

# CHAPTER 2



## Access to Care for Children Enrolled in Medicaid or CHIP



# 2

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This chapter presents findings on access to care for children enrolled in Medicaid or the State Children's Health Insurance Program (CHIP) compared to uninsured children and children with employer-sponsored insurance (ESI). Medicaid and CHIP are critical sources of coverage for millions of low-income children. More than 40 million children had Medicaid or CHIP coverage at some point during fiscal year 2011, representing approximately half of the U.S. child population.

A key question is whether or not this coverage provides these children with timely access to appropriate health care services. To provide insights on this question, the Commission analyzed national household survey data to examine children's access to and utilization of care. Like much prior research, these analyses compare children with Medicaid or CHIP to children who were uninsured or covered by ESI while controlling for health, demographic, and socioeconomic characteristics. The key findings include the following:

- ▶ For almost every measure of access to health care analyzed, the survey data indicate that children enrolled in Medicaid or CHIP have substantially better access to care than similarly situated uninsured children, as reported by a parent or other knowledgeable adult in the household. Compared to uninsured children, children enrolled in Medicaid or CHIP were:
  - more likely to have a usual source of care;
  - more likely to have had a well-child visit in the past year;
  - more likely to have had a specialist visit in the past year; and
  - less likely to have delayed medical care in the past year.
- ▶ While comparisons between children with Medicaid or CHIP and similarly situated children with ESI yield a more complex picture, their health care access and use are comparable for many of the survey measures, such as having a usual source of care and having had a specialist visit in the past year.

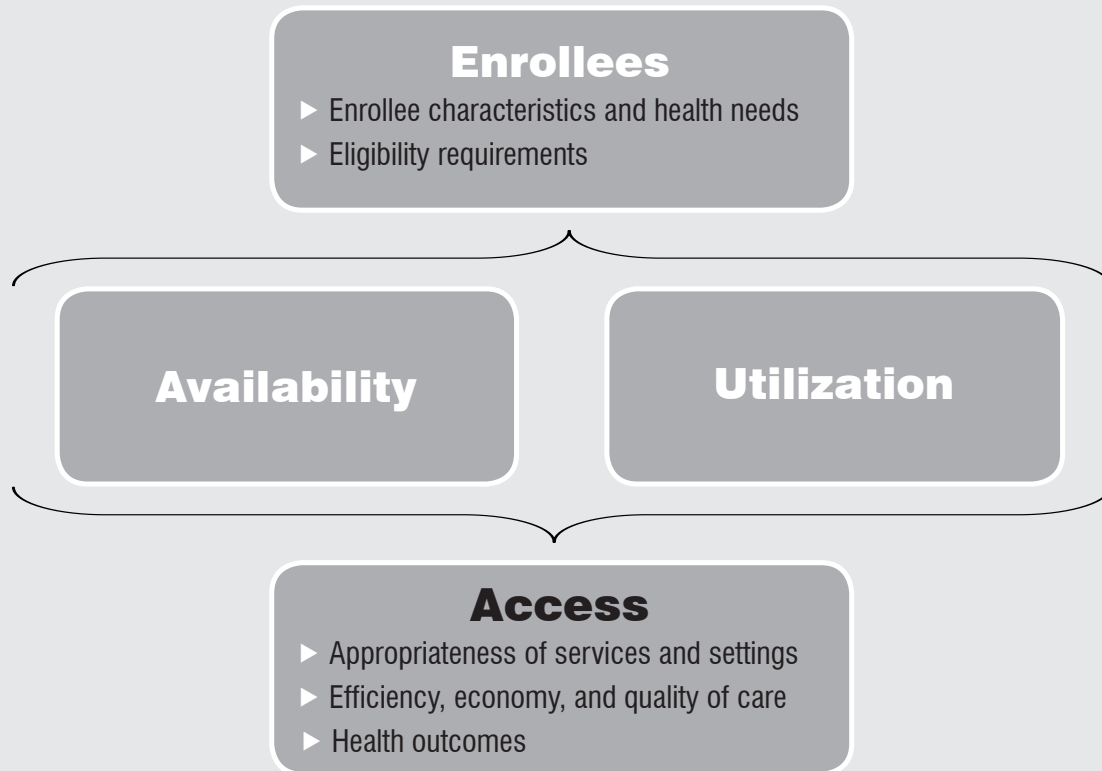
- ▶ This chapter focuses mainly on how access to care and service use are affected by the source of health insurance of similarly situated children, controlling for differences in the underlying health, demographic, and socioeconomic characteristics of children with Medicaid or CHIP as compared to uninsured children and children with ESI. While these adjustments had a substantial impact on only a few measures, the more detailed analyses suggest that factors beyond health insurance—for example, health status, race or ethnicity, and family income—can also be associated with differences in access to care, regardless of health insurance status.

For decades, the federal Medicaid statute has required state Medicaid programs to ensure adequate access to covered services. One of

MACPAC’s statutory requirements is to assess Medicaid and CHIP enrollees’ access to care and the factors that affect access. In its March 2011 Report to the Congress, the Commission presented its initial framework for examining access (Figure 2-1). Drawing upon over 30 years of research on defining and measuring access to care, the framework focuses on three main elements: enrollees and their unique characteristics, provider availability, and utilization. These three elements serve as the structure for the quantitative findings presented here on children’s access to care. These three elements also address both the supply and demand sides of health care.

The remainder of this chapter briefly describes the sources of data and methodology used and presents the MACPAC findings on children’s access to care.<sup>1</sup>

**FIGURE 2-1. The Commission’s Access Framework**



<sup>1</sup> Additionally, more detailed information is presented in the chapter’s Annex and in the MACPAC Contractor Report (Kenney and Coyer 2012), which was the basis of the findings presented in this chapter. The MACPAC Contractor Report is available at [www.macpac.gov](http://www.macpac.gov).

## Methodology Overview

As described in greater detail in this chapter's Annex, the findings in this chapter are based on two national household surveys—the National Health Interview Survey (NHIS) and the Medical Expenditure Panel Survey (MEPS). In comparing children enrolled in Medicaid or CHIP<sup>2</sup> to uninsured children and children with ESI,<sup>3</sup> factors controlled for include:

- ▶ Health-related characteristics, such as age, gender, health status, presence of certain chronic conditions (e.g., asthma), and disability;
- ▶ Additional demographic characteristics, such as race and ethnicity; and
- ▶ Socioeconomic characteristics, such as income, education, and citizenship.

The goal of controlling for these factors was to determine how access varies for children with different or no health insurance who are similarly situated in terms of certain health, demographic, and socioeconomic characteristics. However, there may be other relevant variables that could not be controlled for in this analysis.

For the findings on children's access to care, survey respondents were generally parents. By providing families' perspectives on children's access and health care experiences, parental reports complement the information on access to care that can be derived from other sources, such as provider surveys and administrative data.

However, these different types of data have both unique strengths and weaknesses as sources

of information on access to care. Particular weaknesses associated with these household survey data include:

- ▶ They rely on parent recall, which may not be accurate.
- ▶ Parents may feel pressure to provide certain socially acceptable answers (for example, by indicating that their children received well-child visits even if they did not).
- ▶ They are based on subjective perceptions that might not align with objective criteria (for example, parents may not be aware that their child needs a particular type of care and may thus underreport “unmet health care needs”).

Moreover, such weaknesses may vary systematically according to individuals' sources of health insurance, potentially biasing the results. As a result, developing a more complete assessment of access to care for children enrolled in Medicaid or CHIP will require placing the information provided by parents in the context of information from other sources.

**Children with part-year health insurance coverage not included.** The surveys used to produce the findings in this chapter capture children's source of health insurance coverage at the time of the survey. However, if children were uninsured at the time of the survey but were enrolled in ESI, Medicaid, or CHIP for several of the preceding months, their annual health care use and other measures of access may not accurately reflect their uninsured status. To address this concern, the findings in this chapter are limited to

<sup>2</sup> The NHIS asks separately about Medicaid and CHIP while the MEPS has a single question about whether the individual is covered by Medicaid or CHIP. However, Medicaid and CHIP estimates are not produced separately from the NHIS for several reasons; for example, many states' CHIP and Medicaid programs use the same name, so respondents would not necessarily know whether their child's coverage was funded by Medicaid or CHIP. The separate survey questions are used to reduce surveys' undercount of Medicaid and CHIP enrollees, not to produce valid estimates separately for each program. Thus, survey estimates generally combine Medicaid and CHIP into a single category, as is done in this chapter.

<sup>3</sup> In the NHIS, ESI coverage is defined as coverage through an employer (including self-employed), union, or the military (TRICARE/CHAMPVA). In the MEPS, ESI is defined as private group coverage through an employer or union, self-employed coverage, or TRICARE/CHAMPVA.

children who were either uninsured or insured for the entire year. This helps ensure that reports about access to care for insured children, for example, do not actually include parts of the year when the children did not have coverage.<sup>4</sup> The movement of children in and out of coverage and across sources of coverage has been widely recognized as an important policy issue and may be explored in future MACPAC analyses.<sup>5</sup>

**Access to certain services not included.** The findings in this chapter do not include results for certain specific services such as dental care. Dental services are delivered by a unique set of providers and are often financed differently from other types of care. MACPAC plans to produce focused analyses on oral care and other services in the context of Medicaid and CHIP in the future.

## Enrollees and Their Unique Characteristics

Medicaid and CHIP enrollees differ from the general population in terms of their health, demographic, and socioeconomic characteristics, as shown in prior MACPAC reports.<sup>6</sup> These differences in individual and family characteristics can influence how and where children with Medicaid or CHIP obtain health care services. As described below, the findings on access to care presented in this chapter take into account the

unique characteristics of enrollees with Medicaid or CHIP.

**Health characteristics.** Children with Medicaid or CHIP are more likely than children with ESI or uninsured children to be in fair or poor health and are more likely to have asthma<sup>7</sup> or to be limited because of physical, mental, or emotional problems (Figure 2-2). The fact that children with Medicaid or CHIP tend to be in poorer health suggests that they would be expected to use more health care services. As a result, children with Medicaid or CHIP could show higher utilization of health care services, not necessarily because Medicaid and CHIP provide greater access, but simply because children with Medicaid or CHIP are sicker. The findings in this chapter attempt to control for health-related characteristics that make children with ESI and no insurance differ from children with Medicaid or CHIP.<sup>8</sup>

**Demographic and socioeconomic characteristics.** Children with Medicaid or CHIP also differ from other children in terms of their demographic and socioeconomic characteristics. For example, children with Medicaid or CHIP are more likely to be in a family with income below the federal poverty level than are children with ESI and uninsured children.<sup>9</sup> Children with Medicaid or CHIP are *more* likely to be Hispanic than children with ESI, but *less* likely to be Hispanic than uninsured children (Figure 2-3).

<sup>4</sup> The coverage categories used in this report are as follows: a) full-year uninsured; b) full-year insured with Medicaid or CHIP at the time of the survey (and not with ESI or Medicare at the time of the survey); and c) full-year insured with ESI at the time of the survey. While the full-year insurance variables are defined over a 12-month period, some of the children in the ESI category may have had Medicaid or CHIP or other types of coverage over the course of the year; likewise, some of the children in the Medicaid/CHIP category may have had ESI coverage over the course of the year.

<sup>5</sup> For a discussion of the characteristics of children insured for only part of the year and the complexities involved with measuring their access to care, see Buchmueller et al. 2011 and Olson et al. 2005.

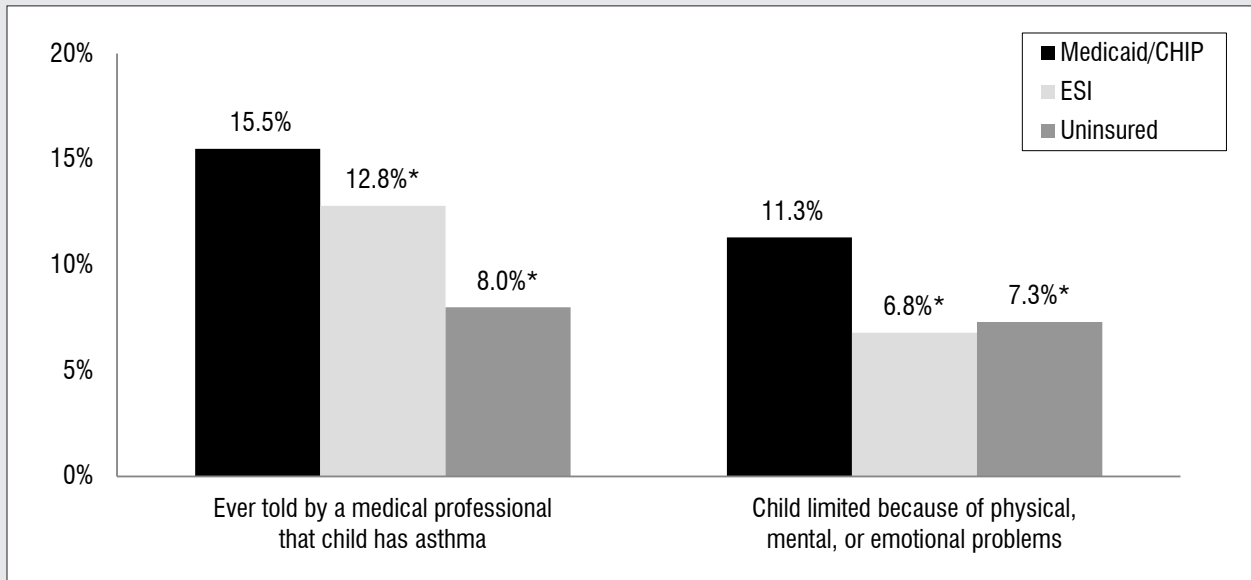
<sup>6</sup> See, for example, MACPAC 2011b, pp. 125-142.

<sup>7</sup> Report of asthma is based on whether the parent was ever told by a medical professional that the child had asthma. Uninsured children may be more likely to have undiagnosed health problems because they do not see health care providers as regularly.

<sup>8</sup> The MACPAC Contractor Report describes in detail the adjustments used, which are based on an approach developed by the Institute of Medicine. The MACPAC Contractor Report also shows the findings without the adjustments for these health-related characteristics.

<sup>9</sup> Income is measured at the health insurance unit (HIU). An HIU includes the members of a nuclear family who generally can be covered under one health insurance policy. This includes an individual, spouse, all unmarried children 18 and younger, and children 24 and younger who are full-time students.

**FIGURE 2-2. Personal Health Characteristics of Children (0–18) by Insurance Status, 2009**

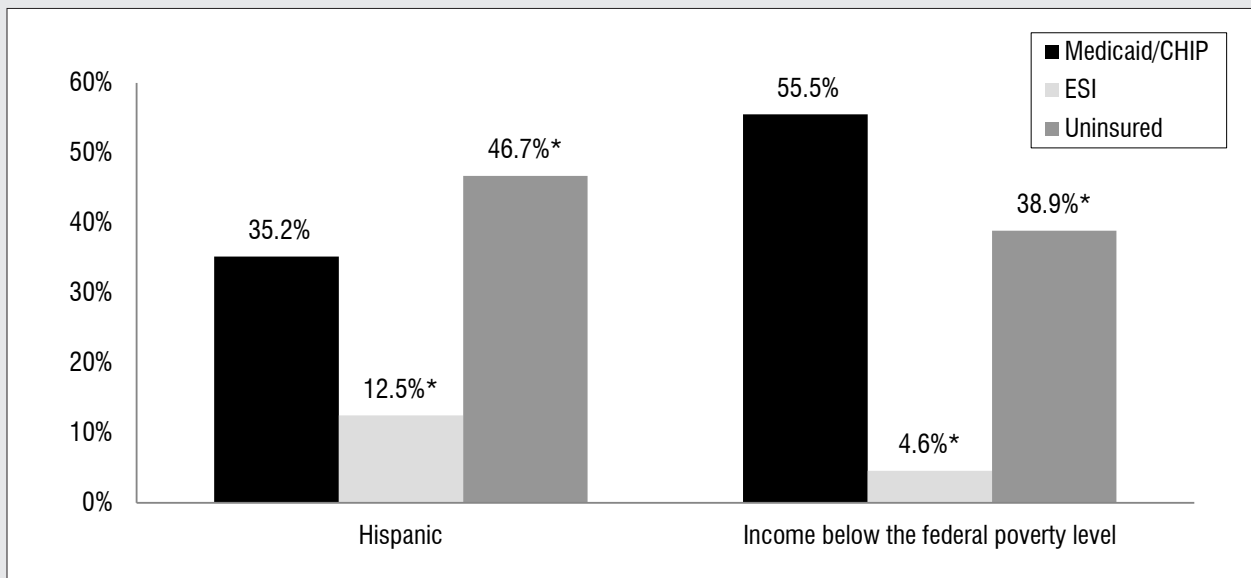


**Notes:** ESI is employer-sponsored insurance. To show how Medicaid/CHIP children differ from children with ESI or no coverage, these numbers are not adjusted as elsewhere for the groups' differing health, demographic or socioeconomic characteristics. Uninsured children may be more likely to have undiagnosed health problems because they do not see health care providers as regularly.

\* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

**Source:** Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

**FIGURE 2-3. Demographic and Socioeconomic Characteristics of Children (0–18) by Insurance Status, 2009**



**Notes:** ESI is employer-sponsored insurance. Income is measured at the health insurance unit (HIU). The federal poverty level (FPL) is measured using the 2009 U.S. Department of Health and Human Services (HHS) poverty guidelines. To show how Medicaid/CHIP children differ from children with ESI or no coverage, these numbers are not adjusted for the groups' differing health, demographic or socioeconomic characteristics.

\* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

**Source:** Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

As a result of these demographic and socioeconomic differences, children with Medicaid or CHIP could show different levels of health care utilization and access to care, not because of the source of coverage, but because of their underlying demographic and socioeconomic characteristics. For example, because significantly more children with Medicaid or CHIP live below the poverty line than do children with ESI or with no insurance, this analysis attempts to control for income to account for differences in levels of access due to income status. The findings in this chapter are based on controlling for demographic and socioeconomic characteristics that make children with ESI and no insurance differ from children with Medicaid or CHIP.<sup>10</sup>

## Provider Availability

Availability focuses on whether health care providers are accessible to Medicaid and CHIP enrollees. There are two key factors that influence the availability of providers in a given area:

- ▶ provider supply—for example, the ratio of providers to the population; and
- ▶ provider participation—for example, the proportion of providers in an area that accepts Medicaid and CHIP.

Physicians and other health care providers are disproportionately located in areas where incomes are high and health care is financed predominantly by private insurance; they are less willing to locate in the more rural or low-income areas where many children with Medicaid and CHIP reside (Brasure et al. 1999, Fossett and Perloff 1999). Research has also found that communities with high proportions

of black and Hispanic residents were much more likely than others to have a shortage of physicians, regardless of the average income in the community (Komaromy et al. 1996). Although overall provider supply may not be affected by federal or state Medicaid and CHIP policies, providers' willingness to participate in these programs may be affected by a number of factors under states' control, including payment rates and administrative burden for providers.

Because the data used here are from interviews of *users* of care, rather than *providers*, they do not directly measure the number of providers available to Medicaid and CHIP enrollees. Other sources of data such as provider surveys can produce more information on access as measured by provider availability and are being used in analyses MACPAC is currently conducting. However, there are several measures available in household survey data that indirectly measure whether providers are available to the consumers being surveyed. For example, whether an enrollee reports having a usual source of care may be the result of multiple influences, but one important factor is whether the enrollee is able to find a provider to serve as a usual source of care.

**Nearly all children with Medicaid or CHIP have a usual source of care.** Almost all children with Medicaid or CHIP (95.5 percent) and similarly situated children with ESI (94.5 percent) were reported to have had a usual source of care, compared to 63.0 percent of similarly situated uninsured children (Figure 2-4).<sup>11</sup>

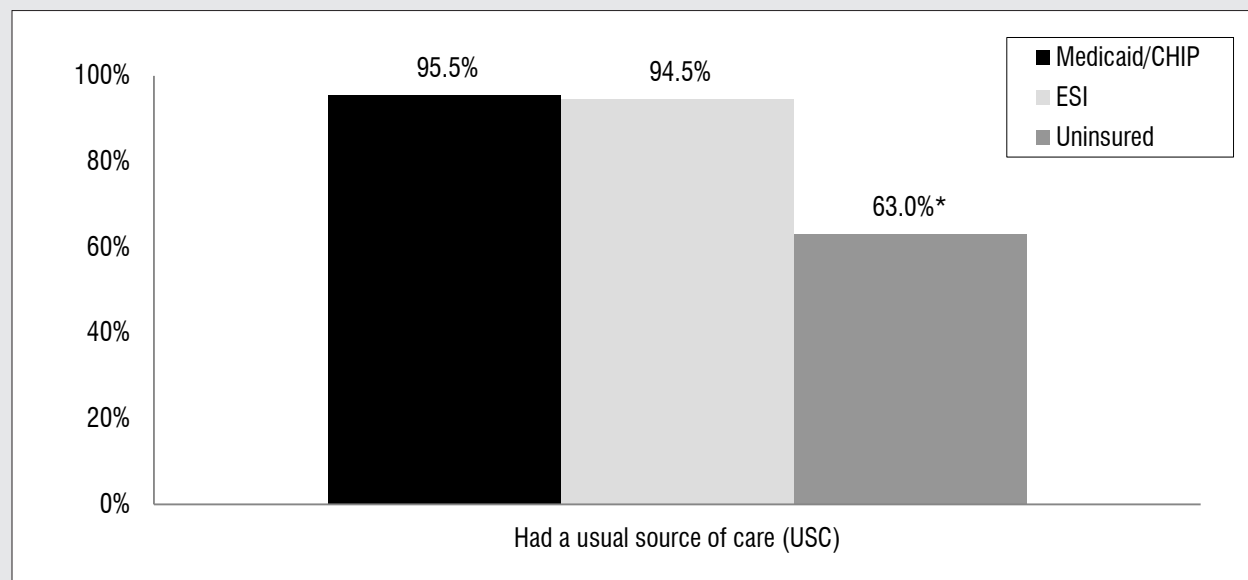
**Children with Medicaid or CHIP are more likely than children with ESI to have a clinic or health center as their usual source of care.** A usual source of care is defined as the place that a person

<sup>10</sup> The MACPAC Contractor Report also shows the findings without these adjustments.

<sup>11</sup> The results in the remainder of this chapter compare children with Medicaid or CHIP to “similarly situated” children with ESI or without insurance unless otherwise specified. This means that numerous characteristics were controlled for using regression models, as described in this chapter’s Annex and the MACPAC Contractor Report.



**FIGURE 2-4. Usual Source of Care among Similarly Situated Children (0–18) by Insurance Status, 2009**



**Notes:** ESI is employer-sponsored insurance. Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of health-related advice; the emergency department is not considered a USC. The means reported for children with ESI coverage and for uninsured children are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the children with Medicaid/CHIP coverage.

\* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

**Source:** Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

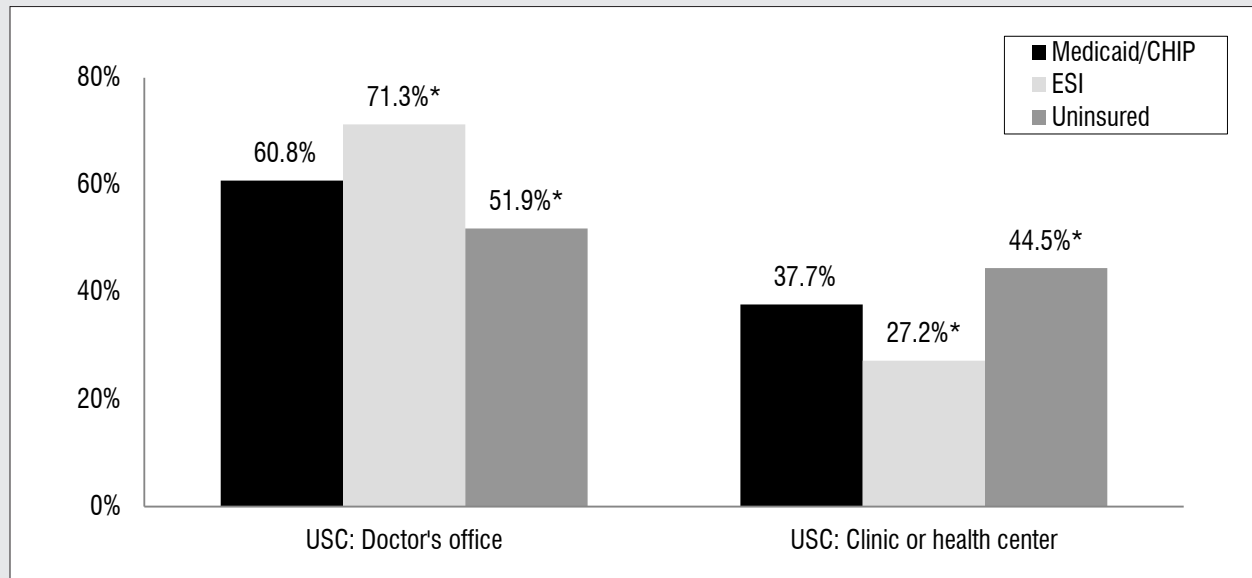
typically goes to when sick or in need of health-related advice. For the analyses in this chapter, the emergency department is not considered a usual source of care. Among children with a usual source of care (USC), most have a doctor's office as their USC, regardless of their source of health insurance. Previous research has found that Medicaid and CHIP enrollees disproportionately rely on providers at community health centers for primary care services (Hing and Uddin 2008). This is consistent with the findings in Figure 2-5, which show that, even after accounting for differences in the health, demographic, and socioeconomic status of children with a USC, children with Medicaid or CHIP are more likely to have a clinic or health center as their USC, compared to children with ESI.<sup>12</sup> Uninsured children are even more likely than children with Medicaid or CHIP to rely on clinics and health centers as their USC.

**Reasons for delaying needed care vary with insurance status.** After accounting for differing enrollee characteristics, children with Medicaid or CHIP and those with ESI reported similar rates of delayed medical care (Table 2-1).

The findings in this chapter rely on comparisons of children with Medicaid or CHIP to *similarly situated* children with ESI. When comparing the two groups *without* controlling for their differing characteristics, children with ESI were less likely to have delayed care (9.4 percent) compared to children with Medicaid or CHIP (17.0 percent)—a difference of 7.6 percentage points. When controlling only for the populations' differing health characteristics, the difference between the two groups decreases; if children with ESI had as many health needs as children with Medicaid or CHIP, they would be more likely to have delayed

<sup>12</sup> "Clinic or health center" does not include hospital outpatient departments.

**FIGURE 2-5. Type of Usual Source of Care (USC) among Similarly Situated Children (0–18) with a USC by Insurance Status, 2009**



**Notes:** ESI is employer-sponsored insurance. Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of health-related advice; the emergency department is not considered a USC. See Figure 2-4 for overall rates of children having a USC. Doctor’s office includes an HMO. Clinic or health center does not include hospital outpatient departments. The means reported for children with ESI coverage and for uninsured children are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the children with Medicaid/CHIP coverage.

\* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

**Source:** Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

care (a smaller difference, 5.7 percentage points, as shown in Table 3 of the MACPAC Contractor Report’s technical appendix). After also controlling for demographic and socioeconomic characteristics, in addition to health characteristics, the significant difference in reported delayed medical care between children with Medicaid or CHIP and ESI disappears. This may indicate that delaying needed medical care is a challenge for children with lower incomes and other related characteristics, regardless of their health insurance status.

**Children with Medicaid or CHIP are less likely than other groups to delay care because of worries about out-of-pocket costs.** In terms of the reasons why care was delayed, however, children with Medicaid or CHIP reported lower levels of delaying care because of worries about out-of-pocket costs compared to similarly situated children with ESI and uninsured

children (Table 2-1). This is likely related to the requirement that children enrolled in Medicaid generally not have cost sharing such as copayments (42 CFR 447.53(b)(1)).

**Provider office hours and office waiting times present some challenges for children with Medicaid or CHIP.** For children with Medicaid or CHIP and with ESI, similar rates were reported for delaying care because of difficulty in obtaining an appointment or getting through on the phone. Delays in care because families could not make appointments during office hours were uncommon, but were more often reported for children with Medicaid or CHIP than for those with ESI (Table 2-1). This may be influenced by the fact that 42.9 percent of children with Medicaid or CHIP had a usual source of care available at night or during weekend hours, which is significantly lower than for children with ESI

**TABLE 2-1. Delayed Medical Care among Similarly Situated Children (0–18) by Insurance Status, 2009**

	Medicaid/CHIP	ESI	Uninsured
<b>Delayed medical care (any reason below)</b>	<b>17.0%</b>	<b>16.1%</b>	<b>29.8%*</b>
Because once at the site, wait too long to see the doctor	8.2	5.9*	4.0*
Because could not get an appointment soon enough	6.9	5.6	5.0
Because did not have transportation	4.6	3.4*	4.0
Because could not go when open (office hours)	3.7	2.5*	3.9
Because could not get through on the phone	2.9	2.2	2.5
Because of worries about out-of-pocket costs	1.6	4.9*	21.6*

**Notes:** ESI is employer-sponsored insurance. Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of health-related advice; the emergency department is not considered a USC. The means reported for children with ESI coverage and for uninsured children are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the children with Medicaid/CHIP coverage.

\* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

**Source:** Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

(51.4 percent). Children enrolled in Medicaid or CHIP were also more likely to have care delayed because the wait for the health care provider in the office was too long.

There were no significant differences reported among children with Medicaid or CHIP and similarly situated children with ESI for the following four access measures:

- ▶ **Timeliness of needed care.** Among children who had a condition that needed care right away, 91.5 percent of the children with Medicaid or CHIP were reported to have received care as soon as needed.
- ▶ **Appointments for routine care.** Among children who had appointments for routine care, an appointment was reported to be available as soon as was needed for 93.3 percent of the children with Medicaid or CHIP.

- ▶ **Ease of obtaining care and tests.** Among children who needed care, tests, or treatments, households reported it was easy for 94.8 percent of the children with Medicaid or CHIP to get such care.
- ▶ **Ease of obtaining specialty care.** Among children who needed to see a specialist, it was reported to be easy for 82.6 percent of the children with Medicaid or CHIP to see the necessary specialist.

Indeed, even for uninsured children who obtained care, there was no significant difference in most of these measures compared to children with Medicaid or CHIP, with the exception of specialty care: 58.6 percent of uninsured children needing specialty care found it easy to see a specialist.

## Utilization of Health Care Services

By itself, insurance coverage does not guarantee the receipt of necessary or appropriate services. Thus utilization, the third component of the Commission's framework on access, assesses enrollees' use of services and how they perceive their experiences with obtaining care and interacting with their providers. Utilization is "realized access," or how services are actually used by individuals. This section presents findings on utilization of care by children enrolled in Medicaid or CHIP, compared to similarly situated children with ESI or no coverage.<sup>13</sup>

**Use of primary and preventive care among children with Medicaid or CHIP equals or exceeds that among other children.** As shown in Figure 2-6, parents of children with Medicaid or CHIP reported rates of well-child visits that exceeded those of similarly situated children with ESI or no coverage. This was also true for children having any office visit to a health care provider.

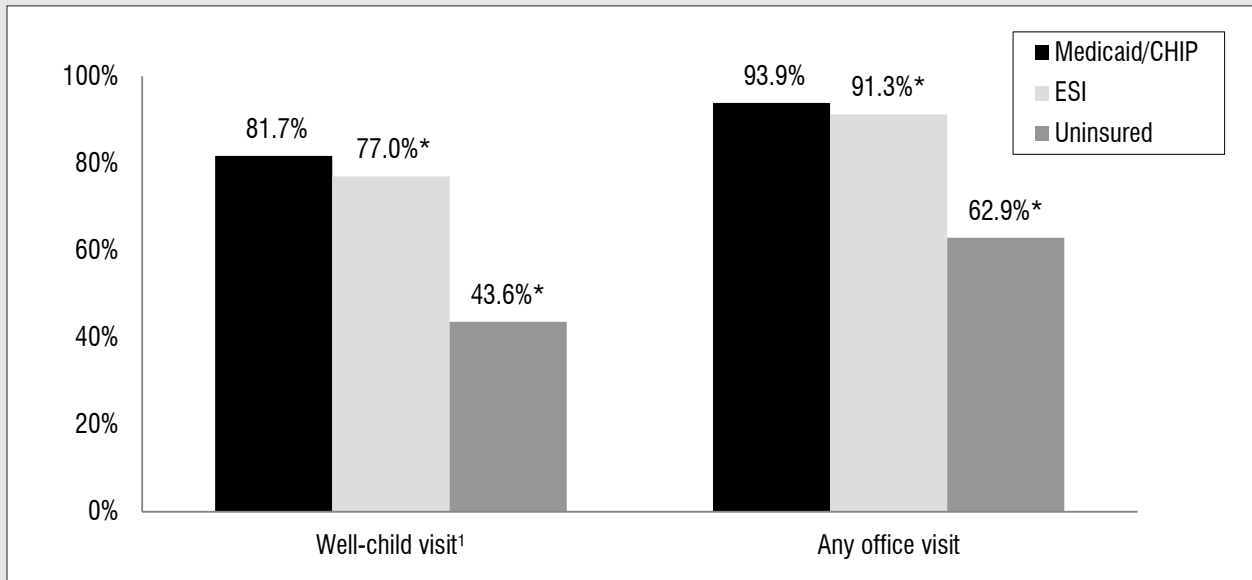
While children with Medicaid or CHIP were reported to receive flu vaccines at rates similar to those covered by ESI (34.2 percent vs. 32.3 percent), the receipt of flu vaccines among all children is very low given that the Centers for Disease Control and Prevention (CDC) recommends that all children over six months of age be inoculated. Consistent with their less-frequent contact with the health care system, uninsured children are less likely to have flu shots, screenings such as blood pressure checks, and encounters that include advice on topics such as the benefits of regular dental check-ups and exercise.

**Use of specialists is comparable among children with Medicaid or CHIP and similarly situated children with ESI.** The survey results show that children with Medicaid or CHIP have rates of visits to specialists and mental-health professionals that are not significantly different from those among similarly situated children with ESI (Figure 2-7). The utilization rates among uninsured children are significantly lower for specialists in general and mental-health professionals in particular, compared to children with Medicaid or CHIP.

Again, the findings in this chapter rely on comparisons of children with Medicaid or CHIP to *similarly situated* children with ESI. When comparing the two groups without controlling for their differing characteristics, children with ESI are *more* likely to have a specialist visit (18.6 percent) compared to children with Medicaid or CHIP (14.4 percent)—a difference of 4.2 percentage points. When controlling *only* for the populations' differing health characteristics, the difference between the two groups is even larger; if children with ESI had as many health needs as children with Medicaid or CHIP, they would be even more likely to have visited a specialist (5.8 percentage point difference, as shown in Table 3 of the MACPAC Contractor Report's technical appendix). However, after controlling for demographic and socioeconomic characteristics, in addition to differing health characteristics, the significant differences between children with Medicaid or CHIP and ESI disappear with respect to a specialist visit, as shown in Figure 2-7. This may indicate that accessing specialty care is a challenge for low-income children, regardless of their health insurance status.

<sup>13</sup> Additional detail is available in the MACPAC Contractor Report.

**FIGURE 2-6. Ambulatory Care among Similarly Situated Children (0–18) by Insurance Status, 2009**



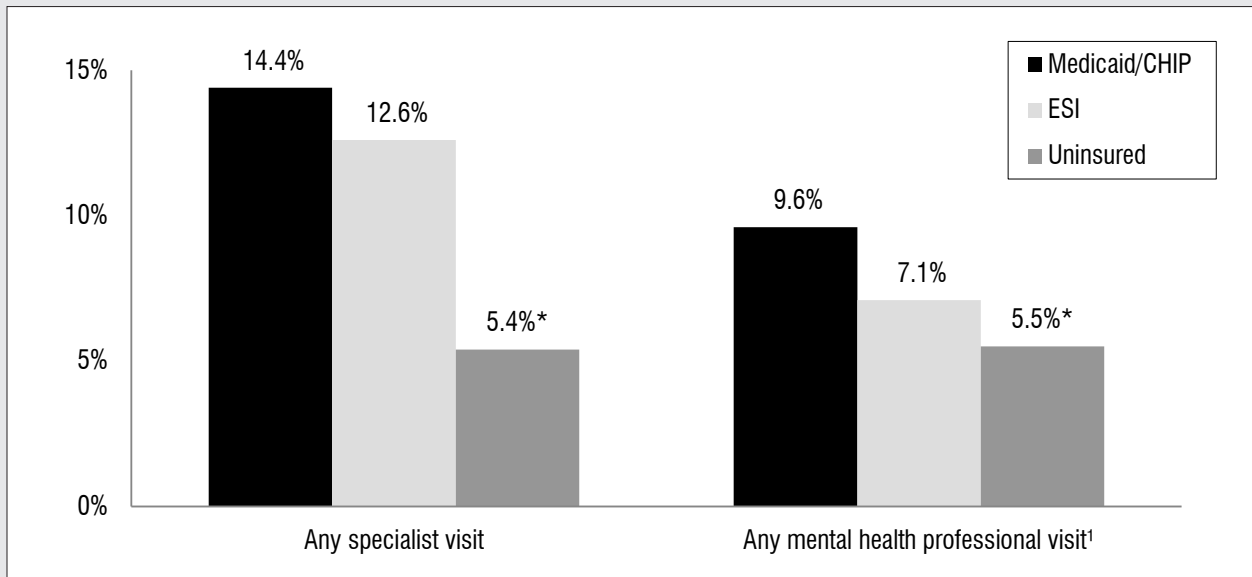
**Notes:** ESI is employer-sponsored insurance. The means reported for children with ESI coverage and for uninsured children are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the children with Medicaid/CHIP coverage.

\* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

<sup>1</sup> Question only asked of children age 0 to 17.

**Source:** Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

**FIGURE 2-7. Specialty Care among Similarly Situated Children (0–18) by Insurance Status, 2009**



**Notes:** ESI is employer-sponsored insurance. Specialists include medical doctors who specialize in a particular medical disease or problem (other than psychiatrists or ophthalmologists). The means reported for children with ESI coverage and for uninsured children are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the children with Medicaid/CHIP coverage.

\* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

<sup>1</sup> Question only asked of children age 2 to 18.

**Source:** Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

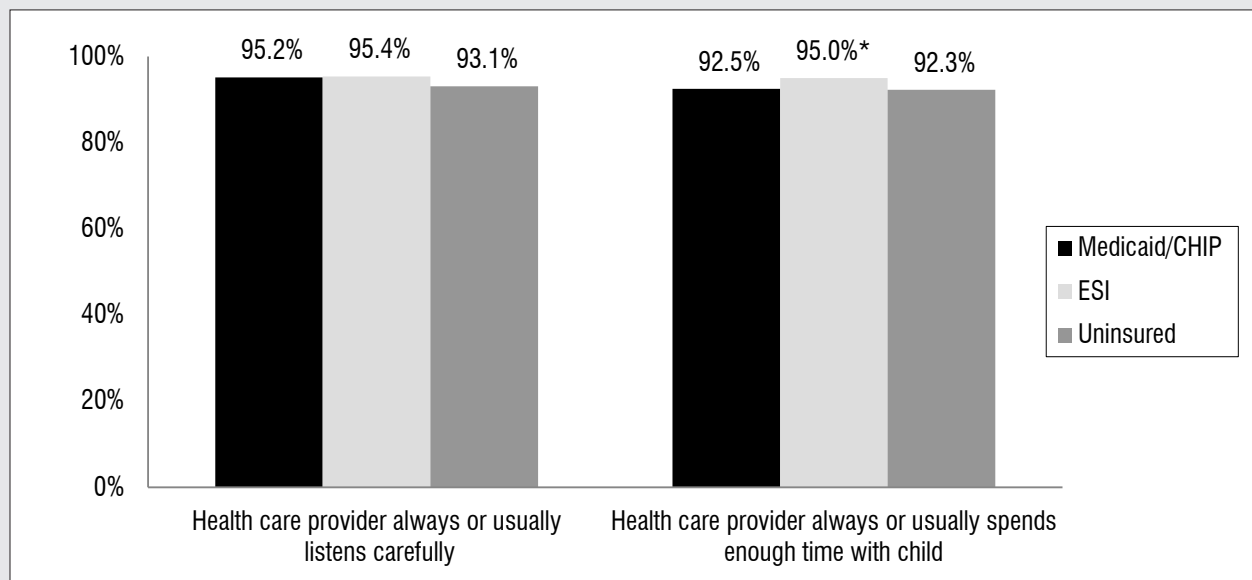
In addition, this measure does not assess the extent to which specialty care was needed, nor whether children received all necessary specialty care. Rather, it is a simple measure of whether a visit to a specialist occurred. This sole measure cannot be used to indicate whether or not children with Medicaid or CHIP face challenges in obtaining access to needed specialty care, but must also be placed in the context of information from other sources, such as provider surveys and claims data.

**Regardless of the source of health insurance, health care providers were reported to listen carefully and spend enough time with their child patients.** The vast majority of children who had at least one visit to a health care provider’s office or clinic in the past 12 months were reported to have had positive interactions with the provider. For all three insurance groups, over 90 percent indicated that the provider usually or always listened carefully, explained things in a way

that was easy to understand, showed respect, and spent enough time with the child. The differences between uninsured and children with Medicaid or CHIP were not statistically significant. Only in one case—whether the doctors or health care professionals spend enough time with the child—was the difference between ESI and Medicaid or CHIP significant. And, although the difference was statistically significant, both numbers were above 90 percent (Figure 2-8).

As previously noted, these measures are based on the perceptions of respondents on behalf of children who obtained care. The surveys do not identify, for example, the amount of time the provider actually spent with the children, only whether respondents considered it to be “enough.” Respondents with children who have no coverage or with different sources of coverage may have different expectations for how much time with

**FIGURE 2-8. Patient-centered Measures among Similarly Situated Children (0–17) by Insurance Status, 2008**



**Notes:** ESI is employer-sponsored insurance. Questions only asked of children who had at least one doctor or health care professional visit in the past 12 months. The means reported for children with ESI coverage and for uninsured children are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the children with Medicaid/CHIP coverage.

\* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

**Source:** Urban Institute analysis for MACPAC of the 2008 Medical Expenditure Panel Survey (MEPS)

the child is “enough,” which could affect their responses.

**Children with Medicaid or CHIP have the highest rates of emergency department visits.**

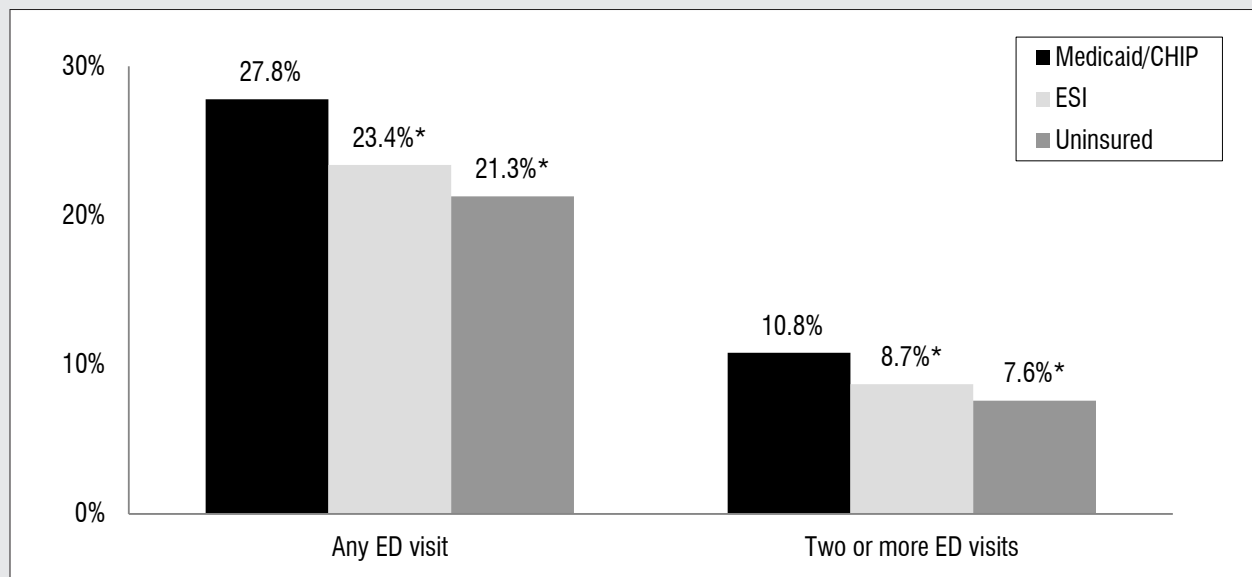
Although emergency department (ED) care is necessary for some conditions, utilizing EDs for non-emergent care is generally more costly and provides fewer opportunities for follow-up than if the underlying condition were treated by a primary care provider (GAO 2011). A high rate of ED use may indicate that children are not receiving care in the optimal setting.

The survey results show that children with Medicaid or CHIP are much more likely than uninsured children and children with ESI to have had an ED visit and to have had multiple ED visits in the past 12 months (Figure 2-9).<sup>14</sup> While these results are adjusted for differences in

children’s health, demographic, and socioeconomic characteristics, they do not adjust for the availability of health care providers after hours or for whether the children live in medically underserved areas, for example. The higher rates of ED visits among children with Medicaid or CHIP is well documented in the research literature and confirmed in this analysis. This may be due in part to their having less access to nighttime and weekend care through their usual source of care, and longer wait times in the office to see their providers (Table 2-1) (IOM 2007).

More analysis is needed to understand what may be causing higher rates of ED use among children with Medicaid or CHIP, whether or not such ED use is appropriate, and whether or not the higher rates are a reflection of problems with access to primary or specialty care.

**FIGURE 2-9. Emergency Department Visits among Similarly Situated Children (0–18) by Insurance Status, 2009**



**Notes:** ESI is employer-sponsored insurance. The means reported for children with ESI coverage and for uninsured children are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the children with Medicaid/CHIP coverage.

\* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

**Source:** Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

<sup>14</sup> Using the unadjusted ESI numbers, the differences are even larger, as shown in Table 3 of the MACPAC Contractor Report’s technical appendix.

## Looking Forward

Prior studies have shown that insurance coverage—Medicaid and CHIP for children in particular—improves access to care compared to being uninsured, and the findings in this chapter are consistent with that earlier research (IOM 2009, Hargraves and Hadley 2003). Other studies have examined the impact of Medicaid and CHIP relative to ESI on access to care (Dubay and Kenney 2001, Long et al. 2005, Selden and Hudson 2006).

The findings presented in this chapter show that children enrolled in Medicaid or CHIP have substantially better access to care than similarly situated uninsured children and, in most cases, experience comparable access as similarly situated children with ESI. The comparisons between similarly situated children help ensure that any differences in access were attributable to the specific source of coverage, not underlying enrollee characteristics. In the relatively few cases where the results differed when controlling for underlying characteristics such as family income, race, or ethnicity, the findings show that these factors tend to be associated with reduced access to care, regardless of whether children are enrolled in ESI, Medicaid, or CHIP. Because Medicaid and CHIP serve a disproportionate share of children from certain racial and ethnic minority groups with lower incomes and worse health status, the programs have an important but challenging role to ensure timely access to appropriate care.

Using its framework for examining access to care, the Commission will continue to explore access in Medicaid and CHIP. The Commission intends to extend this analysis to other populations such as non-elderly adults. The Commission also plans to explore in greater depth particular issues pertaining to children's access, including oral health, geographic variation by state and by rural/urban status, and the relationship between payment policy and access.



## References

- Agency for Healthcare Research and Quality (AHRQ), Department of Health and Human Services. 2010. Medical Expenditure Panel Survey: Household Component. [http://meps.ahrq.gov/mepsweb/survey\\_comp/household.jsp](http://meps.ahrq.gov/mepsweb/survey_comp/household.jsp).
- Brasure, M., S.C. Stearns, and E.C. Norton, et al. 1999. Competitive behavior in local physician markets. *Medical Care Research and Review* 56, no. 4: 395-414.
- Buchmueller, T., S. Orzol, and L. Shore-Sheppard. 2011. *Stability of children's insurance coverage and implications for access to care: Evidence from the Survey of Income and Program Participation*.
- Centers for Disease Control and Prevention (CDC), Department of Health and Human Services. 2010. About the National Health Interview Survey. Atlanta, GA: CDC. [http://www.cdc.gov/nchs/nhis/about\\_nhis.htm](http://www.cdc.gov/nchs/nhis/about_nhis.htm).
- Dubay, L., and G. Kenney. 2001. Health care access and use among low-income children: Who fares best? *Health Affairs* 20, no. 1: 112-121.
- Fossett, J.W., and J.D. Perloff. 1999. The 'new' health reform and access to care: The problem of the inner city. In *Access to health care: Promises and prospects for low-income Americans*. Washington, DC: Kaiser Commission on Medicaid and the Uninsured.
- Government Accountability Office (GAO). 2011. *Hospital Emergency Departments: Health Center Strategies That May Help Reduce Their Use*. Report no. GAO-11-414R. Washington, DC: GAO. <http://www.gao.gov/products/GAO-11-414R>.
- Hargraves, J.L., and J. Hadley. 2003. The contribution of insurance coverage and community resources to reducing racial/ethnic disparities in access to care. *Health Services Research* 38, no. 3: 809-829.
- Hing E., and S. Uddin. 2008. *Visits to primary care delivery sites*. NCHS data brief, no. 47. Hyattsville, MD: National Center for Health Statistics. <http://www.cdc.gov/nchs/data/databriefs/db47.pdf>.
- Institute of Medicine (IOM). 2009. *America's uninsured crisis: Consequences for health and health care*. Washington, DC: National Academies Press.
- Institute of Medicine (IOM), Committee for the Future of Emergency Care in the United States Health System. 2007. *Hospital-based emergency care: At the breaking point*. Washington, DC: National Academies Press.
- Institute of Medicine (IOM). 2002. *Unequal treatment: confronting racial and ethnic disparities in health care*. Washington, DC: National Academies Press.
- Kenney, G.M., and C. Coyer. 2012. National findings on access to health care and service use for children enrolled in Medicaid or CHIP. MACPAC Contractor Report No. 1. Washington, DC: Urban Institute. <http://www.macpac.gov/>.
- Komaromy, M., et al. 1996. The role of black and Hispanic physicians in providing health care for underserved populations. *New England Journal of Medicine* 334: 1305-1310.
- Long, S., T. Coughlin, and J. King. 2005. How well does Medicaid work in improving access to care? *Health Services Research* 40, no. 1: 39-58.
- Medicaid and CHIP Payment and Access Commission (MACPAC). 2011a. *Report to the Congress on Medicaid and CHIP*. March 2011. Washington, DC: MACPAC. <http://www.macpac.gov/reports>.
- Medicaid and CHIP Payment and Access Commission (MACPAC). 2011b. *Report to the Congress: The evolution of managed care in Medicaid*. June 2011. Washington, DC: MACPAC. <http://www.macpac.gov/reports>.
- Olson, L., S.F. Tang, and P. Newacheck. 2005. Children in the United States with discontinuous health insurance coverage. *New England Journal of Medicine* 353, no. 4: 382-391.
- Plewes, T.J. 2010. *Databases for estimating health insurance coverage for children: A workshop summary*. Washington, DC: National Academies Press.
- Selden, T., and J. Hudson. 2006. Access to care and utilization among children: Estimating the effects of public and private coverage. *Medical Care* 44, no. 5: i19-i26.



# Chapter 2 Annex

## Summary of Data Sources and Methods for the Analysis of Children’s Access to Care

This Annex gives a brief overview of the data sources and the analytic approach used to produce the statistical analysis presented in this chapter.<sup>1</sup>

### Sources of Data

The results presented in this chapter are from publicly available data from two national household surveys that are administered annually by the federal government—the NHIS and the MEPS. The survey responses regarding children were provided by a knowledgeable adult in the household.

Although state-specific estimates may be available for some of the largest states, neither the NHIS nor the MEPS permits state-level estimates for all 50 states. Thus, these estimates do not provide information on state-level differences in access to care or on the factors that drive differences across states.

**NHIS.** The NHIS (2009) was the primary source of data used in this chapter because it provides great detail on individuals’ health while also providing some of the most reliable estimates of individuals’ sources of health insurance coverage (Pewes 2010). The NHIS is an annual face-to-face household survey of civilian non-institutionalized individuals and is designed to monitor the health of the U.S. population through the collection of information on a broad range of health topics. Administered by the National Center for Health Statistics within the CDC, the NHIS consists of a nationally representative sample from approximately 35,000 households with about 87,500 people (CDC 2010).

The NHIS is fielded continuously throughout the year, with data collected through an in-person household interview using computer-assisted personal interviewing (CAPI) technology. The NHIS employs a complex, multistage sample design and includes an oversample of minority populations, including African American, Hispanic, and Asian American respondents.

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<sup>1</sup> Additionally, more detailed information is presented in the MACPAC Contractor Report (Kenney and Coyer 2012), which was the basis of the findings presented in this chapter. The MACPAC Contractor Report is available at [www.macpac.gov](http://www.macpac.gov).

The NHIS Basic Module remains relatively constant over time and consists of the Family, Sample Adult, and Sample Child Core components. For the Family Core component, information is collected for each member of the household. One sample child (if any children under age 18 are present) and one sample adult are randomly selected from each household to collect more detailed information for the Sample Child Core and the Sample Adult Core components. Responses to the Sample Child Core questionnaire are obtained from a knowledgeable adult residing in the household. The Sample Adult and Sample Child questionnaires differ on some items, but both collect basic information on health status, health care service use, and health-related behaviors.

**MEPS.** The MEPS (specifically, its household component) was used in this chapter to provide estimates not available from the NHIS. The sample frame for the MEPS is drawn from a subsample of households participating in the previous year's NHIS. Like the NHIS, the MEPS is a face-to-face household survey of civilian non-institutionalized individuals. Administered by the Agency for Healthcare Research and Quality (AHRQ), the MEPS consisted of a nationally representative sample of about 31,000 people in 2008 (AHRQ 2010). The full-year consolidated MEPS data file for 2008 was used in this chapter.

The MEPS collects data through an overlapping panel design. A new panel of sample households is selected each year, and data for each panel are collected for two calendar years. The two years of data for each panel are collected in five rounds of interviews that take place over a two-and-a-half year period. A single household respondent reports information for the entire household through in-person household interviews using CAPI technology. The survey collects detailed information on health care use, expenditures, sources of payment, and health insurance coverage

for all household members. The MEPS also provides estimates of health status, demographic and socioeconomic characteristics, and access to health care.

## Analytic Approach

The findings in this chapter are based on the standard research approach of controlling for factors other than health insurance status. In this case, the goal was to determine how reported measures of access to and use of health care differ based on children's insurance coverage, controlling for numerous other characteristics using regression models. Those characteristics include:

- ▶ health-related characteristics, such as age, gender, health status, presence of certain chronic conditions (e.g., asthma), and disability;
- ▶ additional demographic characteristics, such as race and ethnicity; and
- ▶ socioeconomic characteristics, such as income, education, and citizenship.

Additional analyses in the MACPAC Contractor Report show unadjusted as well as regression-adjusted differences in access and use among children with Medicaid or CHIP, ESI, and no coverage. Two multivariate regression model specifications were used to capture differences related to two types of factors. For the first set of models, based on Institute of Medicine (IOM) recommendations (IOM 2002), the analyses controlled for differences in health status. For children, these factors were age, gender, self-reported health status, chronic conditions, and disability status. The second set of factors also included variables that capture demographic and socioeconomic characteristics. The additional variables were race, ethnicity, citizenship, parent composition, and—at the health insurance unit level—highest educational attainment, employment, income, homeownership, citizenship,

health status, and disability status. These are the results used in this chapter.

Even with these adjustments, the differences in access that persist may not necessarily be wholly attributable to insurance status. There may be other relevant variables that could not be controlled for in this analysis. For example, whether or not a person lived in a Metropolitan Statistical Area is not available on the publicly available NHIS data, even though it is collected through the survey. There may be additional unobserved factors related to health status, health-seeking behavior, and socioeconomic status that influence both insurance status and access to care.