dually enrolled in Medicaid and Medicare, who are categorized as having other coverage.

For the analyses of children with Medicaid/CHIP, we restrict our samples to children 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. In the NHIS, Medicaid/CHIP includes Medicaid and CHIP, other government or public coverage, and private coverage that the government either helped pay for or that was 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.

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 analyze separately the children who report more than one race ("multiple race") or children who report "other race," including Asian, American Indian or Alaska Native, and Native Hawaiian or Other Pacific Islander.

We examine the composition of children covered by Medicaid/CHIP by sex; citizenship status (or, in the case of the NSCH, by whether the child was born in the United States); family composition (two-parent, single mother, or other); highest educational attainment of the parent(s) (defined for children with parents in the household); household income; whether the child lives in a metropolitan statistical area (MSA); region (Northeast, Midwest, South, or West); whether the child's health status is excellent/very good, good, or fair/poor; whether they had ever been told their child had asthma; and whether their child met the definition of having special health care needs (CSHCN). CSHCNs are defined as children who "have or are at increased risk for a chronic physical, developmental,

behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally"(McPherson et al. 1998, page 138). Both the MEPS and the NSCH use a screening instrument to identify CSHCNs (Bethell et al. 2002). Since the NHIS does not include the CSHCN screening questions, this analysis adapted Davidoff's (2004) methodology for identifying CSHCNs that was developed for the 1999–2000 NHIS to the 2007–09 NHIS.[3] We include additional health condition measures (e.g., cerebral palsy) and an indicator of citizenship status in the household when available, for the analysis of the change in the composition of children in Medicaid and CHIP.

For analysis of how the composition of Medicaid/CHIP enrollees and the insurance distribution have been changing among children, we use data from the 2000 and 2010 NHIS. To assess the variation in the composition of Medicaid/CHIP enrollees across surveys, we pooled two years of data on the NHIS and the MEPS (the 2007 and 2008 MEPS, and the 2008 and 2009 NHIS) due to the relatively 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; however, the sample sizes are not large enough to analyze racial/ethnic differences by state.

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, there are differences in the country of origin among the parents of Hispanic children in immigrant families), which may limit the usefulness of generalizations about ethnic differences (Berdahl et al. 2010; Borders et al. 2004).

All the estimates that are presented have been weighted to account for the design of each survey. Likewise, the standard errors are computed using the "svy" procedures in Stata 11 to reflect the survey design. Statistically significant changes over time and differences across racial/ethnic groups are highlighted at the .05 level, based on two-tailed tests.

Conclusion

Medicaid and CHIP have grown in importance over the past decade, particularly among minority children. The two public health programs covered over a third of children nationwide in 2010, over a fifth of white children, and more than half of all Hispanic and black children.

The increases in Medicaid/CHIP coverage are associated with decreases in uninsurance among white, black, and Hispanic children and with a narrowing of the uninsurance rates among children in those three groups, though the uninsured rate for Hispanic children remains substantially higher than that for black and white children.

While exact numbers vary across the surveys examined, all three indicate that about a third of the children covered by Medicaid/CHIP are white, about a third are Hispanic, and about a quarter are black (the remainder are in the other race category).

Children covered by Medicaid/CHIP in each of the three racial and ethnic groups examined tend to live in different areas of the country. White children covered by Medicaid/CHIP are much more likely than their Hispanic and black counterparts to live outside metropolitan statistical areas: over a third of the white children covered by Medicaid or CHIP live outside an MSA, compared with approximately 15 and 8 percent, respectively, of similar black and Hispanic children. In addition, white children covered by Medicaid/CHIP are more likely than black and Hispanic children to live in the Midwest; they are less likely than black children to live in the South and less likely than Hispanic children to live in the West. Overall, between 50 and 60 percent of black children covered by Medicaid or CHIP live in the South, while around 45 percent of the Hispanic children covered by Medicaid or CHIP live in the West.

On health status, the picture is complex. White children with Medicaid/CHIP coverage are more likely to be characterized as in excellent or very good health, but they are also more likely to meet the definition of having a special health care need. Black children covered by Medicaid or CHIP in 2010 are more likely to have been diagnosed with ADHD/ADD or asthma than those in the programs a decade earlier.

This analysis has both research and policy implications. In terms of research, the demographic, socioeconomic, health, and residential characteristics of children with Medicaid/CHIP coverage vary with race and ethnicity. These differences complicate assessments of whether and how access to care varies for Medicaid/CHIP-covered children from different racial and ethnic backgrounds, since many of these factors also affect the need for health care. These findings demonstrate that a single health status measure is unlikely to accurately convey the health needs of a particular child, and they raise questions about how the general health status measure relates to the special health care needs indicator, which is affected by how well a child's health needs are identified and treated. These findings also raise concerns that black and Hispanic children may be underrepresented among policies targeted at children with special health care needs. More analysis is needed to assess why black and Hispanic children are less likely to meet the definition of having a special health care need, despite being less likely than white children to be in excellent or very good health (Shenkman et al. 2001; Stein and Jessop 1989).

In terms of policy, this analysis indicates how important state and federal Medicaid and CHIP policies are for children, particularly for the large and growing shares of black and Hispanic children who rely on Medicaid or CHIP for their health insurance coverage. Given their geographic location, white and black children covered by Medicaid and CHIP will be most affected by policies implemented by midwestern and southern states (with the South relatively more important for black children and the Midwest for white children); for Hispanic children, policies implemented by states in both the South and, particularly, the West will have the greatest potential impact.

There is considerable uncertainty about the future of Medicaid and CHIP. Full implementation of the Affordable Care Act (ACA) is projected to lead to further increases in Medicaid and CHIP coverage for children due to the combination of the new outreach and enrollment efforts, the expansion of Medicaid eligibility and other types of coverage to more adults, and the individual requirement to have health insurance coverage (Kenney et al. 2012). Particularly large gains are expected for the nonelderly black and Hispanic population (Clemans-Cope et al. 2012.) However, some states have indicated that they may not implement the Medicaid expansion; other states may not be as aggressive about outreach and enrollment. Moreover, the future of CHIP and of public coverage for children more generally is uncertain beyond 2015. In addition, federal budget issues have led some to call for block grants in Medicaid. All these possible changes make it all the more important to monitor how federal and state policies affect children overall and especially the black and Hispanic children who most rely on Medicaid and CHIP coverage.

NOTES

1. Eileen Patten, "Statistical Portrait of the Foreign-Born Population in the United States, 2010," Table 1. Population, by Nativity and Citizenship Status: 2000 and 2010, http://www.pewhispanic.org/2012/02/21/statistical-portrait-of-the-foreign-born-population-in-the-united-states-2010/#1.
2. Blavin and colleagues (2012) report similar estimates of the share of children with Medicaid/CHIP in 2000 and 2010 based on the Current Population Survey.
3. For additional information, see Davidoff (2004).

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