National Findings on Access to Health Care and Service Use for Non-elderly Adults Enrolled in Medicaid

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Introduction

Medicaid currently covers millions of low-income adults, providing enrollees with potential access to a comprehensive set of health services at low or no cost.[1] Adults with Medicaid have consistently been shown to have better health care access than those who lack health insurance.[2] [3] [4] [5] In contrast, there are potential access tradeoffs associated with Medicaid coverage as compared to employer sponsored insurance (ESI). While Medicaid enrollees generally have a broader benefits package with lower cost sharing than those with ESI, physician payment tends to be lower in Medicaid and physicians are more likely to accept privately insured individuals as new patients over individuals with public coverage.[6] [7] [8] [9] [10] [11]

Currently, most non-elderly adults are eligible for Medicaid not only because they meet an income test and other general eligibility criteria, but also because they are one of the following: (a) disabled (and generally receiving Supplemental Security Income, SSI), (b) pregnant, or (c) parents of a dependent child enrolled in Medicaid or the State Children's Health Insurance Program (CHIP). In a small number of states, low-income non-disabled adults without dependent children are also eligible for Medicaid. In the following analysis of access to care, comparisons are presented for non-elderly adult Medicaid enrollees ages 19 to 64, excluding "dual eligibles" who are enrolled in both Medicare and Medicaid[12] and Medicaid enrollees in institutional settings (including nursing homes).

Among Medicaid enrollees, non-elderly adults on SSI represent a unique group of enrollees who are severely disabled, with high health care needs and costs as well as limited financial assets.[13] To better understand access to care for those Medicaid enrollees, our analysis also compares access to care for non-elderly Medicaid adults with SSI to the remaining non-SSI Medicaid adults.

This MACPAC Contractor Report presents national findings on access to care for non-elderly Medicaid adults using measures from two national household surveys—the National Health Interview Survey (NHIS) and the Household Component of the Medical Expenditure Panel Survey (MEPS).[14] [15] These estimates give a national picture of how access to care for non-elderly adults enrolled in Medicaid compares to that of adults with ESI and uninsured adults, building on prior reports and analyses.[16] [17] [18] [19] The study was developed in conjunction with MACPAC Contractor Report No. 1, *National Findings on Access to Health Care and Service Use for Children Enrolled in Medicaid or CHIP*.[20] The format of this report and the description of data sources and analytic approach are similar to those of the earlier report. The report includes a Technical Appendix that provides a more detailed description of the data and analytic approach used.

The key findings from these analyses of non-elderly adults are:

- Non-elderly Medicaid adults have substantially better access to care and use more health care than uninsured adults. For example, compared to uninsured adults, non-elderly adults with Medicaid were:
  - More likely to have a usual source of care—that is, a place that they usually go for health care when they are sick or need advice about their health (88.1 vs. 39.8 percent);
  - More likely to report health care visits overall (88.8 vs. 52.9 percent reporting an office or outpatient visit over the past 12 months) and for specific types of services;
  - More likely to report timely care (77.6 vs. 65.3 percent reporting that they always or usually got care as soon as it was needed);
  - Less likely to delay obtaining need medical care overall (24.2 vs. 41.6 percent) or because of costs (8.3 vs. 34.3 percent); and
  - Less likely to go without needed health care because of cost (26.9 vs. 56.2 percent).

- For almost every measure analyzed, the Medicaid-uninsured differences in access and use persist after controlling for the significant differences between the two groups in terms of health, demographic, and socioeconomic characteristics.

- The comparison of adults on Medicaid to adults with ESI yields a more complex picture, with Medicaid adults doing equally well or better on some measures, such as having a usual source of care (88.1 vs. 89.8 percent), any office or outpatient visit (88.8 vs. 87.3 percent) or reporting a routine check-up (70.4 vs. 63.9 percent), and worse on others, such as unmet need for care because of costs (26.9 vs. 13.2 percent).

- However, many of the gaps in access and use between Medicaid and ESI adults are driven by the higher health care needs and lower socioeconomic status of the Medicaid adults. After controlling for differences in health, demographic, and socioeconomic characteristics between the two groups, adults on Medicaid had similar access and use on many measures, including having a usual source of care and outpatient visits. Key differences that remained included lower levels of unmet need because of costs for Medicaid adults relative to ESI adults for medical care, prescription drugs, mental health care, and eyeglasses. However, Medicaid adults reported higher levels of delays in obtaining needed medical care because of factors other than costs (such as, a lack of transportation) and higher levels of emergency department use, all else equal.

- Finally, looking within the population of non-elderly adults on Medicaid to compare SSI adults, who have severe disabilities, to other Medicaid adults, we find SSI adults use much higher levels of care and face greater barriers to obtaining care than other Medicaid adults. Many of those differences reflect the poorer health and socioeconomic status of the SSI adults. We find similar levels of access to care on many dimensions after controlling for differences in health, demographic, and socioeconomic characteristics of the two groups. Key exceptions include lower levels of doctor visits (83.5 vs. 89.5 percent) and lower levels of unmet need for health care because of costs (29.9 vs. 40.0 percent) among SSI adults relative to non-SSI Medicaid adults. While we are able to control for the presence of certain medical conditions, self-reported health status, and other health-related characteristics, one limitation of these comparisons is our inability to control for the differences in severity of health conditions between SSI and non-SSI adults on Medicaid.

- Although the figures in this report display the unadjusted results, the findings of the full analysis highlight the importance of controlling for the health care needs of the population in comparing Medicaid adults to adults with ESI and the uninsured, and in looking within the Medicaid population. Many of the differences between Medicaid adults and other adults reflect the much poorer health and higher disability levels of adults on Medicaid. Similarly, the poorer access to care among the most disabled Medicaid enrollees also reflects, in part, their worse health and higher disability levels relative to the remaining Medicaid enrollees.

- These findings also highlight the importance of demographic and socioeconomic factors in explaining differences in access and use between Medicaid adults and adults with ESI and the uninsured. The characteristics of Medicaid adults, including their more limited economic resources, contribute to their lower access to health care relative to ESI adults and mitigate some of the differences relative to uninsured adults, highlighting the importance of factors beyond insurance coverage in ensuring access to care.

Sources of Data

The estimates presented in this report are derived from publicly available data from two national household surveys that are administered annually by the federal government—the National Health Interview Survey (NHIS) and the Medical Expenditure Panel Survey (MEPS). While these surveys contain important indicators of access to care and service use, they provide little information on the quality and content of the care that is provided or any consequences associated with diminished access to care.

The NHIS is an annual face-to-face household survey of civilian non-institutionalized individuals that is designed to monitor the health of the U.S. population through the collection of information on a broad range of health topics.[21] Administered for the National Center for Health Statistics (NCHS) within the Centers for Disease Control and Prevention (CDC), the NHIS consists of a nationally representative sample of approximately 35,000 households, containing about 87,500 people. The NHIS was the primary source of data used in this report, supplemented with measures of access from the MEPS that are not available on the NHIS (such as whether the individual had a routine check-up over the past 12 months, his or her assessments of the timeliness of care and provider accessibility, and his or her assessments of interactions with their provider). We rely on the NHIS as the primary data source for this report because it provides detailed information on health and health care access and use while also providing some of the most reliable estimates of individuals' sources of health insurance coverage.[22] The NHIS also provides larger sample sizes and more recent data than the MEPS.

The Household Component of the MEPS is based on a random subsample of households participating in the previous year's NHIS and, thus, is also representative of the civilian non-institutionalized population in the United States.[23] Administered for the Agency for Healthcare Research and Quality (AHRQ), the MEPS obtains information on health care use and spending from respondents in five rounds of face-to-face interviews over a two-year period. The MEPS also includes a Self-Administered Questionnaire (SAQ) that provides supplemental information, including Consumer Assessment of Healthcare Providers and Systems (CAHPS) questions. The MEPS consists of a nationally representative sample of about 12,300 households, containing about 31,000 people.

The analysis comparing adults on Medicaid to adults with ESI and the uninsured relies on the 2009 NHIS and the full-year consolidated MEPS file for 2008. For the analysis comparing SSI adults on Medicaid to other Medicaid adults, we use multiple years of the NHIS (2007-2009) and MEPS (2006-2008) to increase the sample size for the study.

Although state-specific estimates may be available for the largest states, neither the NHIS nor the MEPS permits state-level estimates for all 50 states and the District of Columbia. Thus, the estimates presented here do not necessarily reflect the situation in any one particular state nor do they provide information on state-level differences in access to care or the factors that drive differences across states. While other research has examined access to care for individuals with Medicaid coverage at a local level, such analyses cannot be generalized to the country as a whole.

Analytic Approach

The analyses in this report are limited to non-elderly adults who were either uninsured for the entire year or who were insured for the entire year, thus excluding those insured for only part of the year. Coverage was defined this way to help ensure that the access to care reported for

insured/uninsured individuals, which is based on care received over the past year, would not be affected by the parts of the year when they did not/did have coverage. More information on the analysis sample is provided in the Technical Appendix.

In this analysis, measures of access to care for non-elderly adults covered by ESI are used as a proxy for the level of access that is typically available to the insured population, while access for the uninsured is used to provide insights about the likely access that the non-elderly adults would have if Medicaid coverage were not available. An asterisk indicates significant differences in access to care for ESI coverage and uninsurance relative to Medicaid in the tables and figures. Comparing access to care for individuals enrolled in Medicaid versus those with ESI provides important information on the relative differences in care received between these groups. However, the level of care received under ESI may not necessarily reflect a gold standard with respect to care (i.e., there may be over or under consumption of care) or correspond with the recommended standards of care. Moreover, this analysis provides little information on the quality of care that the adults are receiving.

Population Characteristics. The population characteristics of non-elderly adults enrolled in Medicaid differ from the characteristics of the uninsured and those with ESI. For example, Tables 4A-4C of MACStats in MACPAC's June 2011 *Report to the Congress* showed that, compared to non-elderly adults with ESI or no insurance, non-elderly adults on Medicaid were less likely to be in excellent or very good health, less likely to be male, and more likely to suffer from various impairments and chronic health conditions, all of which could affect the need for, access to, and use of health care.[24] Because of these differing characteristics, unadjusted comparisons between the three groups may not accurately indicate how insurance status affects access to care. In other words, differences in access may be driven in part by differences in the underlying population's demographic and health characteristics rather than in their source of coverage.

Therefore, more in-depth analyses were conducted to assess whether differences in health status, functional limitations, age, gender, race/ethnicity, income, and other observed characteristics across the insurance groups affected the results. These adjusted comparisons—that is, the comparisons that attempt to control for various observed characteristics—will come closer than the unadjusted comparisons to isolating the impact of Medicaid enrollment on access to care for individuals with similar characteristics.

Adjustments for Population Characteristics. Two different sets of adjustments were used, based on a method of assessing disparities in access to care advocated by the Institute of Medicine (IOM),[25] to make the underlying populations more comparable. Each set of adjustments is intended to capture particular types of characteristics. The first set, which is designed to make the individuals in the different insurance groups more comparable in terms of their observed health care needs, is made up of factors that should reasonably affect an individual's need for health care, such as age, gender, health status, and functional limitations.

The second set of adjustments includes factors that should not directly affect an individual's need for health care but that may still affect access nonetheless—factors such as family income, race/ethnicity, education, and household structure. The use of both sets of adjustments together is designed to make the individuals in each insurance group more comparable in terms of not only their observed health care needs, but also their demographic and socioeconomic characteristics.

Both sets of adjustments are limited to the measures that are available in the surveys and may not control for all of the differences between Medicaid enrollees and other adults. To the extent that there are unmeasured differences between the population groups that affect their health care needs (such as severity of health conditions), the differences reported here will include the effects of those unmeasured differences. That is, the differences in access and use between Medicaid enrollees and other adults that persist after adjusting for observed characteristics may not be wholly attributable to insurance status as there may be additional unobserved factors related to health and disability status, health-seeking behavior, and socioeconomic status that influence both insurance status and access to care.

Interpreting the Findings. The following is an example of how to interpret the three comparisons that are done for each measure (unadjusted, regression-adjusted for health care needs, and regression-adjusted for both health care needs and factors related to demographic and socioeconomic characteristics), illustrated by the measure of any unmet need for health care because of costs in the past 12 months among non-elderly adults on Medicaid and those with ESI (Table 1; Figure 6; and in the Technical Appendix, Table 6). Overall, 26.9 percent of non-elderly adults with Medicaid and 13.2 percent of non-elderly adults with ESI reported having any unmet need for health care because of costs in the past 12 months. Thus, the unadjusted Medicaid-ESI difference is 13.7 percentage points, which is statistically significant as noted by an asterisk in the relevant figure and tables.

After adjusting for health and disability status to make Medicaid and ESI adults more comparable in terms of their observed health care needs, the Medicaid-ESI difference in the share of adults with any unmet need for health care because of costs decreases to 3.5 percentage points and remains statistically significant as noted by the single-barred cross. This suggests that some of the unmet need for health care because of costs for Medicaid adults is explained by their greater health needs as compared to non-elderly adults with ESI coverage. However, when controlling not only for health and disability status but also for demographic and socioeconomic characteristics, the direction of the Medicaid-ESI difference changes sign and is no longer statistically significant (-2.4 percentage point difference). Thus, for adults with similar levels of health care needs and in similar socioeconomic circumstances, Medicaid and ESI provide similar levels of access to care as measured by unmet need for health care due to costs. If the Medicaid-ESI differences remained statistically significant after adding the controls for demographic and socioeconomic status, that would be noted by a double-barred cross.

The next section presents the full set of findings and briefly discusses their implications. In cases where the unadjusted comparisons show less utilization for non-elderly adults with Medicaid, because these individuals tend to be in poorer health and more disabled than other adults, one would expect that adjusting for health and disability status alone would increase any differences compared to the unadjusted results. By contrast, in cases where the unadjusted comparisons show higher utilization for non-elderly adults with Medicaid, one would expect that adjusting for the poorer health and disability status of the Medicaid adults would narrow that gap.

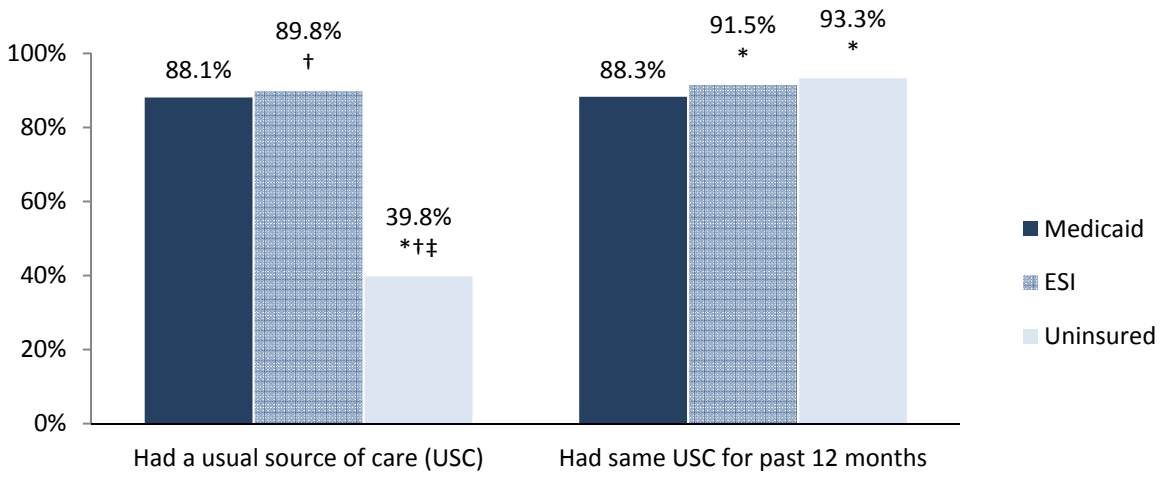
In comparing Medicaid adults to adults with ESI, if a gap between Medicaid and ESI adults is eliminated by controlling for health and disability status, that implies that Medicaid coverage is as effective as ESI in providing access to care, holding constant the individual's health and disability status. If Medicaid-ESI gaps remain after controlling for health and disability status but are eliminated by the addition of demographic and socioeconomic characteristics as adjustment variables, that would imply that Medicaid coverage is as effective in providing access to care, holding constant the individual's health and disability status, race/ethnicity, income, and other socioeconomic characteristics. That pattern would also indicate, however, that gaps in access to care exist that are related to an individual's race/ethnicity, income, or other socioeconomic characteristics, regardless of the type of coverage the individual has.

Findings

The results that follow focus on the unadjusted means for non-elderly adults with Medicaid compared to those with ESI or who were uninsured. Unless otherwise indicated, the unadjusted results are consistent with those found when taking into account the two sets of regression adjustments described above. Tables 1 and 2 provide the unadjusted and the regression-adjusted differences between Medicaid and ESI coverage and uninsurance for all the outcomes discussed in this report. Tables 3 and 4 contain the unadjusted and regression-adjusted differences between SSI Medicaid and non-SSI Medicaid enrollees for all of the outcomes discussed in this report. Only unadjusted and regression-adjusted differences that are statistically significant at the 5 percent level are noted. The Technical Appendix provides additional details on the analysis and estimation results.

Usual Source of Care. The majority of adults on Medicaid (88.1 percent) reported having a place that they usually go when they are sick or need advice about their health, suggesting strong ties to the health care system for adults under the Medicaid program (Figure 1; Table 1). This is much higher than that reported by uninsured adults (39.8 percent) and similar to that reported by adults with ESI (89.8 percent). Most of the adults with a usual source of care reported having the same source of care over the past 12 months, including 88.3 percent of Medicaid adults, 93.3 percent of uninsured adults, and 91.5 percent of adults with ESI. This is important since consistency in the place of care tends to facilitate greater continuity of health care over time. [26] [27]

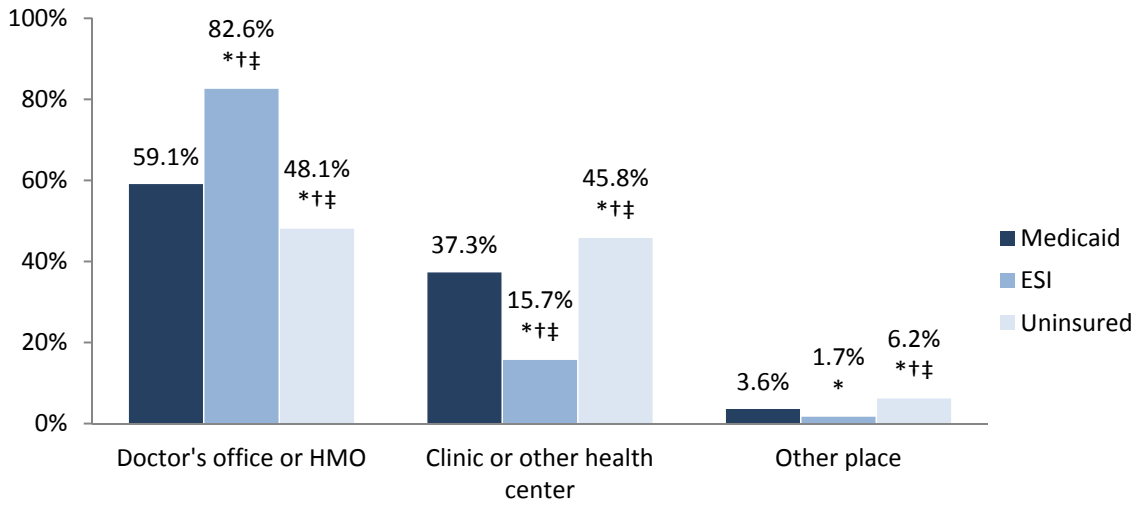
Figure 1. Proportion of Non-elderly Adults with a Usual Source of Care by Insurance Status



Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). 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 advice about his/her health; the emergency department is not considered a USC.
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Although adults with Medicaid and adults with ESI were equally likely to have a usual source of care, there were differences in the site of that care (Figure 2). While most of the adults with ESI with a usual source of care reported a doctor's office or HMO as their place of care (82.6 percent), the comparable estimate was 59.1 percent of Medicaid adults with a usual source of care. By contrast, Medicaid adults were more likely than those with ESI to report a clinic or health center as their usual source of care (37.3 vs. 15.7 percent). This likely reflects many factors, including lower levels of physician participation in Medicaid[28] and the availability of community health centers and other clinics in lower-income communities.[29] Uninsured adults with a usual source of care relied even more heavily than the Medicaid adults on clinics and health centers as their usual source of care (45.8 vs. 37.3 percent).

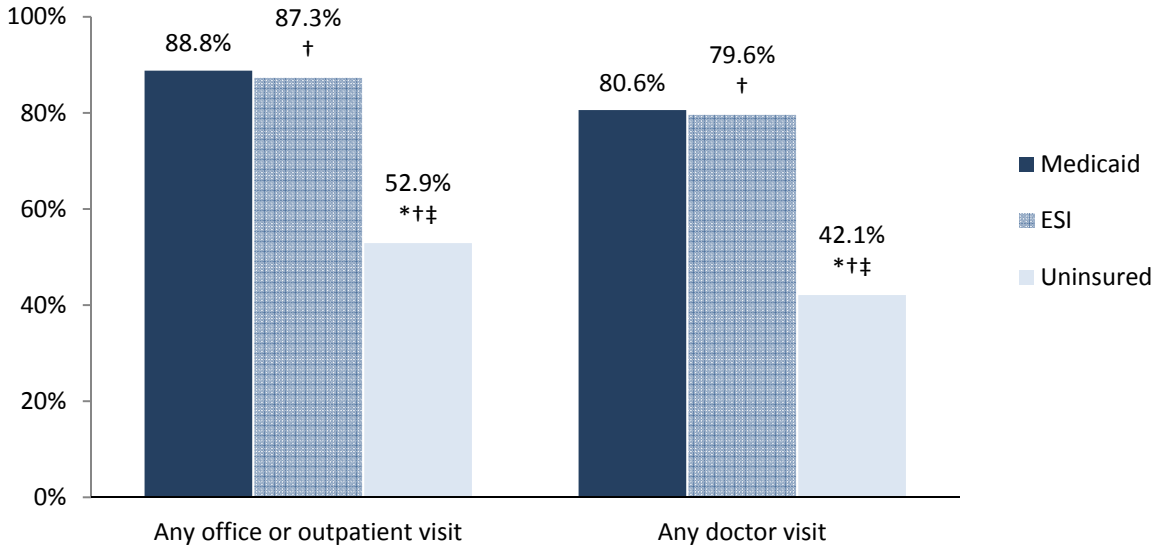
Figure 2. Proportion of Non-elderly Adults with Different Places for Usual Source of Care by Insurance Status



Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). 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 advice about his/her health; the emergency department is not considered a USC. HMO is health maintenance organization. Other place includes any place other than a clinic, health center, doctor's office, or HMO.
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Use of Outpatient Care, Including Doctor Visits**.** Consistent with the connection to the health care system of having a usual source of care, most adults on Medicaid (88.8 percent) and most adults with ESI (87.3 percent) had at least one office or outpatient visit over the prior 12 months, with 80.6 percent of Medicaid adults and 79.6 percent of ESI adults reporting a visit to a doctor (Figure 3; Table 1). Office and outpatient visits were much less common among uninsured adults, as only 52.9 percent had any visits over the past 12 months.

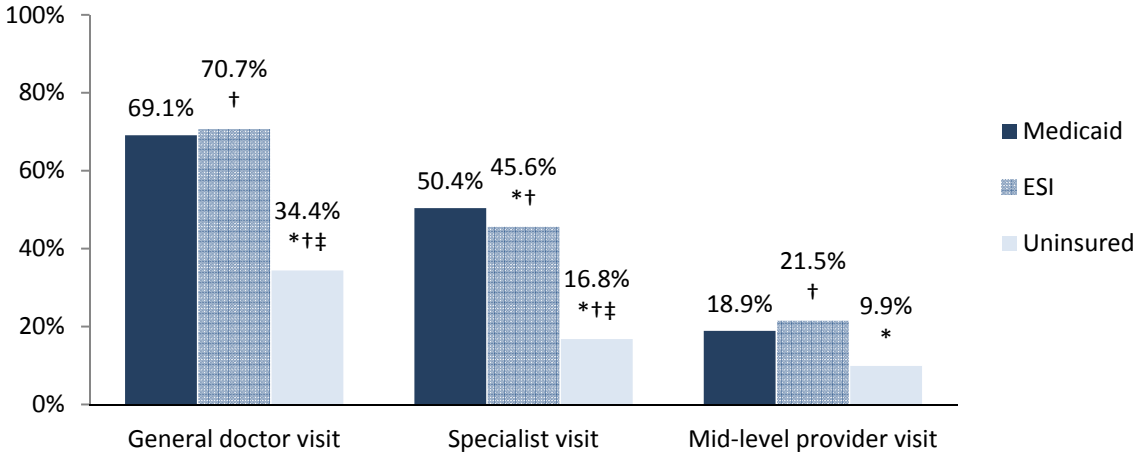
Figure 3. Proportion of Non-elderly Adults with Any Outpatient or Office Visit in the Past 12 Months by Insurance Status



Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance.
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Consistent with the lower likelihood of an office visit in general, the likelihood of a general doctor visit, a specialist visit (overall), and a visit to mid-level providers (nurse practitioners, physician assistants and midwives) were all lower for uninsured adults than Medicaid adults (Figure 4; Table 1). By contrast, adults with ESI were just as likely as Medicaid adults to have had a general doctor visit and a visit to a mid-level provider. They were, however, less likely to have had a visit to a specialist (45.6 percent as compared to 50.4 percent among Medicaid adults). This difference in specialist use overall is significant in the unadjusted differences between Medicaid adults and ESI adults and uninsured adults. However, when care by an obstetrician/gynecologist (OB/GYN) is excluded from the measure, the Medicaid-ESI difference in the probability of a specialist visit is not significant (Table 1). This likely reflects the fact that there is a disproportionate share of women relative to men on Medicaid and, thus, a disproportionate share of OB/GYN use. After controlling for differences in health care needs (including differences due to gender) and differences in demographic and socioeconomic characteristics, Medicaid adults and ESI adults were equally likely to have had specialist visits overall, specialist visits excluding OB/GYN visits, and, for women, OB/GYN visits.

Figure 4. Proportion of Non-elderly Adults with a Visit to a General Doctor, Specialist, or Mid-level Provider in the Past 12 Months by Insurance Status



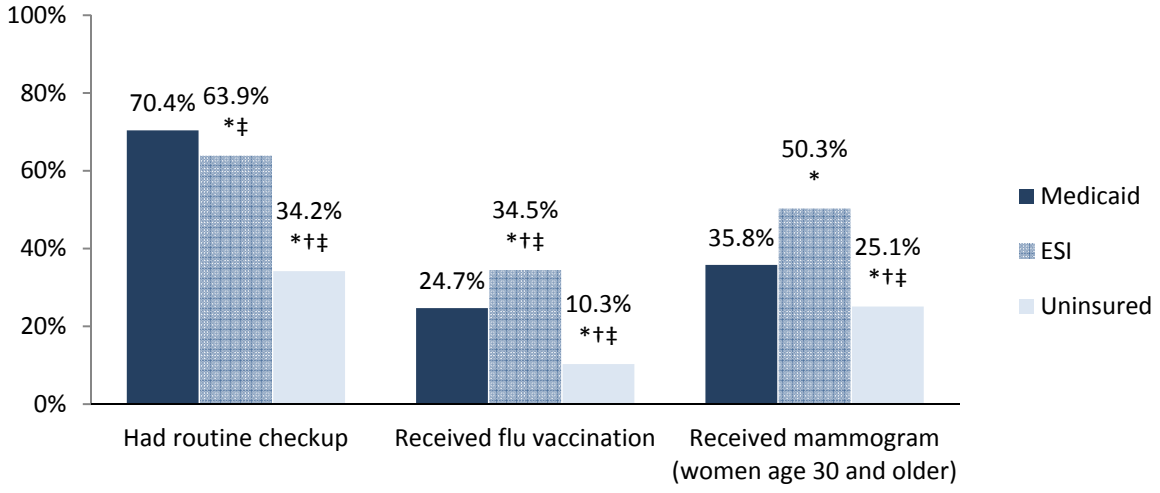
Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance. Specialist includes medical doctors who specialize in a particular medical disease or problem (including obstetricians and gynecologists; excluding psychiatrist or ophthalmologist). Mid-level provider is a nurse practitioner, physician assistant or midwife.
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Controlling for differences in health, demographic, and socioeconomic characteristics tended to narrow but not eliminate the gap in health care use between Medicaid adults and uninsured adults. Among otherwise similar adults, Medicaid enrollees continued to be more likely than uninsured adults to use all types of outpatient services examined (Table 1).

By contrast, controlling for differences in health care needs between adults with Medicaid and those with ESI tended to exacerbate rather than mitigate the differences in health care use: Medicaid adults were less likely to use the different types of care examined than were adults with ESI estimated to have similar health care needs. However, the remaining access differences were largely explained by differences in the demographic and socioeconomic circumstances of Medicaid adults and adults with ESI. After controlling for those factors, there were, with two exceptions, no longer significant differences in health care use between Medicaid adults and adults with ESI; the exceptions were the shares with mental health and home care visits, which continued to be higher for Medicaid adults than for adults with ESI coverage (Table 1).[30]

Preventive Care. The measures of preventive care examined here include having a visit for a routine check-up, receiving a flu vaccination,[31] and, for women aged 30 and older, receipt of a mammogram in the last year (Figure 5; Table 2). Among Medicaid adults, 70.4 percent reported a routine check-up and 29.9 percent reported receiving a flu vaccination (Figure 5). For the Medicaid women in the target age group, 35.8 percent reported receiving a mammogram.

Figure 5. Proportion of Non-elderly Adults with Routine Checkup, Flu Vaccination and Mammogram (for Women) in Past 12 Months by Insurance Status

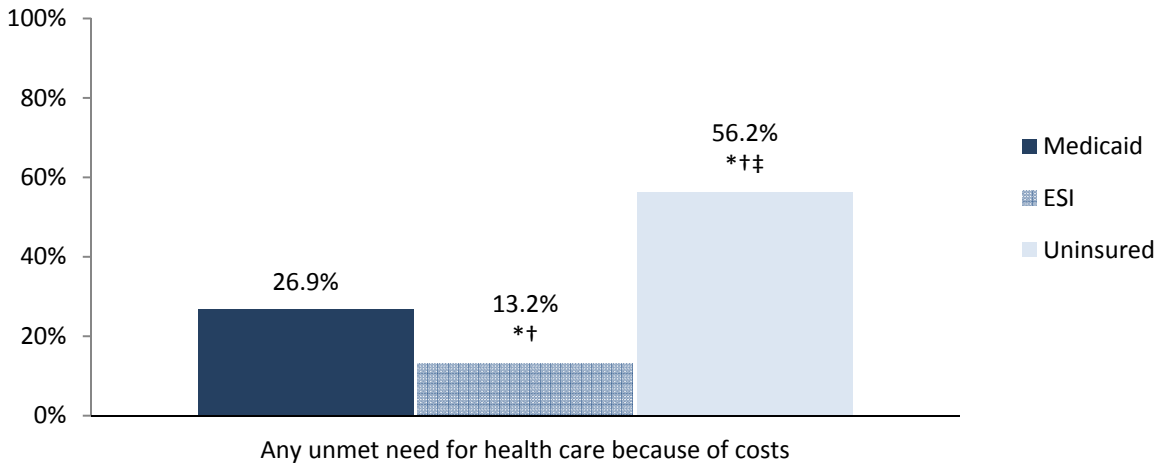


Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS) and the 2008 Medical Expenditures Panel Survey (MEPS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance.
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

These levels of preventive care among Medicaid adults were well above those reported by uninsured adults on all three measures, with the differences persisting after controlling for health, demographic, and socioeconomic characteristics. Medicaid adults were also more likely than adults with ESI to have had a routine check-up (70.4 vs. 63.9 percent), a difference that also persisted after controlling for health, demographic, and socioeconomic characteristics. By contrast, Medicaid women age 30 and older were less likely to have had a mammogram than were women with ESI; however, the latter Medicaid-ESI difference was explained by differences in the health, demographic, and socioeconomic characteristics of the two groups.

Unmet Need for Health Care Because of Costs. Despite the high levels of health care use, one in four Medicaid adults reported going without needed care over the past 12 months because of costs (Figure 6; Table 1). Not surprisingly, unmet need for care because of costs was much higher among uninsured adults than those with Medicaid, with more than half (56.2 percent) of the uninsured reporting some type of unmet need (e.g., medical care, dental care, mental health care, prescription drugs, or eyeglasses) because of costs. By contrast, unmet need because of costs among adults with ESI was lower than that of Medicaid adults, as only 13.2 percent reported any type of unmet need.

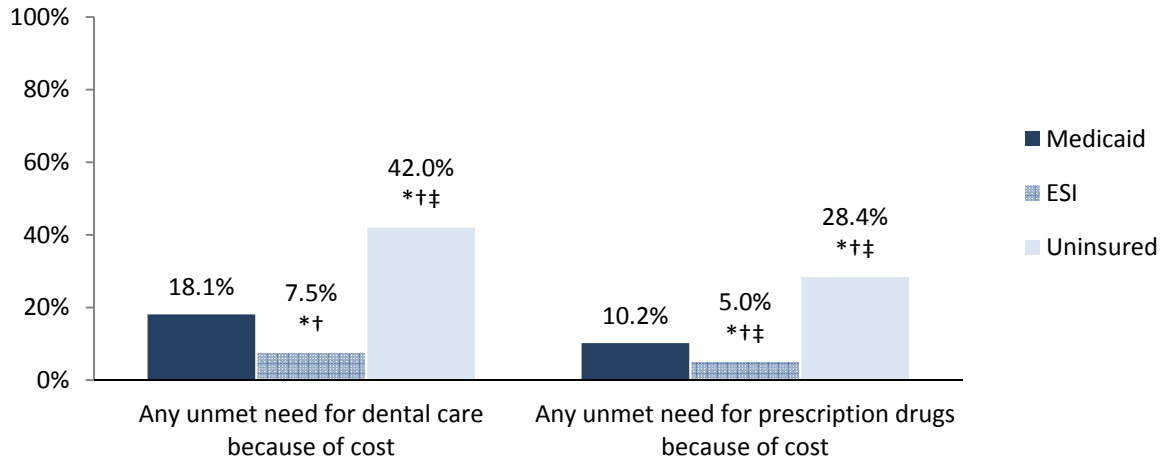
Figure 6. Proportion of Non-elderly Adults with any Unmet Need for Health Care Because of Costs in the Past 12 Months by Insurance Status



Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance.
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Among Medicaid adults, unmet need because of costs occurred most often for dental care (18.1 percent) and prescription drugs (10.2 percent), two services that are often subject to benefit limits under state Medicaid programs (Figure 7; Table 1). Fewer Medicaid adults reported unmet need because of costs for medical care (6.4 percent) and for mental health care or counseling (3.2 percent). Although the overall levels of unmet need were lower, the most common types of unmet need were similar for adults with ESI and those on Medicaid—dental care and prescription drugs. As is true under the Medicaid program, these are two health services that are often limited (or excluded) in private plans.

Figure 7. Proportion of Non-Elderly Adults with Any Unmet Need for Dental Care or Prescription Drugs Because of Costs in the Past 12 Months by Insurance Status

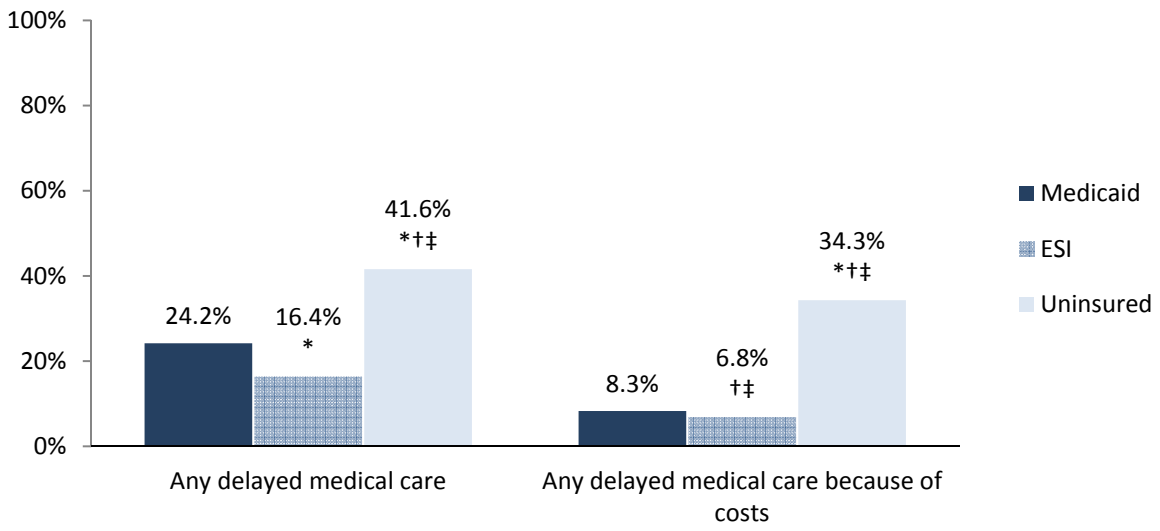


Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance.
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Controlling for differences in the health care needs of Medicaid adults and uninsured adults tended to exacerbate the differences in unmet need between the two groups, suggesting even better access to care for Medicaid enrollees relative to being uninsured for persons with similar health care needs. In contrast, the gap in unmet need due to costs between Medicaid adults and adults with ESI tended to narrow or reverse sign after controlling for the differences in the health care needs of those two groups. After controlling further for differences in demographic and socioeconomic characteristics, unmet need because of costs is similar or lower among Medicaid adults relative to adults with ESI. In particular, Medicaid adults were less likely than ESI adults to have unmet need because of costs for medical care, prescription drugs, and mental health care.

Delays in Obtaining Medical Care. There are many reasons individuals delay obtaining medical care, reflecting their health insurance coverage (or lack of coverage), the health care system (e.g., difficulties getting an appointment, couldn't go when provider was open, long waits to see the doctor once at the site), and their personal circumstances (e.g., a lack of transportation). Roughly one quarter of Medicaid adults (24.2 percent) reported that they had delayed obtaining needed medical care over the past year (Figure 8; Table 1).

Figure 8. Proportion of Non-elderly Adults with a Delay in Obtaining Needed Medical Care Overall or Because of Costs in the Past 12 Months by Insurance Status



Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance.
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

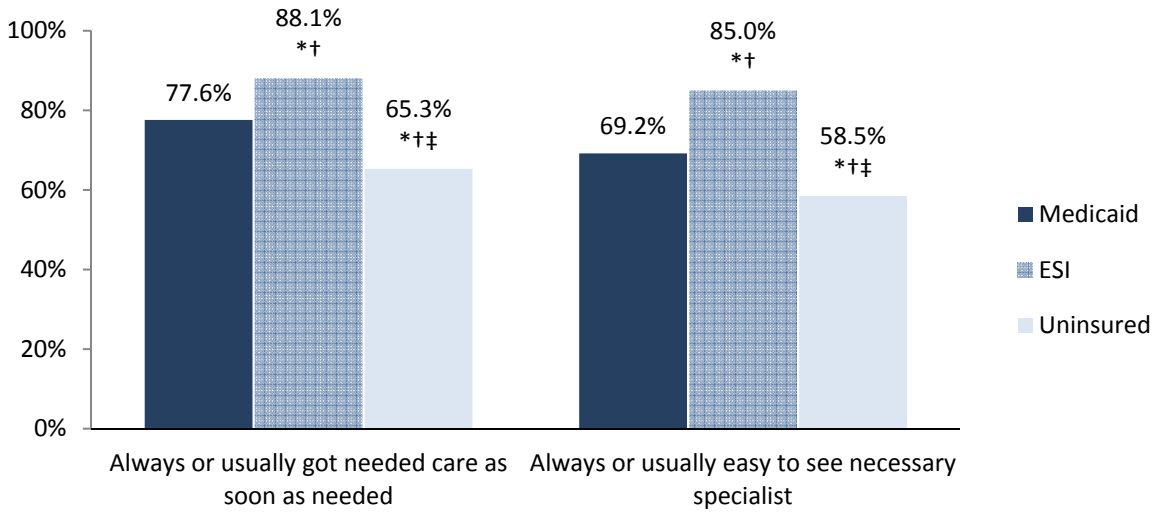
Delays in obtaining medical care were much more common among uninsured adults than the Medicaid adults (41.6 vs. 24.2 percent), driven largely by delays in obtaining care due to cost (34.3 vs. 8.3 percent). In contrast, adults with ESI were less likely to have reported delays in obtaining care than were Medicaid adults (16.4 vs. 24.2 percent). However, adults with ESI were just as likely as Medicaid adults to have reported delaying obtaining medical care because of costs over the prior year.

The Medicaid-uninsured differences in delaying obtaining medical care persist after controlling for differences in health, demographic, and socioeconomic characteristics. Many of the Medicaid-ESI differences also persist after controlling for differences in the characteristics of Medicaid and adults with ESI and, in some cases, become statistically significant. In particular, after controlling for health, demographic, and socioeconomic characteristics, Medicaid adults are also less likely to delay obtaining health care because of costs than are ESI adults.

Provider Accessibility. Among Medicaid adults who needed care right away, more than three-quarters (77.6 percent) reported that they always or usually got that care as soon as it was needed

(Figure 9; Table 2). Similarly high levels of Medicaid adults reported that they always or usually got appointments for health care as soon as needed and that it was always or usually easy to get necessary care, tests, and treatments. The share reporting that they always or usually got needed specialist care was lower, at 69.2 percent.

Figure 9. Non-elderly Adults' Assessment of Access to Needed Care Overall and to Needed Specialist Care in the Past 12 Months by Insurance Status



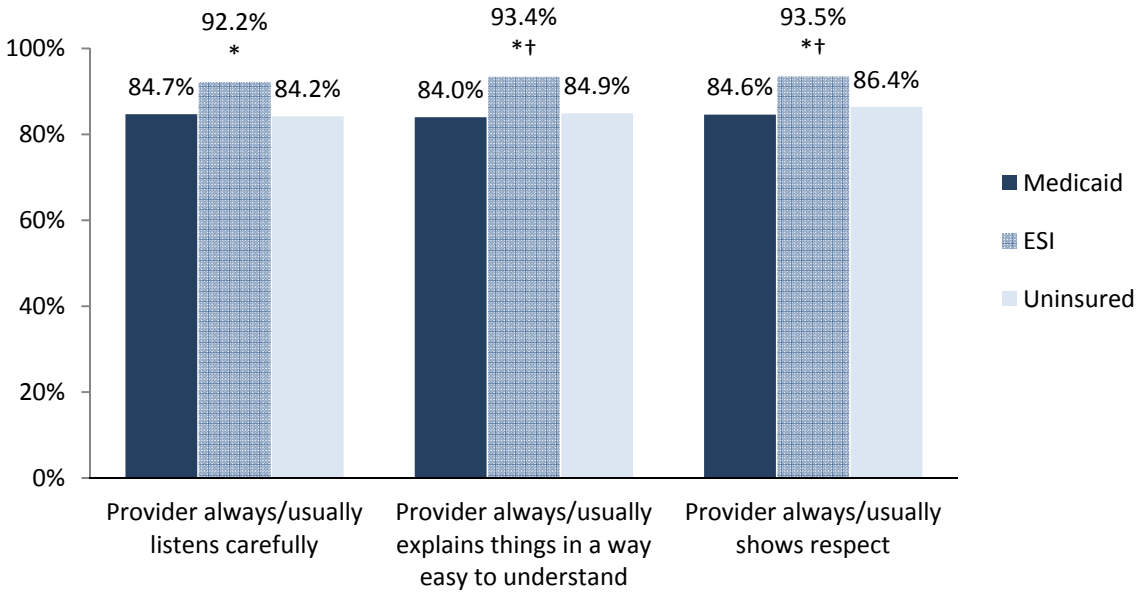
Source: Urban Institute analysis for MACPAC of the 2008 Medical Expenditures Panel Survey (MEPS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance. Specialist includes medical doctors who specialize in a particular medical disease or problem (other than psychiatrist or ophthalmologist).
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Adults with ESI reported significantly higher levels of provider accessibility, while the uninsured reported much poorer access to providers than the Medicaid adults. The differences between Medicaid and ESI adults were explained by differences in health, demographic, and socioeconomic characteristics across the two population groups, while the differences between Medicaid adults and the uninsured persisted after controlling for those differences.

Provider Interactions. The majority of adults who obtained care over the year, regardless of their insurance status, reported that their doctor or other health care provider always or usually listened carefully, explained things in a way that was easy to understand, showed respect, and spent enough time with them (Figure 10; Table 2). Medicaid and uninsured adults provided similar assessments of provider interactions, likely reflecting the fact that they see the same

providers in many cases, particularly those relying on health centers. Adults with ESI rated their provider interactions more highly than did Medicaid adults, although those differences disappeared after controlling for health, demographic, and socioeconomic characteristics.

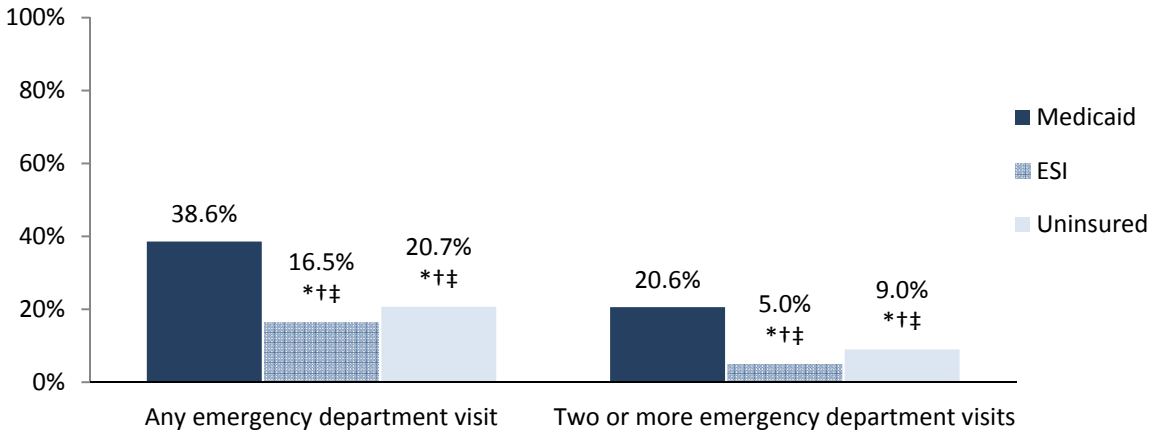
Figure 10. Non-elderly Adults' Assessment of Interactions with Doctors and Other Health Care Providers in the Past 12 Months by Insurance Status



Source: Urban Institute analysis for MACPAC of the 2008 Medical Expenditures Panel Survey (MEPS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance.
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Emergency Department Visits. Emergency department visits were quite common among Medicaid adults, with 38.6 percent reporting at least one visit and 20.6 percent reporting multiple visits over the past year (Figure 11; Table 1). This is substantially more than that reported by uninsured adults (at 20.7 and 9.0 percent, respectively) and by adults with ESI (at 16.5 and 5.0 percent, respectively).

Figure 11. Proportion of Non-elderly Adults with Any Emergency Department Visit and Two or More Emergency Department Visits in the Past 12 Months by Insurance Status



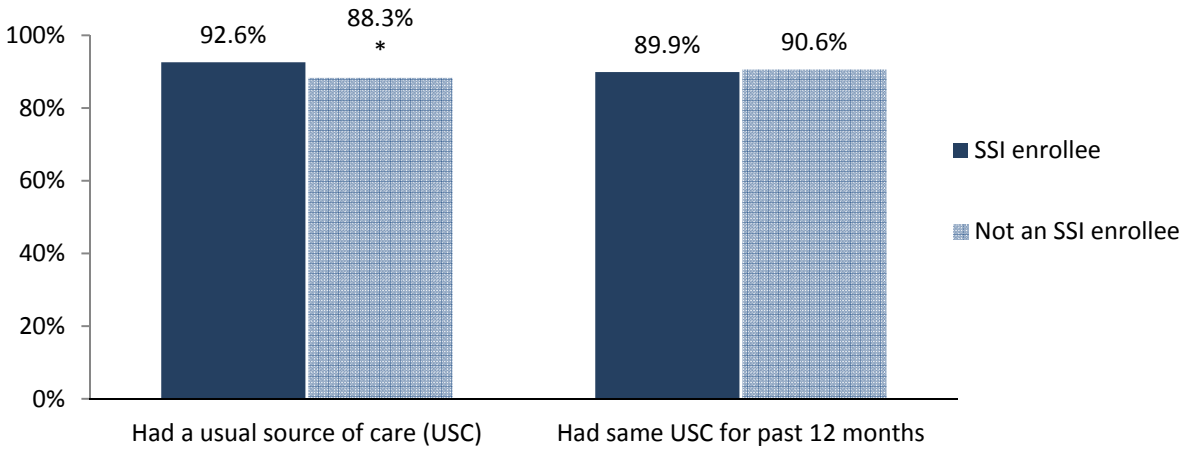
Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance.
*Unadjusted difference from Medicaid is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

The higher levels of emergency department visits by Medicaid adults relative to uninsured adults and adults with ESI were explained, in part, by their higher health care needs and lower socioeconomic status; however, some differences persist even after controlling for these characteristics. More research is needed to understand the factors driving the high levels of emergency care by Medicaid adults. Such high levels of emergency care may reflect differences in the severity of illnesses and disability that are not captured in the controls, the more frequent barriers to obtaining care reported by Medicaid enrollees, and/or the low cost-sharing requirements for emergency department visits under the Medicaid program, among other factors.

Differences in Access to and Use of Care by Disability Status. The population of non-elderly adults eligible for Medicaid includes healthy adults and adults in poor health and with high levels of physical and mental disability, including severely disabled adults who are receiving SSI benefits. This section compares access to care for Medicaid SSI adults to other adults on Medicaid (referred to as "non-SSI adults"), as shown in Tables 3 and 4.[32] As noted earlier, dual Medicare-Medicaid enrollees are excluded from this analysis. We focus first on the simple, unadjusted differences and then discuss the regression-adjusted differences.

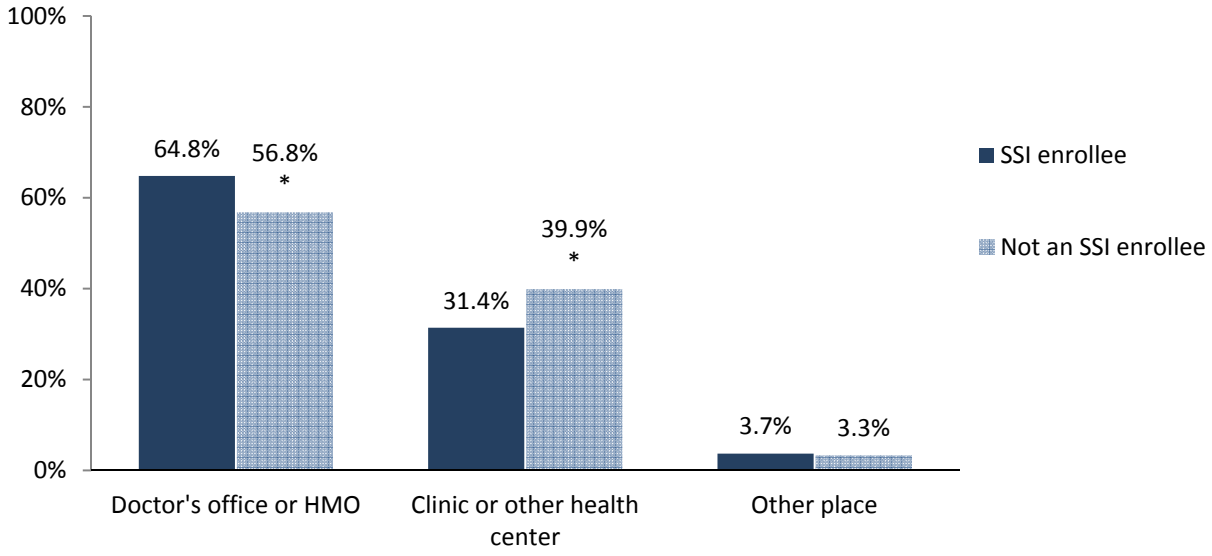
Consistent with their higher health care needs, Medicaid SSI adults are more likely than non-SSI Medicaid adults to have a usual source of care (92.6 vs. 88.3 percent) (Figure 12; Table 3), and, among those with a usual source of care, to report a doctor's office or HMO as their place of care (64.8 vs. 56.8 percent) (Figure 13; Table 3).

Figure 12. Proportion of Non-elderly Adults on Medicaid with a Usual Source of Care by Disability Status



Source: Urban Institute analysis for MACPAC of the 2007-2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). SSI is Supplemental Security Income. Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of advice about his/her health; the emergency department is not considered a USC.
*Unadjusted difference from SSI enrollees is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from SSI enrollees controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from SSI enrollees controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

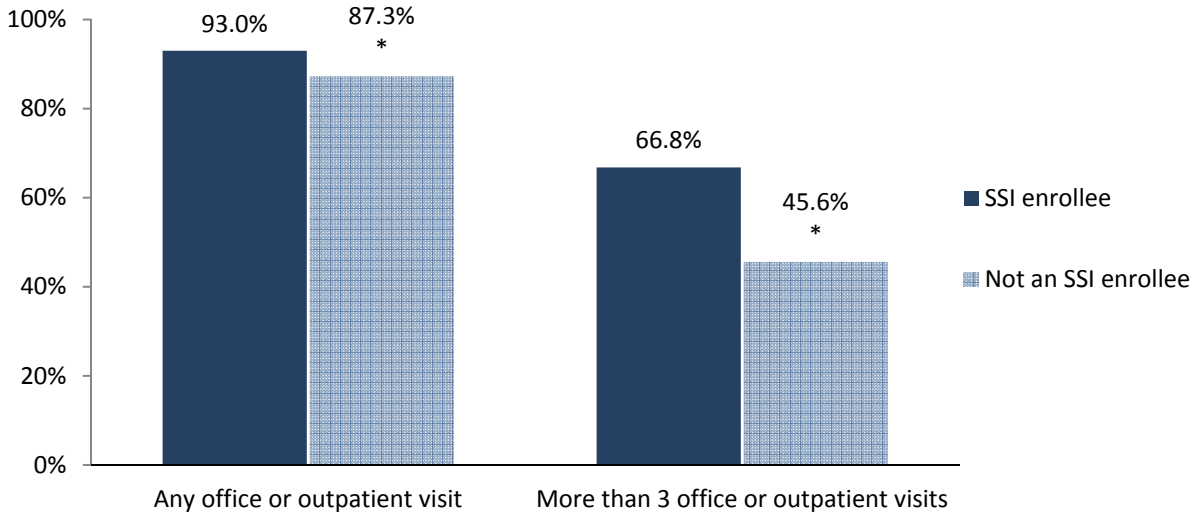
Figure 13. Proportion of Non-elderly Adults on Medicaid by with Different Places for Usual Source of Care by Disability Status



Source: Urban Institute analysis for MACPAC of the 2007-2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). SSI is Supplemental Security Income. Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of advice about his/her health; the emergency department is not considered a USC. HMO is health maintenance organization. Other place includes any place other than a clinic, health center, doctor's office, or HMO.
*Unadjusted difference from SSI enrollees is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from SSI enrollees controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from SSI enrollees controlling for age, gender, health and disability status, health

Medicaid SSI adults are also more likely than other Medicaid adults to use health care services, with the share with any office and outpatient visits (93.0 vs. 87.3 percent) and with multiple office visits (66.8 vs. 45.6 percent) significantly higher (Figure 14; Table 3). The SSI adults were also more likely to use many of the specific types of health services examined, including general doctor visits, mental health visits, inpatient stays, and home health visits (Table 3).

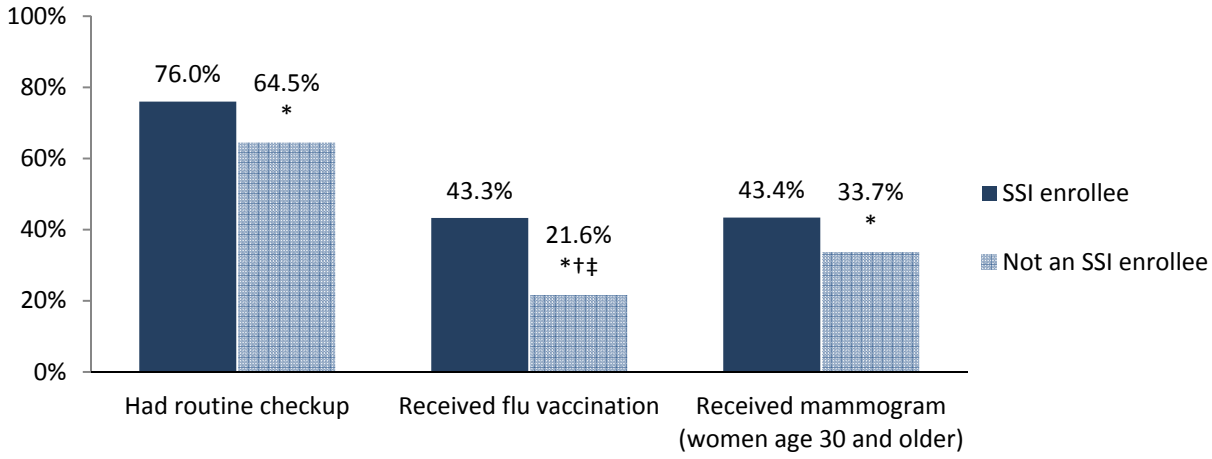
Figure 14. Proportion of Non-elderly Adults on Medicaid with Outpatient or Office Visit in the Past 12 Months by Disability Status



Source: Urban Institute analysis for MACPAC of the 2007-2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). SSI is Supplemental Security Income.
*Unadjusted difference from SSI enrollees is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from SSI enrollees controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from SSI enrolleees controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Preventive care was also more common among SSI adults than other adults on Medicaid, with more than three-quarters (76.0 percent) reporting a routine check-up (Figure 15; Table 4). That compares to 64.5 percent for non-SSI adults.[33] Medicaid SSI adults were also more likely to receive a flu vaccination (29.9 percent vs. 33.7 percent) and, among women aged 30 and older, a mammogram (43.4 vs. 33.7 percent).

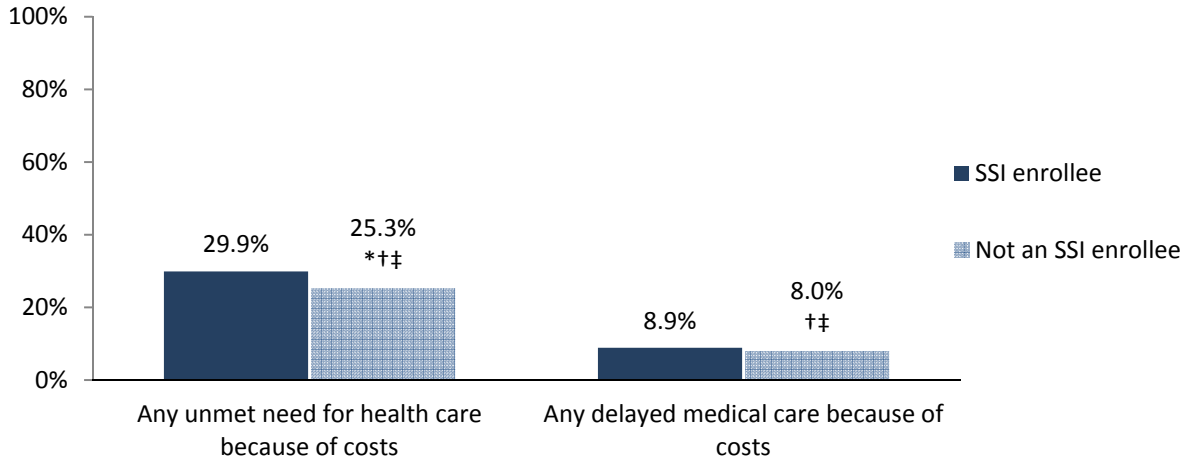
Figure 15. Proportion of Non-elderly Adults on Medicaid with Routine Checkup, Flu Vaccinaiton, and Mammogram (for Women) in Past 12 Months by Disability Status



Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS) and the 2008 Medical Expenditures Panel Survey (MEPS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). SSI is Supplemental Security Income.
*Unadjusted difference from SSI enrollees is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from SSI enrollees controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from SSI enrollees controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Medicaid SSI adults were somewhat more likely to report unmet need for care because of costs and delays in obtaining medical care than were other Medicaid adults (Figure16; Table 3). Roughly one-quarter of Medicaid adults (both SSI and non-SSI) reported going without needed health care because of costs , with SSI adults more likely to report unmet need for prescription drugs (13.0 vs. 9.5 percent) and mental health care (6.1 vs. 3.2 percent) (Table 3). Almost one-third (31.0 percent) of Medicaid SSI adults reported delaying needed medical care, as compared to 21.1 percent of non-SSI adults. A particular challenge for the SSI adults was transportation, with 15.1 percent reporting that they delayed care because of a lack of transportation; transportation was an issue for only 5.0 percent of non-SSI adults.

Figure 16. Proportion of Non-elderly Adults on Medicaid with Any Unmet Need for Health Care or a Delay in Obtaining Needed Medical Care Because of Costs in the Past 12 Months by Disability Status

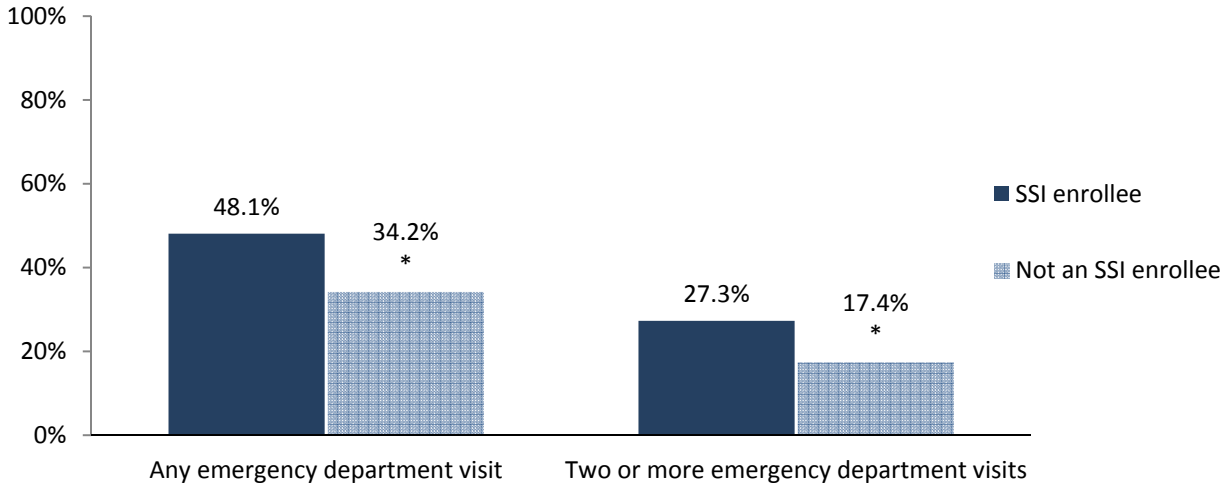


Source: Urban Institute analysis for MACPAC of the 2007-2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). SSI is Supplemental Security Income.
*Unadjusted difference from SSI enrollees is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from SSI enrollees controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from SSI enrollees controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

SSI adults and non-SSI adults report quite similar assessments of their interactions with doctors and other health care providers, with roughly 85 percent of both reporting that their doctor or other provider always or usually listens carefully and shows respect. SSI adults were somewhat less like than non-SSI adults to report that their doctor or other provider always or usually explains things in a way that is easy to understand (80.6 vs. 85.5 percent).

Finally, emergency department use was much higher for Medicaid SSI adults than non-SSI adults (Figure 17; Table 3). Nearly half (48.1 percent) of SSI adults reported an emergency department visit over the past year and more than one quarter (27.3 percent) reported multiple visits. This compares to 34.2 percent and 17.4 percent, respectively, for non-SSI adults on Medicaid.

Figure 17. Proportion of Non-elderly Adults on Medicaid with Any Emergency Department Visit and Two or More Emergency Department Visits in the Past 12 Months by Disability Status



Source: Urban Institute analysis for MACPAC of the 2007-2009 National Health Interview Survey (NHIS).
Notes: Figure shows unadjusted estimates. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). SSI is Supplemental Security Income.
*Unadjusted difference from SSI enrollees is statistically significant at the 5% level, two-tailed test.
†Regression-adjusted difference from Medicaid controlling for age, gender, health and disability status, and health conditions is statistically significant at the 5% level, two-tailed test.
‡Regression-adjusted difference from SSI enrollees controlling for age, gender, health and disability status, health conditions, race/ethnicity, and socioeconomic characteristics is statistically significant at the 5% level, two-tailed test.

Many of the differences between Medicaid SSI and non-SSI adults are explained by the differences in observed health care needs between the two groups of Medicaid enrollees. However, a number of differences persist after controlling for observed health, demographic, and socioeconomic characteristics and, in some cases, the direction of the differences switches after controlling for these factors. For example, after controlling for health, demographic, and socioeconomic characteristics, Medicaid SSI adults were less likely than non-SSI adults to have unmet need for care because of costs and less likely to have delayed care due to costs. Medicaid SSI adults were also less likely to have had some types of health care visits than non-SSI adults, including general doctor visits and visits to mid-level providers.

It is important to note that while we control for observed differences in health and disability status in this analysis, it is likely that the SSI and non-SSI adults on Medicaid differ along health and disability dimensions that are not measured, such as severity of health condition and severity of disability. As a result, the differences in access and use between SSI and non-SSI Medicaid enrollees that persist after adjusting for observed characteristics may reflect the effects of those unmeasured differences in health and disability status.

Conclusions

Consistent with findings from prior research, for almost all the measures considered, non-elderly adults with Medicaid have substantially better access to care and use more care than uninsured adults. For example, compared to uninsured adults, non-elderly adults with Medicaid were:

- More likely to have a usual source of care (88.1 vs. 39.8 percent);
- More likely to report health care visits overall (88.8 vs. 52.9 percent reporting an office or outpatient visit over the past 12 months) and for specific types of services;
- More likely to report timely care (77.6 vs. 65.3 percent reporting that they always or usually got care as soon as it was needed);
- Less likely to delay obtaining needed medical care overall (24.2 vs. 41.6 percent) or because of costs (8.3 vs. 34.3 percent); and
- Less likely to go without needed health care because of cost (26.9 vs. 56.2 percent).

These differences in access and use between Medicaid and uninsured adults persist after controlling for the significant differences between the two groups in terms of health, demographic, and socioeconomic characteristics.

Overall, the access picture is poor for uninsured adults, with many forgoing routine care and experiencing unmet needs. Fewer than half of the uninsured adults have a usual source of care (39.8 percent) and only about one-third reported a routine check-up over the past year (34.2 percent), while more than half report unmet need for health care because of costs (56.2 percent). This suggests that there could be significant access improvements associated with enrolling low-income uninsured adults in Medicaid, the majority of whom will be eligible for Medicaid in 2014 under the Patient Protection and Affordable Care Ace (ACA). The Congressional Budget Office estimates that the ACA would lead to roughly 15 million additional Medicaid and CHIP enrollees by 2019.[34]

The comparison of adults on Medicaid to adults with ESI yields a more complex picture, with Medicaid adults doing equally well or better on some measures, such as having a usual source of care (88.1 vs. 89.8 percent), any office or outpatient visit (88.8 vs. 87.3 percent), or having a routine check-up (70.4 vs. 63.9 percent), and worse on others, such as unmet need for health care because of costs (26.9 vs. 13.2 percent). However, many of the gaps in access and use between Medicaid and ESI adults are driven by the higher health care needs and lower socioeconomic status of the Medicaid adults. After controlling for differences in health, demographic, and socioeconomic characteristics between the two groups, adults on Medicaid and adults with ESI had similar levels of access and use on many measures. Key differences which remained included lower levels of unmet need due to costs for Medicaid adults relative to ESI adults for medical care, prescription drugs, mental health care, and eyeglasses. Medicaid adults also reported higher levels of emergency department use, all else equal.

Finally, looking within the population of non-elderly adults on Medicaid to compare SSI adults, who have severe disabilities, to other Medicaid adults, we find SSI adults use much higher levels of care and face greater barriers to obtaining care than other Medicaid adults. Many Medicaid SSI adults reported unmet need for health care and delays in obtaining medical care. More than one in five reported problems getting an appointment as soon as one was needed and more than half reported problems getting necessary care, tests, and treatments, and seeing specialists for needed care. Such factors may contribute to the high levels of emergency department use among the SSI adults on Medicaid, as nearly half had a least one emergency department visit in the last year and more than a quarter had two or more visits.

Many of the differences between SSI adults and non-SSI adults on Medicaid reflect the poorer health and socioeconomic status of the SSI adults. We find similar levels of access to care on many dimensions after controlling for differences in health, demographic, and socioeconomic characteristics of the two groups. Key exceptions include lower levels of doctor visits (83.5 vs. 89.5 percent) and lower levels of unmet need for health care (29.9 vs. 40.0 percent) among SSI adults relative to non-SSI Medicaid adults. One limitation of these comparisons, however, is our inability to control for the severity of health conditions between SSI and non-SSI adults on Medicaid.

The findings here highlight the importance of controlling for the health care needs of the population in comparing Medicaid adults to adults with ESI and the uninsured, and in looking within the Medicaid population. Many of the differences between Medicaid adults and other adults reflect the much poorer health and higher disability levels of adults on Medicaid. Similarly, the poorer access to care among the most disabled Medicaid enrollees also reflects, in part, their worse health and higher disability levels relative to the remaining Medicaid enrollees.

These findings also highlight the importance of demographic and socioeconomic factors in explaining differences in access and use between Medicaid adults and adults with ESI and the uninsured. The characteristics of Medicaid adults, including their more limited economic resources, contribute to their lower access to health care relative to ESI adults and mitigate some of the differences relative to uninsured adults, highlighting the importance of factors beyond insurance coverage in ensuring access to care.

ENDNOTES

[1] Although the State Children's Health Insurance Program (CHIP) covers adults in a handful of states, their numbers are so small compared to Medicaid that this report uses Medicaid to refer to both adults on Medicaid and those on CHIP.
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[12] According to Table 4A of MACStats in MACPAC's June 2011 *Report to Congress*, 12.4 percent of non-institutionalized Medicaid adults 19 to 64 were dually eligible for Medicaid and Medicare.
[13] Having limited financial assets, or resources, is an eligibility requirement for SSI. Almost all states have eliminated the asset test for pregnant women and approximately half the states have eliminated the asset test for parents.
[14] The MEPS also includes an Insurance Component that surveys employers about the health insurance coverage that they offer to their workers. Only the Household Component was analyzed in this study.
[15] Reports from household surveys complement the information on access to care that can be derived from other sources, such as provider surveys, chart review, and administrative data. While household survey data constitute an important source of information about access to care,

they have some inherent weaknesses. In particular, household survey data rely on the respondent's recall of health care events, which may introduce measurement error. In addition, respondents may feel pressure to provide certain answers to survey questions (for example, indicating that they have received preventive care even if they have not). Finally, the data are based on subjective perceptions, which may not match objective criteria.

[16] U.S. Department of Health and Human Services (HHS). (2010). National healthcare disparities report, 2009. Rockville, MD: Agency for Healthcare Research and Quality (AHRQ) Publication No. 10-0004. Retrieved from www.ahrq.gov/qual/qrdr09.htm.

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[22] National Research Council. (2010). Databases for estimating health insurance coverage for children: A workshop summary. Thomas J. Plewes, Rapporteur. Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

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[24] MACStats available at: http://www.macpac.gov/macstats.

[25] Institute of Medicine (IOM). (2002). Unequal treatment: confronting racial and ethnic disparities in health care. Washington, DC: National Academies Press.

[26] Doescher, M.P., Saver, B.G., Fiscella, K., and Franks, P. (2004). Preventive care. *Journal of General Internal Medicine*, *19*(6), 708-9.

[27] Ettner, S.L. (1999). The relationship between continuity of care and the health behaviors of patients: Does having a usual physician make a difference? *Medical Care, 37*(6), 547-555.

[28] Cunningham, P.J, and Nichols, L. (2005). The effects of Medicaid reimbursement on the access to care of Medicaid enrollees: a community perspective. *Medical Care Research Review*, *62*(6), 676-696.

[29] The Federally Qualified Health Center (FQHC) Program is designed to improve access to primary care services in underserved communities. See http://bphc.hrsa.gov/policiesregulations/policies/index.html.

[30] Our ability to control for differences in mental health care needs is relatively limited in national surveys, raising the possibility that part of the remaining differences here may reflect

unmeasured differences in mental health care needs between Medicaid adults and adults with ESI.

[31] This measure is also available in the NHIS. Given the seasonal nature of the flu vaccination, which is typically available in the fall of each year, we focus on the MEPS estimates as those data are collected closer to the time of service.

[32] As with the comparison of Medicaid adults to the uninsured and adults with employer-sponsored insurance coverage, the focus here is on the non-institutionalized Medicaid population. Thus, we exclude some of the most disabled SSI Medicaid adults from the analysis.

[33] As noted earlier, the focus here is on preventive care measures from the MEPS.

[34] Congressional Budget Office (CBO). (2009). Estimate of the Patient Protection and Affordable Care Act. Letter to Senator Harry Reid on December 19, 2009. Retrieved from: http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/107xx/doc10731/reid_letter_11_18_09.pdf.

Table 1. Unadjusted and Regression-Adjusted Estimates of Health Care Access and Use for Non-Elderly Adults (Age 19 to 64) Overall and Among Full-Year Insured Adults with Medicaid or ESI at the Time of the Survey and Full-Year Uninsured Adults, 2009

Measure	Overall Adults	Medicaid	ESI		(Model I) Regression-adjusted Estimates for ESI		(Model II) Regression-adjusted Estimates for ESI		Uninsured		(Model I) Regression-adjusted Estimates for Uninsured		(Model II) Regression-adjusted Estimates for Uninsured	
	%	%	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid
Access and service use measures (past 12 months)														
Had a usual source of care [a]	78.8	88.1	89.8	-1.7	91.2	-3.1 †	86.9	1.2	39.8	48.3 **	44.8	43.3 ††	45.7	42.3 ‡‡
Doctor's office or HMO	76.0	59.1	82.6	-23.5 **	81.8	-22.7 ††	72.2	-13.1 ‡‡	48.1	11.0 **	48.7	10.4 ††	48.7	10.4 ‡‡
Clinic or health center	21.6	37.3	15.7	21.6 **	16.0	21.3 ††	23.7	13.6 ‡‡	45.8	-8.5 **	45.0	-7.7 ††	44.7	-7.4 ‡‡
Other place [b]	2.5	3.6	1.7	1.9 *	2.1	1.5	4.1	-0.5	6.2	-2.6 *	6.2	-2.6 †	6.7	-3.1 ‡‡
Had same usual source of care for past 12 months	90.7	88.3	91.5	-3.1 *	88.3	0.1	87.5	0.9	93.3	-5.0 **	91.1	-2.7	91.0	-2.7
Any office or outpatient visit	80.7	88.8	87.3	1.5	93.9	-5.1 ††	87.6	1.2	52.9	35.9 **	61.9	26.9 ††	63.0	25.8 ‡‡
More than 1 office or outpatient visit	60.5	71.9	67.0	4.9 **	79.8	-7.9 ††	71.6	0.3	30.3	41.6 **	46.0	25.8 ††	46.3	25.6 ‡‡
More than 3 office or outpatient visits	34.4	51.7	36.4	15.4 **	55.0	-3.3	49.5	2.2	14.7	37.0 **	34.6	17.1 ††	34.1	17.6 ‡‡
More than 15 office or outpatient visits	5.8	12.9	5.3	7.6 **	12.9	0.0	11.4	1.5	2.5	10.4 **	9.4	3.5 ††	9.2	3.7 ‡‡
Any doctor visit	72.4	80.6	79.6	1.0	88.1	-7.5 ††	80.4	0.2	42.1	38.5 **	53.9	26.7 ††	54.6	26.0 ‡‡
General doctor visit	63.5	69.1	70.7	-1.6	76.4	-7.3 ††	69.4	-0.3	34.4	34.8 **	42.5	26.6 ††	43.1	26.1 ‡‡
Specialist visit [c]	40.6	50.4	45.6	4.8 **	59.8	-9.5 ††	51.6	-1.2	16.8	33.6 **	35.4	15.0 ††	35.2	15.2 ‡‡
Specialist visit, excluding OB/GYN	23.5	25.4	26.5	-1.1	33.9	-8.5 ††	27.8	-2.4	8.3	17.1 **	17.5	7.9 ††	17.2	8.2 ‡‡
OB/GYN visit (women only)	47.3	51.1	53.7	-2.7	57.5	-6.4 ††	50.0	1.1	23.1	28.0 **	27.4	23.7 ††	28.1	23.0 ‡‡
Any visit with nurse practitioner, physician assistant, or midwife	19.2	18.9	21.5	-2.6	29.0	-10.1 ††	22.0	-3.1	9.9	9.0 **	18.2	0.7	17.6	1.3
Any mental health professional visit	8.5	17.3	7.2	10.1 **	14.9	2.4 †	14.6	2.7 ‡	4.8	12.5 **	10.0	7.3 ††	10.6	6.7 ‡‡
Any visits to other providers	43.9	39.8	51.3	-11.5 **	53.8	-14.0 ††	41.9	-2.1	22.0	17.8 **	27.7	12.1 ††	27.4	12.3 ‡‡
Any inpatient stay	8.3	18.8	6.9	11.9 **	17.4	1.4	18.2	0.6	4.7	14.2 **	15.2	3.6 ††	15.6	3.2 ‡
Any home health visit	1.3	4.0	0.8	3.2 **	2.6	1.4 †	2.5	1.5 ‡	0.4	3.6 **	2.2	1.9 ††	2.1	2.0 ‡‡
Any emergency department visit	20.4	38.6	16.5	22.1 **	27.9	10.7 ††	31.7	6.9 ‡‡	20.7	17.9 **	29.1	9.5 ††	31.1	7.4 ‡‡
Two or more emergency department visits	7.9	20.6	5.0	15.6 **	12.5	8.1 ††	14.7	5.9 ‡‡	9.0	11.6 **	14.4	6.3 ††	15.7	4.9 ‡‡
Three or more emergency department visits	2.2	8.0	1.0	7.0 **	4.2	3.8 ††	4.9	3.1 ‡‡	2.7	5.3 **	5.0	3.1 ††	5.5	2.5 ‡‡
Any unmet health care need because of costs	25.7	26.9	13.2	13.7 **	23.4	3.5 †	29.3	-2.4	56.2	-29.3 **	63.8	-37.0 ††	63.8	-36.9 ‡‡
Medical care	10.3	6.4	3.5	2.9 **	9.4	-3.1 ††	10.8	-4.5 ‡‡	29.4	-23.1 **	33.7	-27.3 ††	33.8	-27.5 ‡‡
Dental care	17.0	18.1	7.5	10.6 **	14.1	3.9 ††	19.2	-1.1	42.0	-23.9 **	46.9	-28.9 ††	47.4	-29.3 ‡‡
Prescription drugs	11.4	10.2	5.0	5.2 **	12.2	-2.1 †	16.0	-5.8 ‡‡	28.4	-18.2 **	33.8	-23.6 ††	34.5	-24.3 ‡‡
Mental health care or counseling	3.4	3.2	1.3	1.9 **	4.9	-1.7 ††	4.8	-1.6 ‡	7.8	-4.6 **	10.3	-7.0 ††	10.2	-7.0 ‡‡
Eyeglasses	9.5	9.1	4.6	4.5 **	9.8	-0.8	11.5	-2.5 ‡	21.1	-12.0 **	25.5	-16.4 ††	25.5	-16.4 ‡‡
Any delayed medical care	24.2	24.2	16.4	7.8 **	25.6	-1.4	25.6	-1.4	41.6	-17.4 **	48.4	-24.2 ††	47.3	-23.2 ‡‡
Because of costs	14.4	8.3	6.8	1.5	12.9	-4.6 ††	13.6	-5.3 ‡‡	34.3	-26.0 **	38.8	-30.5 ††	38.7	-30.4 ‡‡
Because couldn't get an appointment	7.2	9.6	6.5	3.1 **	9.5	0.1	7.9	1.7	5.7	3.9 **	7.9	1.7	7.1	2.5 ‡
Because couldn't go when open	4.1	4.7	3.9	0.8	5.8	-1.0	4.5	0.2	3.5	1.2	4.7	0.0	4.3	0.4
Because have to wait too long to see doctor at site	5.8	9.8	4.3	5.4 **	7.0	2.8 ††	7.3	2.4 ‡	7.6	2.2	9.4	0.4	8.5	1.3
Because didn't have transportation	2.3	8.2	0.7	7.5 **	3.0	5.2 ††	5.1	3.1 ‡‡	3.3	4.9 **	4.9	3.2 ††	5.5	2.7 ‡‡
Because couldn't get through on the phone	3.1	5.4	2.7	2.7 **	4.4	1.0	4.7	0.7	3.2	2.2 **	4.6	0.8	4.4	1.0
Sample Size	21,908	1,828	11,671						3,565					

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

Notes: Sample sizes are average sample sizes across the five estimation samples derived from multiply imputed income data. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance. HMO is health maintenance organization. OB/GYN is a medical doctor specializing in obstetrics and/or gynecology. The overall category includes all non-elderly NHIS sample adults regardless of their insurance status. Model I regression-adjusted estimates are derived from multivariate regression models that control for age, gender, health status (physical and mental health), disability status, the presence of a number of chronic conditions (e.g. asthma, diabetes, emphysema, heart disease, hypertension, stroke, and kidney disease), pregnancy over the past 12 months, and body mass index (BMI). The means reported for adults with ESI coverage and the uninsured are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage. Model II regression-adjusted estimates are derived from multivariate regression models that control for the variables in the first model (I) plus race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, health insurance unit (HIU) size, HIU income, homeownership, and the health and disability status of the members of the HIU. The means reported for adults with ESI coverage are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage.

* (**); †(††); ‡(‡‡) Significantly different from zero at the .05 (.01) level, two-tailed test.

[a] Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of advice about his/her health. USC is measured at the time of the survey and does not include individuals who reported the emergency department or multiple providers.

[b] Other place includes any place other than a clinic, health center, doctor's office, or HMO.

[c] Specialist include medical doctors who specialize in a particular medical disease or problem. For this analysis, specialists include obstetricians and gynecologists and exlude psychiatrists and ophthalmologists.

Table 2. Unadjusted and Regression-Adjusted Estimates of Timeliness and Provider Accessibility Measures, and Patient-Centered Care Measures for Non-Elderly Adults (Age 19 to 64) Overall and Among Full-Year Insured Adults with Medicaid or ESI and Full-Year Uninsured Adults, 2008

Measure	Overall Adults	Medicaid	ESI		(Model I) Regression-adjusted Estimates for ESI		(Model II) Regression-adjusted Estimates for ESI		Uninsured		(Model I) Regression-adjusted Estimates for Uninsured		(Model II) Regression-adjusted Estimates for Uninsured	
	%	%	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid
Access and service use measures (past 12 months)														
Had routine checkup	57.5	70.4	63.9	6.5 **	67.9	2.5	65.2	5.1 ‡	34.2	36.1 **	43.3	27.1 ††	44.5	25.9 ‡‡
Received mammogram (among women aged 30 and older)	44.7	35.8	50.3	-14.5 **	41.6	-5.8	38.8	-3.0	25.1	10.7 **	18.6	17.2 ††	19.2	16.6 ‡‡
Received flu vaccination	28.1	29.9	33.7	-3.8	22.8	-7.1 ††	33.2	-0.5	13.4	16.5 **	24.2	9.5 ††	24.6	9.1 ‡‡
Timeliness and provider accessibility measures (past 12 months)														
Usual source of care has night/weekend hours	40.7	35.9	42.2	-6.4 *	40.9	-5.1	39.3	-3.4	36.9	-1.0	34.6	1.2	34.9	1.0
Very/somewhat difficult to contact usual source of care after hours	31.6	42.3	28.2	14.1 **	34.0	8.3 ††	38.1	4.2	39.8	2.5	43.7	-1.4	43.8	-1.5
Very/somewhat difficult to get to usual source of care	4.7	10.3	3.6	6.8 **	7.5	2.9	9.0	1.3	6.9	3.5 *	9.9	0.5	10.4	-0.1
Very/somewhat difficult to contact usual source of care by telephone	15.5	18.9	14.5	4.4 *	18.0	0.9	18.7	0.2	18.7	0.2	20.9	-2.0	21.2	-2.3
Had an illness, injury, or condition that needed care right away	26.9	42.4	25.8	16.6 **	40.0	2.4	40.2	2.2	21.2	21.2 **	34.2	8.2 ††	35.4	7.0 ‡‡
Always/usually got care as soon as needed [a]	82.2	77.6	88.1	-10.5 **	85.4	-7.8 ††	83.6	-6.0	65.3	12.3 **	65.1	12.5 ††	65.4	12.2 ‡‡
Had appointments for health care	61.6	71.4	69.6	1.8	78.6	-7.2 ††	69.7	1.7	32.7	38.7 **	45.8	25.6 ††	46.6	24.8 ‡‡
Always/usually got appointment for care as soon as needed [b]	81.9	80.1	84.7	-4.7 *	81.0	-0.9	77.6	2.4	71.1	9.0 **	70.2	9.9 ††	69.8	10.3 ‡‡
Needed necessary care, tests, or treatments [c]	73.0	72.1	74.8	-2.7	80.8	-8.7 ††	73.5	-1.4	64.7	7.4 **	70.1	2.0	68.8	3.3
Always/usually easy to get necessary care, tests, or treatments [c d]	89.2	82.2	93.7	-11.5 **	88.0	-5.9 ††	85.1	-3.0	69.2	13.0 **	66.0	16.2 ††	65.6	16.6 ‡‡
Needed to see a specialist	32.2	37.5	36.4	1.1	47.6	-10.1 ††	41.5	-4.0	16.3	21.2 **	29.4	8.1 ††	29.9	7.6 ‡‡
Always/usually easy to see necessary specialist [e]	80.2	69.2	85.0	-15.8 **	77.1	-7.9 †	75.7	-6.5	58.5	10.6 *	54.9	14.3 ††	56.6	12.6 ‡‡
Patient-centered care measures (past 12 months)														
Doctor/other health providers always/usually listen carefully [c]	90.1	84.7	92.2	-7.5 **	87.1	-2.4	85.8	-1.0	84.2	0.5	81.6	3.1	81.3	3.4
Doctor/other health providers always/usually explain things in a way that is easy to understand [c]	91.0	84.0	93.4	-9.4 **	88.4	-4.4 †	88.0	-4.0	84.9	-0.9	82.2	1.8	83.0	1.0
Doctor/other health providers always/usually show respect [c]	91.5	84.6	93.5	-8.9 **	88.0	-3.4 †	87.6	-3.0	86.4	-1.7	83.3	1.3	83.0	1.6
Doctor/other health providers always/usually spend enough time with patient [c]	85.1	78.6	87.5	-8.8 **	79.8	-1.2	81.2	-2.6	77.9	0.7	73.8	4.8 †	74.4	4.2
Sample Size	19,245	1,221	9,002						4,428					

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

Notes: Insurance coverage is defined as full-year coverage. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance. The overall category includes all non-elderly adults regardless of their insurance status. Model I regression-adjusted estimates are derived from multivariate regression models that control for age, gender, health status (physical and mental health), disability status, the presence of a number of chronic conditions (e.g. asthma, diabetes, emphysema, heart disease, hypertension, and stroke), pregnancy over the past 12 months, and body mass index (BMI). The means reported for adults with ESI coverage and the uninsured are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage. Model II regression-adjusted estimates are derived from multivariate regression models that control for the variables in the first model (I) plus race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, spousal employment, health insurance unit (HIU) size, HIU income, and the health and disability status of the members of the HIU. The means reported for adults with ESI coverage and the uninsured are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage.

* (**); †(††); ‡(‡‡) Significantly different from zero at the .05 (.01) level, two-tailed test.

[a] Question only asked of persons that had an illness, injury, or condition that needed care right away.

[b] Question only asked of persons that had appointments for health care, not counting the times they needed care right away.

[c] Question only asked of persons that had at least one doctor or health professional visit.

[d] Question only asked of persons that needed necessary care, tests, or treatments.

[e] Question only asked of persons that needed to see a specialist.

Table 3. Unadjusted and Regression-Adjusted Estimates of Health Care Access and Use for Full-Year Insured Non-Elderly Adults (Age 19 to 64) with Medicaid at the Time of the Survey, Overall and Among Adults with SSI and without SSI, 2007-2009

	All Medicaid	SSI Adults	Non-SSI Adults		(Model I) Regression-adjusted Estimates for Non-SSI Adults		(Model II) Regression-adjusted Estimates for Non-SSI Adults	
Measure	%	%	%	Percentage Point Difference from SSI Adults	%	Percentage Point Difference from SSI Adults	%	Percentage Point Difference from SSI Adults
Access and service use measures (past 12 months)								
Had a usual source of care [a]	87.0	92.6	88.3	4.2 **	91.7	0.9	91.2	1.4
Doctor's office or HMO	58.0	64.8	56.8	8.1 **	61.7	3.1	63.7	1.1
Clinic or health center	38.7	31.4	39.9	-8.5 **	35.6	-4.1	33.4	-2.0
Other place [b]	3.4	3.7	3.3	0.4	2.7	1.0	2.9	0.9
Had same usual source of care for past 12 months	89.3	89.9	90.6	-0.6	89.0	0.9	89.1	0.8
Any office or outpatient visit	87.6	93.0	87.3	5.7 **	93.7	-0.7	93.0	0.0
More than 1 office or outpatient visit	71.1	81.5	69.3	12.2 **	86.2	-4.7 †	86.1	-4.6 ‡
More than 3 office or outpatient visits	49.5	66.8	45.6	21.2 **	69.4	-2.6	70.0	-3.2
More than 15 office or outpatient visits	11.5	18.8	10.1	8.7 **	22.0	-3.2	20.8	-2.0
Any doctor visit	79.8	83.5	79.5	4.0	89.5	-6.0 ††	89.7	-6.3 ‡‡
General doctor visit	69.0	76.4	68.5	7.9 **	82.8	-6.4 ††	83.4	-7.1 ‡‡
Specialist visit [c]	48.3	49.5	48.1	1.4	56.2	-6.6 †	52.9	-3.3
Specialist visit, excluding OB/GYN	25.0	39.9	22.5	17.4 **	42.8	-2.9	40.7	-0.8
OB/GYN visit (women only)	47.5	30.6	50.3	-19.7 **	41.6	-11.0 ††	38.1	-7.5 ‡
Any visit with nurse practitioner, physician assistant, or midwife	20.4	18.8	19.6	-0.9	26.2	-7.5 ††	24.5	-5.7 ‡
Any mental health professional visit	16.4	32.5	13.1	19.3 **	27.9	4.5	30.4	2.0
Any visits to other providers	38.4	52.1	36.6	15.5 **	50.9	1.2	47.0	5.1
Any inpatient stay	17.8	23.3	15.2	8.1 **	21.1	2.1	20.7	2.6
Any home health visit	3.6	9.0	2.3	6.7 **	7.4	1.6	7.8	1.2
Any emergency department visit	38.3	48.1	34.2	13.9 **	45.5	2.6	45.2	2.9
Two or more emergency department visits	20.2	27.3	17.4	9.9 **	29.0	-1.6	29.3	-1.9
Three or more emergency department visits	8.1	11.8	6.7	5.1 **	14.4	-2.7	14.8	-3.0
Any unmet health care need because of costs	31.0	29.9	25.3	4.6 *	41.0	-11.0 ††	40.0	-10.1 ‡‡
Medical care	10.5	7.8	6.7	1.1	14.4	-6.6 ††	15.1	-7.3 ‡‡
Dental care	20.7	17.5	17.0	0.4	27.0	-9.5 ††	25.7	-8.3 ‡‡
Prescription drugs	13.8	13.0	9.5	3.5 *	17.7	-4.7 ††	17.2	-4.2 ‡
Mental health care or counseling	5.4	6.1	3.2	2.9 **	7.2	-1.2	7.5	-1.5
Eyeglasses	12.1	13.3	9.5	3.8 *	18.7	-5.3 ††	18.6	-5.2 ‡‡
Any delayed medical care	25.8	31.0	21.1	9.9 **	36.3	-5.3 †	36.7	-5.7 ‡
Because of costs	11.7	8.9	8.0	0.9	17.0	-8.1 ††	17.1	-8.2 ‡‡
Because couldn't get an appointment	9.9	11.9	8.9	3.0	14.0	-2.1	14.3	-2.4
Because couldn't go when open	4.6	5.2	4.0	1.3	7.3	-2.0	7.4	-2.1
Because have to wait too long to see doctor at site	9.2	11.0	8.5	2.5	13.5	-2.5	14.2	-3.1
Because didn't have transportation	7.2	15.1	5.0	10.1 **	11.5	3.6 †	13.8	1.3
Because couldn't get through on the phone	4.9	5.7	4.4	1.3	7.4	-1.7	8.3	-2.6
Sample Size	5,477	873	3,492					

Source: Urban Institute analysis for MACPAC of the 2007-2009 National Health Interview Survey (NHIS).

Notes: Sample sizes are average sample sizes across the five estimation samples derived from multiply imputed income data. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). SSI is Supplemental Security Income. HMO is health maintenance organization. OB/GYN is a medical doctor specializing in obstetrics and/or gynecology. The overall category includes all non-elderly NHIS sample adults on Medicaid. Model I regression-adjusted estimates are derived from multivariate regression models that control for age, gender, health status (physical and mental health), disability status, the presence of a number of chronic conditions (e.g. asthma, diabetes, emphysema, heart disease, hypertension, stroke, and kidney disease), pregnancy over the past 12 months, and body mass index (BMI). The means reported for non-SSI Medicaid adults are regression-adjusted, using the characteristics (listed above) of the SSI Medicaid adults. Model II regression-adjusted estimates are derived from multivariate regression models that control for the variables in the first model (I) plus race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, spousal employment, health insurance unit (HIU) size, HIU income, homeownership, and the health and disability status of the members of the HIU. The means reported for non-SSI Medicaid adults are regression-adjusted, using the characteristics (listed above) of the SSI Medicaid adults.

* (**); †(††); ‡(‡‡) Significantly different from zero at the .05 (.01) level, two-tailed test.

[a] Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of advice about his/her health. USC is measured at the time of the survey and does not include individuals who reported the emergency department or multiple provider.

[b] Other place includes any place other than a clinic, health center, doctor's office, or HMO.

[c] Specialist include medical doctors who specialize in a particular medical disease or problem. For this analysis, specialists include obstetricians and gynecologists and exlude psychiatrists and ophthalmologists.

Table 4. Unadjusted and Regression-Adjusted Estimates of Timeliness and Provider Accessibility Measures, and Patient-Centered Care Measures for Non-Elderly Adults (Age 19 to 64) Overall and Among Full-Year Insured Adults with Medicaid or ESI and Full-Year Uninsured Adults, 2008

	All Medicaid	SSI Adults	Non-SSI Adults		(Model I) Regression-adjusted Estimates for Non-SSI Adults		(Model II) Regression-adjusted Estimates for Non-SSI Adults	
Measure	%	%	%	Percentage Point Difference from SSI Adults	%	Percentage Point Difference from SSI Adults	%	Percentage Point Difference from SSI Adults
Access and service use measures (past 12 months)								
Had routine checkup	67.0	76.0	64.5	11.5 **	74.0	2.0	76.4	-0.4
Received mammogram (among women aged 30 and older)	36.6	43.4	33.7	9.7 **	42.5	0.9	42.8	0.6
Received flu vaccination	26.5	43.3	21.6	21.7 **	32.9	10.4 ††	35.5	7.8 ‡
Timeliness and provider accessibility measures (past 12 months)								
Usual source of care has night/weekend hours	36.8	33.6	38.0	-4.3	32.7	0.9	30.5	3.1
Very/somewhat difficult to contact usual source of care after hours	44.6	48.2	43.3	4.9	47.4	0.7	45.1	3.1
Very/somewhat difficult to get to usual source of care	11.0	19.2	8.4	10.8 **	16.3	2.8	15.0	4.1
Very/somewhat difficult to contact usual source of care by telephone	22.3	24.4	21.9	2.4	27.6	-3.2	26.2	-1.8
Had an illness, injury, or condition that needed care right away	40.6	51.0	37.8	13.2 **	54.5	-3.5	55.0	-3.9
Always/usually got care as soon as needed [a]	79.4	80.6	78.9	1.7	79.5	1.1	81.0	-0.4
Had appointments for health care	69.0	76.5	66.9	9.6 **	80.5	-3.9	78.5	-2.0
Always/usually got appointment for care as soon as needed [b]	76.7	78.1	76.2	1.9	78.3	-0.2	75.9	2.2
Needed necessary care, tests, or treatments [c]	68.8	78.3	66.1	12.2 **	82.8	-4.5	81.0	-2.7
Always/usually easy to get necessary care, tests, or treatments [c d]	50.5	47.0	51.8	-4.8	51.9	-4.9	50.9	-3.9
Needed to see a specialist	36.3	50.2	32.7	17.5 **	52.3	-2.1	51.6	-1.4
Always/usually easy to see necessary specialist [e]	52.1	44.5	55.9	-11.4 **	55.8	-11.3 †	53.6	-9.1
Patient-centered care measures (past 12 months)								
Doctor/other health providers always/usually listen carefully [c]	85.3	84.2	86.0	-1.8	81.8	2.4	78.6	5.6
Doctor/other health providers always/usually explain things in a way that is easy to understand [c]	84.6	80.6	85.5	-4.9 *	82.0	-1.4	79.3	1.4
Doctor/other health providers always/usually show respect [c]	85.9	84.3	86.8	-2.5	81.9	2.4	79.4	4.9
Doctor/other health providers always/usually spend enough time with patient [c]	78.8	76.4	79.5	-3.1	75.7	0.7	72.9	3.5
Sample Size	3,823	770	2,923					

Source: Urban Institute analysis for MACPAC of the 2006-2008 Medical Expenditure Panel Survey (MEPS).

Notes: Insurance coverage is defined as full-year coverage. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). SSI is Supplemental Security Income. The overall category includes all non-elderly adults on Medicaid. Model I regression-adjusted estimates are derived from multivariate regression models that control for age, gender, health status (physical and mental health), disability status, the presence of a number of chronic conditions (e.g. asthma, diabetes, emphysema, heart disease, hypertension, and stroke), pregnancy over the past 12 months, and body mass index (BMI). The means reported for non-SSI Medicaid adults are regression-adjusted, using the characteristics (listed above) of the SSI Medicaid adults. Model II regression-adjusted estimates are derived from multivariate regression models that control for the variables in the first model (I) plus race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, spousal employment, health insurance unit (HIU) size, HIU income, and the health and disability status of the members of the HIU. The means reported for non-

* (**); †(††); ‡(‡‡) Significantly different from zero at the .05 (.01) level, two-tailed test.

[a] Question only asked of persons that had an illness, injury, or condition that needed care right away.

[b] Question only asked of persons that had appointments for health care, not counting the times they needed care right away.

[c] Question only asked of persons that had at least one doctor or health professional visit.

[d] Question only asked of persons that needed necessary care, tests, or treatments.

[e] Question only asked of persons that needed to see a specialist.

Technical Appendix to
MACPAC Contractor Report No. 2

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This technical appendix provides additional information on the data and analyses underlying MACPAC Contractor Report No. 2, *National Findings on Access to Health Care and Service Use for Non-elderly Adults Enrolled in Medicaid*.

I. Data Sources

The analysis uses data from two large nationally representative household surveys, the National Health Interview Survey (NHIS) and the Medical Expenditure Panel Survey (MEPS), to measure access to care and service use among non-elderly adults enrolled in Medicaid.[1] The NHIS has the advantage of larger sample sizes and more detailed questions about the individual's health, while the MEPS collects more detailed information on health care expenditures and utilization. A significant difference between the two surveys in terms of their design is that the NHIS provides cross-sectional data, while the MEPS provides both cross-sectional and longitudinal data, drawing from a panel that follows individuals over a two-year period.

A. National Health Interview Survey

The NHIS provides detailed information on the health and health care use of a representative sample of the civilian, non-institutionalized population of the United States. The NHIS is conducted for the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), which releases annual public use microdata files. The NHIS is fielded continuously throughout the year, with data collected through an in-person household interview using computer-assisted personal interviewing (CAPI). The NHIS employs a complex, multistage sample design and includes an oversample of minority populations, including black, Hispanic, and Asian persons.

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 responds to the questionnaire for himself/herself unless he/she is unable to do so, in which case an adult proxy is selected from the household. The Sample Adult and Sample Child questionnaires differ in some items, but both collect basic information on health

[1] Although the State Children's Health Insurance Program (CHIP) covers adults in a handful of states, their numbers are so small compared to Medicaid that the discussion in this report uses Medicaid to refer to both adults on Medicaid and those on CHIP.

status, health care service use, and health-related behaviors. This study relies on the Family and Sample Adult components of the NHIS.

B. Medical Expenditure Panel Survey

The MEPS provides detailed information on the health and health care use of the U.S. population, as well as medical expenditures and insurance coverage offered by employers. The MEPS is conducted for the Agency for Healthcare Research and Quality (AHRQ), which releases annual public use microdata files. The MEPS has two major components: the Household Component and the Insurance Component. For the purposes of the MACPAC Contractor Report, we do not use the Insurance Component, which collects data from a sample of private and public sector employers on the health insurance plans they offer their employees.

The Household Component of the MEPS (hereafter referred to as the MEPS) collects data from a nationally representative sample of the U.S. civilian non-institutionalized population through an overlapping panel design. The sampling frame for the MEPS is drawn from a subsample of households participating in the previous year's NHIS. The MEPS also oversamples additional subgroups, including low-income households. 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 though in-person household interviews using CAPI technology. The MEPS also includes a Self-Administered Questionnaire (SAQ) that provides supplemental information, including Consumer Assessment of Healthcare Providers and Systems (CAHPS) questions. The MEPS 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.

Additionally, the MEPS Medical Provider Component collects data, including cost data, from hospitals, physicians, home health care providers, and pharmacies identified by MEPS household respondents. The data are used to supplement and/or replace information received from the respondents and are incorporated into the MEPS data files.

II. Analysis Sample

For these analyses, comparisons are presented for non-elderly adult Medicaid enrollees ages 19 to 64, excluding "dual eligibles" who are enrolled in both Medicare and Medicaid and Medicaid enrollees in institutional settings (including nursing homes).

Table 1 provides counts of the full samples from the two surveys and the final sample sizes after the relevant exclusions.

III. Estimation Methods

The study describes health care access and use for non-elderly adults using measures from both the NHIS and the MEPS. We estimate unadjusted and regression-adjusted differences in health care access and use between non-elderly adults with Medicaid and those with employer-sponsored insurance (ESI) and the uninsured. In estimating the regression-adjusted differences, we specify similar models in the NHIS and MEPS, although there are some differences due to differences in survey content.

A. Model Specifications

In estimating differences in the measures of interest we estimate two multivariate regression models to capture differences related to two types of factors. For the first set of models, based on the Institute of Medicine (IOM) (2002) recommendations for estimating disparities, we control for differences in health care needs. We interpret the adjusted differences from this specification as indicating that the differences are due to factors other than health care needs and preferences. Our measures of health care needs are age, gender, reported health status, chronic conditions, and disability status. The second set of models, which we refer to as the "full" model, include the above health need variables as well as demographic and socioeconomic characteristics. The latter includes race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, homeownership, health insurance unit (HIU, described further in this appendix) size, HIU income, and the health and disability status of the members of the HIU.

The control variables are described in detail in the section below. Tables 2 and 3 provides a summary of these variables based on the NHIS for the analysis samples of all nonelderly adults by insurance status (Table 2) and nonelderly adults on Medicaid by disability status (Table 3). In order to minimize bias, we include person-level missing data indicators for control variables with a high share of missing data (greater than 2 percent for the overall sample). The analysis samples include individuals with complete information on the variables included in the full regression models. Since the NHIS and MEPS are based on a complex survey design, we obtain design-adjusted estimates of the standard errors using the "svy" procedures in Stata 11. For ease of presentation and comparisons across models, we estimate linear probability models.

B. Interpretation

Comparisons of the unadjusted, partially regression-adjusted, and fully regression-adjusted differences are informative in understanding the potential source of differences

in access to and use of health care for adults with Medicaid as compared to those with ESI and the uninsured. However, as factors for which we cannot control may be correlated with an individual's propensity to be enrolled in Medicaid or to take up ESI, we cannot interpret these regression-adjusted differences as the "effect" of Medicaid on access to and use of health care. Although we estimate comprehensive models given the publicly available data, unmeasured differences between the samples may still introduce bias.

IV. Measure Specifications

A. Insurance Coverage

1. Type of Coverage

Although most people accurately report whether they have insurance coverage in surveys, there is some evidence of misreporting of coverage type (Call et al. 2008/2009, Cantor et al. 2007). This is likely to be more of an issue in states with multiple program names and/or with public/private coverage initiatives. In this study, we define the Medicaid population as those who report Medicaid or other public coverage (excluding recipients of Medicare) and limit the comparison population of the privately insured to individuals reporting ESI. In the NHIS, the Medicaid population is defined as those who report Medicaid, CHIP, or other government or public coverage. In the MEPS, the Medicaid population is defined as those who report Medicaid, CHIP or other public coverage. In the NHIS, ESI coverage is defined as those who report 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 military (TRICARE/CHAMPVA). These specifications differ somewhat from the standard NHIS and MEPS definitions of Medicaid and ESI provided on the public use files. Adults 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, and other coverage, with the exception of adults dually enrolled in Medicaid and Medicare who are categorized as having other coverage. In both surveys, uninsured adults are defined as those without insurance coverage for the 12 month reference period.

2. Full-year Status

In this study, we focus on individuals with full-year insurance coverage. In the MEPS, information is available on coverage status and type of coverage for each month of the year. For the MEPS analyses, the full-year Medicaid and ESI samples are defined as those individuals who had Medicaid or ESI coverage for the entire year. The NHIS asks about insurance coverage status and coverage type at the time of the survey and coverage status (but not type) over the prior year. In the NHIS, we can determine whether the individual had insurance coverage for the entire year, but not whether the individual had

the same type of coverage over the entire year. Therefore, the NHIS full-year insured samples are defined as adults who had coverage for the entire year, with Medicaid or ESI respectively at the time of the survey. In both surveys, full-year uninsured individuals are those without any insurance coverage for the entire 12 month period.

B. Health Insurance Units

For control variables defined at the family-level, we use the health insurance unit (HIU) as the measure of the family unit. An HIU includes the members of a nuclear family who can typically be covered under one health insurance policy. This includes an individual, his/her spouse, all unmarried children aged 18 and younger, and children aged 24 and younger who are full-time students. The HIU definition used in this study does not encompass the expanded eligibility to dependents aged 26 and younger from the Patient Protection and Affordable Care Act. In the MEPS, we use the HIU (referred to as the health insurance eligibility unit, or HIEU, on the MEPS) identifiers constructed by AHRQ and provided on the public use file. Since the NHIS does not provide HIU identifiers, we construct our own HIU identifiers using the age, family relationship, and mother, father, and spouse identifier variables. In both surveys, HIUs only include individuals living in the household since neither survey gathers information on family members living outside of the household.

C. Income

The NHIS asks about individual earnings and has a single question about total family income. Work by Czajka and Denmead (2008) finds that a family income estimate constructed as the sum of the earnings of the individuals in the family exceeds family income for a substantial share of cases. For this study, we assign HIU income in the NHIS as the reported family income minus the personal earnings for each member of the NHIS family that is not a member of the HIU (if any). HIU income as a percent of the federal poverty level is constructed using the Department of Health and Human Services (HHS) poverty guidelines for that year. Because state identifiers are not available on the public use file, we apply guidelines for the 48 contiguous states to the entire sample. Guidelines for Hawaii and Alaska are somewhat higher.

In both the NHIS and the MEPS, HIU income was not reported by all sample respondents. The NCHS uses multiple imputation methods to impute personal earnings and family income values each year for the NHIS. We use the imputed income files developed by the NCHS to construct our HIU income measures. We adjust our standard errors to account for the multiply-imputed data (Schenker et al. 2006) using the MI suite of commands in Stata 11.

In the MEPS, we construct HIU income as the sum of person-level income for all members of the HIU. Total person-level income is constructed by AHRQ as the sum of all person-level income components, including wages and salaries and income from other sources. The MEPS imputes missing income component values using weighted, sequential hot-deck methods. For the MEPS analyses, we treat imputed values as actual values with no additional adjustments to our estimates or standard errors since multiple imputations for income are not currently available on the MEPS.

D. Control Variables

1. Health Characteristics

Age. In both the NHIS and the MEPS, this is a continuous variable for years of age, as reported by the respondent.

Sex. In both the NHIS and the MEPS, this is a binary variable as reported by the respondent. Male was the excluded category.

Self-reported health status. In both the NHIS and the MEPS, individuals were asked to categorize their overall health as fair, poor, good, very good, or excellent. We create indicators for (1) fair or poor health status and (2) good health status. Very good or excellent health was the excluded category.

Disability/Limitations. We use three measures from the NHIS to capture disability status: (1) a measure of work limitations, (2) a composite measure of limitations attributable to physical, mental or emotional problems, and (3) a measure of functional limitations related to difficulty walking a quarter of a mile - about 3 city blocks; walking up 10 steps without resting; standing for about 2 hours; sitting for about 2 hours; stopping, bending, or kneeling; reaching overhead; using fingers to grasp or handle small objects; lifting or carrying 10 pounds; pushing or pulling large objects; or going out for activities such as shopping, movies, or sporting events. In each case, the excluded category was no disability or limitation. The MEPS limitation variables also include three measures: (1) a measure of activity limitations, (2) a measure of social/cognitive or physical function limitations, and (3) a measure of any limitations to work at a job, to do housework, or to go to school. In each case, the excluded category was no disability or limitation.

Pregnant in the last 12 months. In the NHIS, women between the ages of 18 and 49 years old were asked if they were pregnant at the time of the survey, or if they had a baby in the last 12 months. If a respondent said yes to either question, she was coded as pregnant in the last 12 months for this analysis. In the MEPS, information on pregnancy was obtained for all females 16 to 55 in each round of the survey. Women who were

pregnant at any time in the calendar year are coded as pregnant. The excluded category for both surveys is not pregnant in the last 12 months.

Chronic conditions. In both surveys, individuals were asked if they were ever diagnosed with a variety of chronic conditions by a doctor or other health professional. In the NHIS, we create indicators for those condition variables, including: asthma, diabetes, emphysema, heart disease or condition, hypertension, stroke, and weak/failing kidneys. We also include a mean of the number of other chronic conditions that the individual reports. In the MEPS, we include a similar set of control variables for chronic health conditions, including: asthma, diabetes, emphysema, heart disease or condition, hypertension, and stroke. No variable for kidney function is available in the MEPS.

Mental health status. In the MEPS, an individual's mental health status is categorized as fair, poor, good, very good, or excellent by the respondent. We create indicators for (1) fair or poor mental health status and (2) good mental health status. Very good or excellent mental health status was the excluded category. The NHIS "any limitation" variable (described above) includes whether the individual has any chronic mental, emotional or behavioral problem that causes a limitation. We also included an indicator for whether the individual reported depressed or anxious feelings most or all of the time, and an indicator for whether the individual reported that feelings interfered with life "a lot" in the past 30 days.

Body Mass Index (BMI). The body mass index (BMI) was calculated in the NHIS and MEPS using height and weight variables.

2. Demographic and Socioeconomic Characteristics

Race/ethnicity. The race/ethnicity variables are defined using NHIS and MEPS edited variables. In the models we include indicators for individuals who are Hispanic, non-Hispanic black, and other non-white, non-Hispanic. The excluded category was white, non-Hispanic.

Citizenship. In the NHIS, citizenship status is reported by the respondent. The MEPS does not report citizenship information on the public use file. We use the NHIS-MEPS link files to link the MEPS sample to the corresponding NHIS record from the prior year. Thus, the MEPS measure corresponds to citizenship at the time of the NHIS interview, which occurred either one or two years prior to the MEPS calendar year file. In both surveys, we create an indicator for non-citizens. The excluded category was citizen.

Marital status. For both surveys, marital status is captured using two measures: (1) whether the individual was never married and (2) whether the individual was widowed, separated or divorced. Married was the excluded category.

Educational attainment. For both surveys, educational attainment is measured as the highest educational status obtained by individual. We control for (1) less than high school, (2) a high school diploma/GED, and (3) a four-year college degree or higher. The excluded category was some college.

Employment. For both surveys, we include measures of whether the individual worked full-time or part-time, with not working the excluded category. If the individual's spouse is present in the household, we also include measures for whether the spouse worked full-time or part-time, with not working or no spouse as the excluded category. We defined part-time employment as individuals working less than 35 hours per week and full-time employment as individuals working 35 hours per week or more. We also include measures of (1) whether the individual worked for a government agency, (2) worked for a firm with more than 50 employees, or (3) had worked for their employer for one year or more.

Homeownership. We include an indicator for whether an adult in the HIU owns or is buying their home in the NHIS models. Homeownership is not available in the MEPS files.

Parent status. In both surveys, we define the adult as a parent if there is at least one dependent child living in the adult's HIU (defined above).

Family size. In both surveys, family size is defined as the number of individuals in the HIU.

Health and disability status of other family members. In both surveys, we create indicators for (1) whether anyone in the HIU had a functional limitation and (2) whether anyone in the HIU was in fair or poor health.

Family income. As described earlier, family income is constructed as total HIU income. We defined income relative to the federal poverty level (FPL), using the following categories: Less than 50% of the FPL (the excluded category), 50-99% FPL, 100-149% FPL, 150-199% FPL, 200-249% FPL, 250-299% FPL, 300-399% FPL, 400-499% FPL and greater than 500% FPL.

E. Access and Use Measures

The following section provides an overview of the outcome measures we analyzed for the MACPAC Contractor Report. Tables 4 and 5 provide the complete variable names from the surveys and descriptions of the access to care and service use measures analyzed based on the NHIS and MEPS, respectively. Tables 6-9 show the unadjusted point estimates and how the estimates for those with ESI or without coverage differ from those with Medicaid when the point estimates are (1) unadjusted, (2) regression-adjusted for characteristics related to the need for health care (e.g., age and health status), and (3) regression-adjusted for characteristics related to the need for health care and for other factors such as race/ethnicity and income that should not affect the need for care. The regression-adjusted point estimates are calculated for adults with ESI and the uninsured using the health, demographic, and socioeconomic characteristics of the non-elderly adults with Medicaid coverage.

Tables 10 and 11 show for non-elderly SSI adults the unadjusted point estimates and how the estimates for those without SSI differ from those with SSI when the point estimates are (1) unadjusted, (2) regression-adjusted for characteristics related to the need for health care (e.g., age and health status), and (3) regression-adjusted for characteristics related to the need for health care and demographic and socioeconomic characteristics. The regression-adjusted point estimates are calculated for adults without SSI using the health, demographic, and socioeconomic characteristics of the non-elderly adults with SSI.

1. Access to Care

In the NHIS and the MEPS, most questions on health care access cover a reference period of the 12 months prior to the interview date. The access measures include having a usual source of care, characteristics of the usual source of care, unmet need for various types of health care because of cost, and measures of delayed care for a number of reasons—because of cost, because could not get an appointment, and because the hours of care were not convenient.

Usual source of care. Both the NHIS and MEPS define usual source of care (USC) as a place that the person usually goes to when sick or in need of advice about his/her health. The NHIS defines the type of USC as a clinic or health center, doctor's office or HMO, hospital emergency room, hospital outpatient department, or some other place. We recode those who report not going to one place most often or relying on the emergency room as not having a usual source of care. The MEPS identifies whether the USC is a facility, person, or a person in a facility. For all provider types, the location is identified as an office, hospital non-emergency room, or hospital emergency room. Again, those who report an emergency room as their usual source of care are recoded as not having a USC.

The MEPS also includes measures of whether the usual source of care has night or weekend hours and whether it was difficult to get to the usual source of care, or contact the usual source of care over the telephone or after hours.

Unmet need for health care and delays in obtaining medical care. The NHIS asks about unmet need for medical care, dental care, prescription drugs, and mental health care because of costs. Delayed medical care, on the other hand, is defined across a number of dimensions, including cost, provider hours, transportation, office wait time, appointment availability, and telephone accessibility.

2. Use of Services

The NHIS collects data on service use over specified reference periods, generally the 12 months prior to the survey. Therefore, for an individual interviewed midway through the year, information reflects service use for the first part of the survey year and the second part of the calendar year prior to the survey.

The MEPS collects data in each round on use of office- and hospital-based care, home health care, dental services, vision aids, and prescription medicines. Data are collected at the event level (e.g., doctor visit, hospital stay) and summed across rounds 3-5 for the first panel and across rounds 1-3 for the second panel to produce the annual utilization data for the calendar year.

We examine use of health care over the previous 12 months, including any office or outpatient visit and multiple visits (more than 1, more than 3, or more than 15 visits). We also examine care from a general doctor or a specialist (overall and separately for care by an obstetrician/gynecologists (for women) and care by other specialists), a nurse practitioner/physician's assistant/midwife, a mental health professional, care from other types of providers, any inpatient stays, any home health visits, and any emergency department visits. We also examine a limited number of preventive care use measures, including having a routine checkup, receiving a flu vaccination, and receiving a mammogram for women age 30 and older.

3. Patient-centered Care, Timeliness of Care, and Provider Accessibility

For non-elderly adults, patient-centered care, timeliness of care, and provider accessibility measures are identified by responses to the Consumer Assessment of Healthcare Providers and Systems (CAHPS) component of the MEPS. Patient-centered measures are based on questions asking whether the doctor listens carefully, explains things in a way that is easy to understand, shows respect, and spends enough time with the patient. Timeliness and provider accessibility questions ask whether the patient needed care, including acute care, routine care, tests/treatments, or specialty care, and if

so, whether the patient received the care as soon as wanted/needed and whether it was easy to get the care.

V. Differences between NHIS and MEPS

Prior studies have highlighted the differences across the NHIS and the MEPS in health insurance distributions and ambulatory care service use (Cohen, Makuc and Ezzati-Rice, 2007; Rhoades, Cohen and Machlin, 2010). Such differences may be attributable to the longer NHIS recall period (three to six months on the MEPS versus 12 months on the NHIS) or survey fatigue from the number of additional questions asked on the MEPS, among other differences between the surveys.

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Table 1. Summary of Sample Sizes for the Analyses for Non-Elderly Adults (Age 19 to 64) Based on the National Health Interview Survey and Medical Expenditure Panel Survey

	Overall Adults	Medicaid	ESI	Uninsured
Total NHIS Sample of Non-elderly Adults Aged 19 to 64 in the Sample Adult File	21,908	2,560	12,653	5,007
Excluded cases		732	982	1,442
Cases excluded because Medicare enrollee		300	150	
Cases excluded because did not have same insurance status for the full year or because data on full-year insurance status was missing		364	550	1,320
Cases excluded because of missing data on the control variables in the regression models		68	282	122
Final analysis sample	21,908	1,828	11,671	3,565
Total MEPS Adult Sample of Non-elderly Adults Aged 19 to 64	19,245	1,423	9,352	4,666
Excluded cases		202	350	238
Cases excluded because Medicare enrollee		171	73	
Cases excluded because of missing data on the control variables in the regression models		31	277	238
Final analysis sample	19,245	1,221	9,002	4,428

Source: 2009 National Health Interview Survey (NHIS) and 2008 Medical Expenditure Panel Survey (MEPS)

Notes: ESI is employer-sponsored insurance. In the NHIS, health insurance coverage is defined at the time of the survey and is based on an ESI-topped coverage hierarchy. Medicaid/CHIP includes Medicaid, CHIP, other government and other public coverage (excluding Medicare). ESI includes employer-sponsored insurance and military coverage. Medicaid/CHIP, ESI, and Uninsured do not sum to Overall Adults. Sample adults included in the Overall Adults category but excluded from the coverage groups have either Medicare only or other private (non-ESI) coverage (e.g., single services plans); additionally, 54 sample adults are missing any measure of health insurance coverage on the NHIS. In the MEPS, health insurance coverage is defined as full-year coverage and is based on an ESI-topped coverage hierarchy. Medicaid/CHIP includes Medicaid, CHIP, and other public coverage (excluding Medicare). ESI includes employer-sponsored insurance and military coverage. Medicaid/CHIP, ESI, and Uninsured do not sum to Overall Adults. Sample adults included in the Overall Adults category but excluded from the coverage groups have full-year Medicare coverage, full-year other private (non-ESI) coverage (e.g., single services plans), or are not insured or uninsured for the full year.

Table 2. Summary of Health-Related Characteristics and Socioeconomic Characteristics of Non-Elderly Adults (Age 19 to 64) by Insurance Status, 2009 (Unadjusted)

Measure	Overall Adults	Medicaid	ESI	Uninsured
	%	%	%	%
Health-related characteristics				
Age (mean)	41.0	37.9	42.5 **	37.2
Female	50.9	68.1	51.1 **	42.7 **
Self-reported health status				
Good	25.3	28.6	22.9 **	31.4
Fair/poor	11.0	26.4	5.9 **	13.1 **
Disability				
Limited in any way	31.1	46.3	26.9 **	27.5 **
Work limitation	10.5	29.0	4.8 **	8.1 **
Functional limitation	29.1	42.1	25.8 **	25.3 **
Pregnant in the last 12 months	3.3	11.8	2.7 **	1.1 **
Chronic conditions				
Asthma	13.4	19.5	12.4 **	12.2 **
Diabetes	7.1	13.2	6.2 **	4.8 **
Emphysema	1.3	2.5	0.9 **	1.0 **
Heart disease or condition	8.1	11.3	7.7 **	5.7 **
Hypertension	22.8	29.1	22.8 **	16.1 **
Stroke	1.4	3.2	0.8 **	1.1 **
Weak/failing kidneys	1.4	3.4	0.8 **	1.4 **
Number of other chronic conditions (mean)	0.3	0.4	0.3 *	0.2 **
Mental health status				
Depressed or anxious feelings most or all of the time	13.0	26.4	8.1 **	18.0 **
Feelings interfered with life a lot in the past 30 days	4.0	8.9	2.1 **	4.6 **
Body mass index (BMI) (mean)	27.0	28.1	27.0 **	26.9 **
Did not report BMI	3.1	3.2	2.6	2.8
Socioeconomic characteristics				
Race/ethnicity				
Black, non-Hispanic	12.4	24.8	10.0 **	13.6 **
Hispanic	15.1	23.9	9.6 **	34.3 **
Other non-white, non-Hispanic	5.9	6.7	5.9	5.0
Noncitizen	9.6	13.6	5.2 **	26.2 **
Marital status				
Widowed, separated, or divorced	13.3	20.1	10.7 **	15.6 **
Never married	23.4	37.3	17.2 **	31.2 **
Parent of dependent child	39.2	54.6	40.9 **	36.8 **

Table 2 (Continued)

Measure	Overall Adults %	Medicaid %	ESI %	Uninsured %
Socioeconomic characteristics (continued)				
Highest level of education				
High school diploma/GED	26.6	32.1	22.9 **	34.8
Some college	32.3	26.3	34.2 **	27.1
College or graduate degree	28.6	9.5	37.8 **	8.8
Employment				
Works full-time	59.6	24.3	73.6 **	48.3 **
Works part-time	11.6	14.8	9.3 **	15.8
Government employee	11.7	5.5	16.8 **	2.2 **
Works in firm of more than 50 employees	32.3	11.2	45.7 **	12.2
Job tenure of one year or more	60.5	28.5	75.9 **	47.8 **
Spouse (if present) works full-time	34.7	12.9	46.3 **	18.9 **
Spouse (if present) works part-time	5.2	3.1	6.0 **	4.1
Homeowner	65.0	34.5	76.8 **	44.1 **
Health insurance unit (HIU) size (mean)	2.3	2.5	2.4	2.1 **
Health and disability status in HIU				
Anyone in fair/poor health	14.3	29.8	9.1 **	17.2 **
Anyone with a limitation of any kind	19.3	41.2	13.8 **	17.3 **
HIU income as a percent of the federal poverty level (FPL)				
50% to 99% FPL	8.6	29.8	2.6 **	18.0 **
100% to 149% FPL	9.3	17.6	4.0 **	18.9
150% to 199% FPL	8.1	9.4	5.4 **	15.2 **
200% to 249% FPL	8.0	5.1	6.8 *	11.2 **
250% to 299% FPL	7.2	3.1	7.6 **	6.8 **
300% to 399% FPL	12.9	3.0	15.7 **	7.5 **
400% to 499% FPL	10.4	2.6	14.4 **	3.4
500% FPL or more	28.0	3.3	41.3 **	3.9
Sample Size	21,908	1,828	11,671	3,565

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

Notes: Sample sizes are average sample sizes across the five estimation samples derived from multiply imputed income data. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). The Medicaid sample size here differs from that in Table 3 because the estimates in Table 3 are based on pooled data for three years while these estimates are based on data for a single year. ESI is employer-sponsored insurance. The federal poverty level (FPL) is measured using the 2009 US Department of Health and Human Services (HHS) poverty guidelines. HIU is health insurance unit. GED is General Education Development test. BMI is body mass indes. The overall category includes all non-elderly NHIS sample adults regardless of their insurance status. The other categories include only full-year insured with Medicaid or ESI at the time of the survey, or full-year uninsured.

* (**) Significantly different from Medicaid at the .05 (.01) level, two-tailed test.

Table 3. Summary of Health-Related Characteristics and Socioeconomic Characteristics of Non-Elderly Adults (Age 19 to 64) with Medicaid by Disability Status, 2007-2009 (Unadjusted)

Measure	All Medicaid Adults	SSI Adults	Non-SSI Adults
	%	%	%
Health-related characteristics			
Age (mean)	37.6	44.2	36.4 **
Female	67.4	62.4	68.8 **
Self-reported health status			
Good	29.8	24.7	30.5 **
Fair/poor	27.5	58.9	20.4 **
Disability			
Limited in any way	48.5	88.4	38.1 **
Work limitation	29.7	76.1	19.1 **
Functional limitation	43.0	74.5	34.7 **
Pregnant in the last 12 months	11.1	1.9	11.6 **
Chronic conditions			
Asthma	18.1	27.3	16.5 **
Diabetes	10.2	20.1	8.4 **
Emphysema	2.3	7.3	1.2 **
Heart disease or condition	11.2	21.7	8.8 **
Hypertension	28.6	45.7	24.5 **
Stroke	3.3	8.8	2.2 **
Weak/failing kidneys	3.4	7.1	2.5 **
Number of other conditions (mean)	0.4	0.6	0.3 **
Mental health status			
Depressed or anxious feelings most or all of the time	25.1	38.7	21.3 **
Feelings interfered with life a lot in the past 30 days	10.2	18.4	7.4 **
Body mass index (BMI) (mean)	27.3	29.3	27.5 **
Did not report BMI	4.9	3.9	3.8
Socioeconomic characteristics			
Race/ethnicity			
Black, non-Hispanic	23.7	28.8	23.4 *
Hispanic	23.5	15.5	25.6 **
Other non-white, non-Hispanic	6.3	4.4	7.3 **
Noncitizen	13.6	2.6	15.9 **
Marital status			
Widowed, separated, or divorced	19.4	29.0	17.0 **
Never married	34.2	42.7	33.3 **
Parent of dependent child	55.1	23.4	62.4 **

Table 3 (continued)

Measure	All Medicaid Adults %	SSI Adults %	Non-SSI Adults %
Socioeconomic characteristics (continued)			
Highest level of education			
High school diploma/GED	35.4	37.4	34.8
Some college	24.3	15.6	24.8 **
College or graduate degree	8.2	1.6	10.2 **
Employment			
Works full-time	25.7	2.4	30.8 **
Works part-time	14.9	4.8	16.7 **
Government employee	5.9	1.0	8.1 **
Works in firm of more than 50 employees	11.7	1.1	14.6 **
Job tenure of one year or more	27.7	4.0	34.8 **
Spouse (if present) works full-time	14.8	6.5	16.9 **
Spouse (if present) works part-time	3.5	2.5	4.0
Homeowner	34.6	31.7	35.9
Health insurance unit (HIU) size (mean)	2.5	1.7	2.7 **
Health and disability status in HIU			
Anyone in fair/poor health	31.0	60.2	24.6 **
Anyone with a limitation of any kind	40.9	82.1	31.8 **
HIU income as a percent of the federal poverty level (FPL)			
50% to 99% FPL	28.3	48.3	24.5 **
100% to 149% FPL	18.2	14.7	18.3
150% to 199% FPL	9.7	8.2	9.9
200% to 249% FPL	5.1	3.7	5.4
250% to 299% FPL	3.3	3.3	3.4
300% to 399% FPL	3.7	1.9	3.9 *
400% to 499% FPL	1.9	0.3	2.6 **
500% FPL or more	3.5	0.4	4.8 **
Sample Size	5,477	873	3,492

Source: Urban Institute analysis for MACPAC of the 2007-2009 National Health Interview Survey (NHIS).

Notes: Sample sizes are average sample sizes across the five estimation samples derived from multiply imputed income data. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). The Medicaid sample size here differs from that in Table 1 because the estimates in Table 1 are based on a single year of data while these estimates are based on pooled data for three years. SSI is Supplemental Security Income. The federal poverty level (FPL) is measured using the 2007-2009 US Department of Health and Human Services (HHS) poverty guidelines. HIU is health insurance unit. GED is General Education Development test. BMI is body mass index. The overall category includes all full-year Medicaid enrollees. The other categories include full-year Medicaid enrollees with and without SSI enrollment.

* (**) Significantly different from Medicaid at the .05 (.01) level, two-tailed test.

Table 4. Description of Access and Service Use Measures from the National Health Interview Survey, 2009

Measure	Description
Access and service use measures (past 12 months)	
Had a usual source of care	=1 if individual had a place (excluding 'hospital emergency room' and 'Doesn't go to one place most often' [APLKIND]) that he/she usually goes to when sick or in need of advice about his/her health [AUSUALPL]
Doctor's office or HMO	=1 if individual had doctor's office or HMO as his/her usual source of care, conditional on having a usual source of care [APLKIND]
Clinic or health center	=1 if individual had clinic or health center as his/her usual source of care, conditional on having a usual source of care [APLKIND]
Other place	=1 if individual had other place ('Hospital outpatient department' or 'Some other place,' including any place other than a clinic, health center, doctor's office, or HMO) as his/her usual source of care, conditional on having a usual source of care [APLKIND]
Had same usual source of care for past 12 months	=1 if individual had same usual source of care for the past 12 months, conditional on having a usual source of care [AHCCHGYR]
Any office or outpatient visit	=1 if during the past 12 m, individual saw a doctor or other health care provider about his/her health at a doctor's office, a clinic, or some other place, excluding those times he/she was hospitalized overnight, visits to emergency department, telephone calls or dental visits [AHCNOYR2]
More than (1/3/15) office visits	=1 if during the past 12 m, individual saw a doctor or other health care provider about his/her health more than (1/3/15) times [AHCNOYR2]
Any general doctor visit	=1 if during the past 12 m, individual saw or talked to a general doctor who treats a variety of illnesses (a doctor in general practice, family medicine or internal medicine) [AHCSYR9]
Any specialist visit	=1 if during the past 12 m, individual saw or talked to a medical doctor who specializes in a particular medical disease or problem, excluding psychiatrists and ophthalmologists and including obstetrician/gynecologist [AHCSYR8, AHCSYR7]
Any specialist visit, excluding OB/GYN visit	=1 if during the past 12 m, individual saw or talked to a medical doctor who specializes in a particular medical disease or problem, excluding psychiatrists, ophthalmologists, obstetricians, and gynecologists [AHCSYR8]
Any OB/GYN visit (women only)	=1 if during the past 12 m, individual saw or talked to an obstetrician or gynecologist (limited to women) [AHCSYR7]
Any visit with nurse practitioner, physician assistant, or midwife	=1 if during the past 12 m, individual saw or talked to a nurse practitioner, physician assistant, or midwife [AHCSYR6]
Any mental health professional visit	=1 if during the past 12 m, individual saw or talked to a mental health professional such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker [AHCSYR1]
Any visits to other providers	=1 if during the past 12 m, individual saw or talked to any other providers: [AHCSYR2] (eye), [AHCSYR3] (foot), [AHCSYR4] (chiropractor), [AHCSYR5] (physical therapist, speech therapist, respiratory therapist, audiologist, occupational therapist)
Any inpatient stay	=1 if during the past 12 m, individual was hospitalized overnight (not including an overnight stay in the emergency department) [PHOSPYR2]
Any home health visit	=1 if during the past 12 m, individual received care at home from a nurse or other health care professional [AHCHYR]
Any emergency department visit	=1 if during the past 12 m, individual went to a hospital emergency department about his/her health, including emergency department visits that resulted in a hospital admission [AHERNOY2]
(Two/Three) or more emergency department visits	=1 if during the past 12 m, individual went to a hospital emergency department (two/three) or more times about his/her health, including emergency department visits that resulted in a hospital admission [AHERNOY2]

Table 4 (continued)

Measure	Description
Any unmet health care need because of costs	=1 if during the past 12 m, individual had any unmet need for medical care, dental care, prescription drugs, mental health care or counseling, or eyeglasses because of costs [based on variables below]
Medical care	=1 if during the past 12 m, there was a time when individual needed medical care, but did not get it because he/she could not afford it [PNMED12M]
Dental care	=1 if during the past 12 m, there was a time when individual needed dental care, but did not get it because he/she could not afford it [AHCAFYR4]
Prescription drugs	=1 if during the past 12 m, there was a time when individual needed prescription medicines, but did not get it because he/she could not afford it [AHCAFYR1]
Mental health care or counseling	=1 if during the past 12 m, there was a time when individual needed mental health care or counseling, but did not get it because he/she could not afford it [AHCAFYR2]
Eyeglasses	=1 if during the past 12 m, there was a time when individual needed eyeglasses, but did not get them because he/she could not afford them [AHCAFYR4]
Any delayed medical care	=1 if during the past 12 m, individual delayed medical care because of worry about the cost, couldn't get an appointment soon enough, clinic/doctor's office wasn't open when he/she could get there, wait too long to see the doctor, didn't have transportation or couldn't get through on the telephone [based on variables below]
Because of costs	=1 if during the past 12 m, individual delayed medical care because of worry about the cost [PDMED12M]
Because couldn't get an appointment	=1 if during the past 12 m, individual delayed medical care because he/she couldn't get an appointment soon enough [AHCDLYR2]
Because couldn't go when open	=1 if during the past 12 m, individual delayed medical care because the clinic/doctor's office wasn't open when he/she could get there [AHCDLYR4]
Because wait too long to see doctor at site	=1 if during the past 12 m, individual delayed medical care because he/she had to wait too long to see the doctor [AHCDLYR3]
Because didn't have transportation	=1 if during the past 12 m, individual delayed medical care because he/she didn't have transportation [AHCDLYR5]
Because couldn’t get through on the phone	=1 if during the past 12 m, individual delayed medical care because he/she couldn't get through on the telephone [AHCDLYR1]

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

Notes: Survey variable names are provided in brackets. HMO is health maintenance organization. OB/GYN is a medical doctor specializing in obstetrics and/or gynecology.

Table 5. Description of Access and Service Use,Timeliness and Provider Accessibility, and Patient-Centered Care Measures from the Medical Expenditure Panel Survey, 2008

Measure	Description
Access and service use measures (past 12 months)	
Had routine checkup	=1 if individual had routine check-up by doctor or other health professional for assessing overall health in the past 12 months [CHECK53]
Received mammogram (among women aged 30 and older)	=1 if female had mammogram in the past 12 months [MAMOGR53] (limited to women ages 30 to 64)
Received flu vaccine	=1 if during the past 12 m, individual had flu vaccine (shot) [FLUSHT53]
Timeliness and provider accessibility measures (past 12 months)	
Usual source of care has night/weekend hours	=1 if the usual source of care provider has night or weekend hours, conditional on having a usual source of care (excluding hospital emergency room) [OFFHOU42, HAVEUS42, PLCTYP42]
Very/somewhat difficult to contact usual source of care after hours	=1 if very difficult or somewhat difficult to contact the usual source of care provider after their regular hours in case of urgent medical needs, conditional on having a usual source of care (excluding hospital emergency room) [AFTHOU42, HAVEUS42, PLCTYP42]
Very/somewhat difficult to get to usual source of care	=1 if very difficult or somewhat difficult to get to the usual source of care provider, conditional on having a usual source of care (excluding hospital emergency room) [DFTOUS42, HAVEUS42, PLCTYP42]
Very/somewhat difficult to contact usual source of care by telephone	=1 if very difficult or somewhat difficult to contact the usual source of care provider during regular business hours over the telephone about a health problem, conditional on having a usual source of care (excluding hospital emergency room) [PHNREG42, HAVEUS42, PLCTYP42]
Always/usually got care as soon as needed	=1 if individual usually or always got care as soon as needed for an illness, injury, or condition, conditional on needing care for an illness, injury, or condition that needed care right away from a clinic, emergency room, or doctor's office [CHILWW42, CHILCR42]
Always/usually got appointment for care as soon as needed	=1 if individual usually or always got an appointment for health care as soon as was needed, conditional on making an appointment, not counting the times the individual needed health care right away [CHRTWW42, CHRTCR42]
Always/usually eary to get necessary care, tests, or treatments	=1 if it was usually or always easy for individual to get the care, tests or treatment that the individual or a doctor believed necessary, conditional on the individual or a doctor believing that the individual needed any care, tests or treatment AND having at least one visit to a doctor's office or clinic for health care [CHNECP42, CHNDCR42, CHAPPT42]
Always/usually easy to see necessary specialist	=1 if it was usually or always easy for individual to see a specialist (not including dental), conditional on the individual or a doctor believing that the individual needed to see a specialist [CHEYRE42, CHSPEC42]
Patient-centered care measures (past 12 months)	
Doctor/other health providers always/usually listen carefully	=1 if doctor or other health providers usually or always listened carefully to the individual, conditional on having at least one visit to a doctor's office or clinic for health care [CHLIST42, CHAPPT42]
Doctor/other health providers always/usually explain things in a way that is easy to understand	=1 if doctor or other health providers usually or always explained things in a way the individual could understand, conditional on at least one visit to a doctor's office or clinic for health care [CHEXPL42, CHAPPT42]
Doctor/other health providers always/usually show respect	=1 if doctor or other health providers usually or always showed respect for what the individual had to say, conditional on having at least one visit to a doctor's office or clinic for health care [CHRESP42, CHAPPT42]
Doctor/other health providers always/usually spend enough time with patient	=1 if doctor or other health providers usually or always spent enough time the individual, conditional on having at least one visit to a doctor's office or clinic for health care [CHPRTM42, CHAPPT42]

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

Notes: Survey variable names are provided in brackets.

Table 6. Unadjusted and Regression-Adjusted Estimates of Health Care Access and Use for Non-Elderly Adults (Age 19 to 64) Overall and Among Full-Year Insured Adults with Medicaid or ESI at the Time of the Survey, 2009

	Overall Adults	Medicaid	ESI		(Model I) Regression-adjusted Estimates for ESI †		(Model II) Regression-adjusted Estimates for ESI ‡	
Measure	%	%	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid
Access and service use measures (past 12 months)								
Had a usual source of care [a]	78.8	88.1	89.8	-1.7	91.2	-3.1 *	86.9	1.2
Doctor's office or HMO	76.0	59.1	82.6	-23.5 **	81.8	-22.7 **	72.2	-13.1 **
Clinic or health center	21.6	37.3	15.7	21.6 **	16.0	21.3 **	23.7	13.6 **
Other place [b]	2.5	3.6	1.7	1.9 *	2.1	1.5	4.1	-0.5
Had same usual source of care for past 12 months	90.7	88.3	91.5	-3.1 *	88.3	0.1	87.5	0.9
Any office or outpatient visit	80.7	88.8	87.3	1.5	93.9	-5.1 **	87.6	1.2
More than 1 office or outpatient visit	60.5	71.9	67.0	4.9 **	79.8	-7.9 **	71.6	0.3
More than 3 office or outpatient visits	34.4	51.7	36.4	15.4 **	55.0	-3.3	49.5	2.2
More than 15 office or outpatient visits	5.8	12.9	5.3	7.6 **	12.9	0.0	11.4	1.5
Any doctor visit	72.4	80.6	79.6	1.0	88.1	-7.5 **	80.4	0.2
General doctor visit	63.5	69.1	70.7	-1.6	76.4	-7.3 **	69.4	-0.3
Specialist visit [c]	40.6	50.4	45.6	4.8 **	59.8	-9.5 **	51.6	-1.2
Specialist visit, excluding OB/GYN	23.5	25.4	26.5	-1.1	33.9	-8.5 **	27.8	-2.4
OB/GYN visit (women only)	47.3	51.1	53.7	-2.7	57.5	-6.4 **	50.0	1.1
Any visit with nurse practitioner, physician assistant, or midwife	19.2	18.9	21.5	-2.6	29.0	-10.1 **	22.0	-3.1
Any mental health professional visit	8.5	17.3	7.2	10.1 **	14.9	2.4 *	14.6	2.7 *
Any visits to other providers	43.9	39.8	51.3	-11.5 **	53.8	-14.0 **	41.9	-2.1
Any inpatient stay	8.3	18.8	6.9	11.9 **	17.4	1.4	18.2	0.6
Any home health visit	1.3	4.0	0.8	3.2 **	2.6	1.4 *	2.5	1.5 *
Any emergency department visit	20.4	38.6	16.5	22.1 **	27.9	10.7 **	31.7	6.9 **
Two or more emergency department visits	7.9	20.6	5.0	15.6 **	12.5	8.1 **	14.7	5.9 **
Three or more emergency department visits	2.2	8.0	1.0	7.0 **	4.2	3.8 **	4.9	3.1 **
Any unmet health care need because of costs	25.7	26.9	13.2	13.7 **	23.4	3.5 *	29.3	-2.4
Medical care	10.3	6.4	3.5	2.9 **	9.4	-3.1 **	10.8	-4.5 **
Dental care	17.0	18.1	7.5	10.6 **	14.1	3.9 **	19.2	-1.1
Prescription drugs	11.4	10.2	5.0	5.2 **	12.2	-2.1 *	16.0	-5.8 **
Mental health care or counseling	3.4	3.2	1.3	1.9 **	4.9	-1.7 **	4.8	-1.6 *
Eyeglasses	9.5	9.1	4.6	4.5 **	9.8	-0.8	11.5	-2.5 *
Any delayed medical care	24.2	24.2	16.4	7.8 **	25.6	-1.4	25.6	-1.4
Because of costs	14.4	8.3	6.8	1.5	12.9	-4.6 **	13.6	-5.3 **
Because couldn't get an appointment	7.2	9.6	6.5	3.1 **	9.5	0.1	7.9	1.7
Because couldn't go when open	4.1	4.7	3.9	0.8	5.8	-1.0	4.5	0.2
Because have to wait too long to see doctor at site	5.8	9.8	4.3	5.4 **	7.0	2.8 **	7.3	2.4 *
Because didn't have transportation	2.3	8.2	0.7	7.5 **	3.0	5.2 **	5.1	3.1 **
Because couldn't get through on the phone	3.1	5.4	2.7	2.7 **	4.4	1.0	4.7	0.7
Sample Size	21,908	1,828	11,671					

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

Notes: Sample sizes are average sample sizes across the five estimation samples derived from multiply imputed income data. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance. HMO is health maintenance organization. OB/GYN is a medical doctor specializing in obstetrics and/or gynecology. The overall category includes all non-elderly NHIS sample adults regardless of their insurance status.

† These regression-adjusted estimates are derived from multivariate regression models that control for age, gender, health status (physical and mental health), disability status, the presence of a number of chronic conditions (e.g. asthma, diabetes, emphysema, heart disease, hypertension, stroke, and kidney disease), pregnancy over the past 12 months, and body mass index (BMI). The means reported for adults with ESI coverage are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage.

‡ These regression-adjusted estimates are derived from multivariate regression models that control for the variables in the first model (Model I) plus race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, spousal employment, homeownership, health insurance unit (HIU) size, HIU income, and the health and disability status of the members of the HIU. The means reported for adults with ESI coverage are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage.

* (**) Significantly different from zero at the .05 (.01) level, two-tailed test.

[a] Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of advice about his/her health. USC is measured at the time of the survey and does not include individuals who reported the emergency department or multiple providers as a USC.

[b] Other place includes any place other than a clinic, health center, doctor's office, or HMO.

[c] Specialist include medical doctors who specialize in a particular medical disease or problem. For this analysis, specialists include obstetricians and gynecologists and exlude psychiatrists and ophthalmologists.

Table 7. Unadjusted and Regression-Adjusted Estimates of Timeliness and Provider Accessibility Measures, and Patient-Centered Care Measures for Non-Elderly Adults (Age 19 to 64) Overall and Among Full-Year Insured Adults with Medicaid or ESI, 2008

Measure	Overall Adults %	Medicaid %	ESI %	ESI Percentage Point Difference from Medicaid	(Model I) Regression-adjusted Estimates for ESI † %	(Model I) Percentage Point Difference from Medicaid	(Model II) Regression-adjusted Estimates for ESI ‡ %	(Model II) Percentage Point Difference from Medicaid
Access and service use measures (past 12 months)								
Had routine checkup	57.5	70.4	63.9	6.5 **	67.9	2.5	65.2	5.1 *
Received mammogram (among women aged 30 and older)	44.7	35.8	50.3	-14.5 **	41.6	-5.8	38.8	-3.0
Received flu vaccination	28.1	29.9	33.7	-3.8	26.6	-7.1 **	33.2	-0.5
Timeliness and provider accessibility measures (past 12 months)								
Usual source of care has night/weekend hours	40.7	35.9	42.2	-6.4 *	40.9	-5.1	39.3	-3.4
Very/somewhat difficult to contact usual source of care after hours	31.6	42.3	28.2	14.1 **	34.0	8.3 **	38.1	4.2
Very/somewhat difficult to get to usual source of care	4.7	10.3	3.6	6.8 **	7.5	2.9	9.0	1.3
Very/somewhat difficult to contact usual source of care by telephone	15.5	18.9	14.5	4.4 *	18.0	0.9	18.7	0.2
Had an illness, injury, or condition that needed care right away	26.9	42.4	25.8	16.6 **	40.0	2.4	40.2	2.2
Always/usually got care as soon as needed [a]	82.2	77.6	88.1	-10.5 **	85.4	-7.8 **	83.6	-6.0
Had appointments for health care	61.6	71.4	69.6	1.8	78.6	-7.2 **	69.7	1.7
Always/usually got appointment for care as soon as needed [b]	81.9	80.1	84.7	-4.7 *	81.0	-0.9	77.6	2.4
Needed necessary care, tests, or treatments [c]	73.0	72.1	74.8	-2.7	80.8	-8.7 **	73.5	-1.4
Always/usually easy to get necessary care, tests, or treatments [c d]	89.2	82.2	93.7	-11.5 **	88.0	-5.9 **	85.1	-3.0
Needed to see a specialist	32.2	37.5	36.4	1.1	47.6	-10.1 **	41.5	-4.0
Always/usually easy to see necessary specialist [e]	80.2	69.2	85.0	-15.8 **	77.1	-7.9 *	75.7	-6.5
Patient-centered care measures (past 12 months)								
Doctor/other health providers always/usually listen carefully [c]	90.1	84.7	92.2	-7.5 **	87.1	-2.4	85.8	-1.0
Doctor/other health providers always/usually explain things in a way that is easy to understand [c]	91.0	84.0	93.4	-9.4 **	88.4	-4.4 *	88.0	-4.0
Doctor/other health providers always/usually show respect [c]	91.5	84.6	93.5	-8.9 **	88.0	-3.4 *	87.6	-3.0
Doctor/other health providers always/usually spend enough time with patient [c]	85.1	78.6	87.5	-8.8 **	79.8	-1.2	81.2	-2.6
	19,245	1,221	9,002					

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

Notes: Insurance coverage is defined as full-year coverage. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). ESI is employer-sponsored insurance. The overall category includes all non-elderly adults regardless of their insurance status.

† These regression-adjusted estimates are derived from multivariate regression models that control for age, gender, health status (physical and mental health), disability status, the presence of a number of chronic conditions (e.g. asthma, diabetes, emphysema, heart disease, hypertension, and stroke), pregnancy over the past 12 months, and body mass index (BMI). The means reported for adults with ESI coverage are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage.

‡ These regression-adjusted estimates are derived from multivariate regression models that control for the variables in the first model (Model I) plus race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, spousal employment, health insurance unit (HIU) size, HIU income, and the health and disability status of the members of the HIU. The means reported for adults with ESI coverage are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage.

* (**) Significantly different from zero at the .05 (.01) level, two-tailed test.

[a] Question only asked of persons that had an illness, injury, or condition that needed care right away.

[b] Question only asked of persons that had appointments for health care, not counting the times they needed care right away.

[c] Question only asked of persons that had at least one doctor or health professional visit.

[d] Question only asked of persons that needed necessary care, tests, or treatments.

[e] Question only asked of persons that needed to see a specialist.

Table 8. Unadjusted and Regression-Adjusted Estimates of Health Care Access and Use for Non-Elderly Adults (Age 19 to 64) Overall and Among Full-Year Insured Adults with Medicaid at the Time of the Survey or Full-Year Uninsured Adults, 2009

Measure	Overall Adults	Medicaid	Uninsured		(Model I) Regression-adjusted Estimates for Uninsured †		(Model II) Regression-adjusted Estimates for Uninsured ‡	
	%	%	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid
Access and service use measures (past 12 months)								
Had a usual source of care [a]	78.8	88.1	39.8	48.3 **	44.8	43.3 **	45.7	42.3 **
Doctor's office or HMO	76.0	59.1	48.1	11.0 **	48.7	10.4 **	48.7	10.4 **
Clinic or health center	21.6	37.3	45.8	-8.5 **	45.0	-7.7 **	44.7	-7.4 **
Other place [b]	2.5	3.6	6.2	-2.6 *	6.2	-2.6 *	6.7	-3.1 **
Had same usual source of care for past 12 months	90.7	88.3	93.3	-5.0 **	91.1	-2.7	91.0	-2.7
Any office or outpatient visit	80.7	88.8	52.9	35.9 **	61.9	26.9 **	63.0	25.8 **
More than 1 office or outpatient visit	60.5	71.9	30.3	41.6 **	46.0	25.8 **	46.3	25.6 **
More than 3 office or outpatient visits	34.4	51.7	14.7	37.0 **	34.6	17.1 **	34.1	17.6 **
More than 15 office or outpatient visits	5.8	12.9	2.5	10.4 **	9.4	3.5 **	9.2	3.7 **
Any doctor visit	72.4	80.6	42.1	38.5 **	53.9	26.7 **	54.6	26.0 **
General doctor visit	63.5	69.1	34.4	34.8 **	42.5	26.6 **	43.1	26.1 **
Specialist visit [c]	40.6	50.4	16.8	33.6 **	35.4	15.0 **	35.2	15.2 **
Specialist visit, excluding OB/GYN	23.5	25.4	8.3	17.1 **	17.5	7.9 **	17.2	8.2 **
OB/GYN visit (women only)	47.3	51.1	23.1	28.0 **	27.4	23.7 **	28.1	23.0 **
Any visit with nurse practitioner, physician assistant, or midwife	19.2	18.9	9.9	9.0 **	18.2	0.7	17.6	1.3
Any mental health professional visit	8.5	17.3	4.8	12.5 **	10.0	7.3 **	10.6	6.7 **
Any visits to other providers	43.9	39.8	22.0	17.8 **	27.7	12.1 **	27.4	12.3 **
Any inpatient stay	8.3	18.8	4.7	14.2 **	15.2	3.6 **	15.6	3.2 *
Any home health visit	1.3	4.0	0.4	3.6 **	2.2	1.9 **	2.1	2.0 **
Any emergency department visit	20.4	38.6	20.7	17.9 **	29.1	9.5 **	31.1	7.4 **
Two or more emergency department visits	7.9	20.6	9.0	11.6 **	14.4	6.3 **	15.7	4.9 **
Three or more emergency department visits	2.2	8.0	2.7	5.3 **	5.0	3.1 **	5.5	2.5 *
Any unmet health care need because of costs	25.7	26.9	56.2	-29.3 **	63.8	-37.0 **	63.8	-36.9 **
Medical care	10.3	6.4	29.4	-23.1 **	33.7	-27.3 **	33.8	-27.5 **
Dental care	17.0	18.1	42.0	-23.9 **	46.9	-28.9 **	47.4	-29.3 **
Prescription drugs	11.4	10.2	28.4	-18.2 **	33.8	-23.6 **	34.5	-24.3 **
Mental health care or counseling	3.4	3.2	7.8	-4.6 **	10.3	-7.0 **	10.2	-7.0 **
Eyeglasses	9.5	9.1	21.1	-12.0 **	25.5	-16.4 **	25.5	-16.4 **
Any delayed medical care	24.2	24.2	41.6	-17.4 **	48.4	-24.2 **	47.3	-23.2 **
Because of costs	14.4	8.3	34.3	-26.0 **	38.8	-30.5 **	38.7	-30.4 **
Because couldn't get an appointment	7.2	9.6	5.7	3.9 **	7.9	1.7	7.1	2.5 *
Because couldn't go when open	4.1	4.7	3.5	1.2	4.7	0.0	4.3	0.4
Because have to wait too long to see doctor at site	5.8	9.8	7.6	2.2	9.4	0.4	8.5	1.3
Because didn't have transportation	2.3	8.2	3.3	4.9 **	4.9	3.2 **	5.5	2.7 **
Because couldn't get through on the phone	3.1	5.4	3.2	2.2 **	4.6	0.8	4.4	1.0
Sample Size	21,908	1,828	3,565					

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

Notes: Sample sizes are average sample sizes across the five estimation samples derived from multiply imputed income data. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). HMO is health maintenance organization. OB/GYN is a medical doctor specializing in obstetrics and/or gynecology. The overall category includes all non-elderly NHIS sample adults regardless of their insurance status. Other place includes any place other than a clinic, health center, doctor's office, or HMO.

† These regression-adjusted estimates are derived from multivariate regression models that control for age, gender, health status (physical and mental health), disability status, the presence of a number of chronic conditions (e.g. asthma, diabetes, emphysema, heart disease, hypertension, stroke, and kidney disease), pregnancy over the past 12 months, and body mass index (BMI). The means reported for uninsured adults are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage.

‡ These regression-adjusted estimates are derived from multivariate regression models that control for the variables in the first model (Model I) plus race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, spousal employment, homeownership, health insurance unit (HIU) size, HIU income, and the health and disability status of the members of the HIU. The means reported for uninsured adults are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage.

* (**) Significantly different from zero at the .05 (.01) level, two-tailed test.

[a] Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of advice about his/her health. USC is measured at the time of the survey and does not include individuals who reported the emergency department or multiple providers as a USC.

[b] Other place includes any place other than a clinic, health center, doctor's office, or HMO.

[c] Specialist include medical doctors who specialize in a particular medical disease or problem. For this analysis, specialists include obstetricians and gynecologists and exlude psychiatrists and ophthalmologists.

Table 9. Unadjusted and Regression-Adjusted Estimates of Timeliness and Provider Accessibility Measures, and Patient-Centered Care Measures for Non-Elderly Adults (Age 19 to 64) Overall and Among Full-Year Insured Adults with Medicaid or ESI, 2008

Measure	Overall Adults	Medicaid	Uninsured		(Model I) Regression-adjusted Estimates for Uninsured †		(Model II) Regression-adjusted Estimates for Uninsured ‡	
	%	%	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid	%	Percentage Point Difference from Medicaid
Access and service use measures (past 12 months)								
Had routine checkup	57.5	70.4	34.2	36.1 **	43.3	27.1 **	44.5	25.9 **
Received mammogram (among women aged 30 and older)	44.7	35.8	25.1	10.7 **	18.6	17.2 **	19.2	16.6 **
Received flu vaccination	28.1	29.9	13.4	16.5 **	20.4	9.5 **	20.8	9.1 **
Timeliness and provider accessibility measures (past 12 months)								
Usual source of care has night/weekend hours	40.7	35.9	36.9	-1.0	34.6	1.2	34.9	1.0
Very/somewhat difficult to contact usual source of care after hours	31.6	42.3	39.8	2.5	43.7	-1.4	43.8	-1.5
Very/somewhat difficult to get to usual source of care	4.7	10.3	6.9	3.5 *	9.9	0.5	10.4	-0.1
Very/somewhat difficult to contact usual source of care by telephone	15.5	18.9	18.7	0.2	20.9	-2.0	21.2	-2.3
Had an illness, injury, or condition that needed care right away	26.9	42.4	21.2	21.2 **	34.2	8.2 **	35.4	7.0 **
Always/usually got care as soon as needed [a]	82.2	77.6	65.3	12.3 **	65.1	12.5 **	65.4	12.2 **
Had appointments for health care	61.6	71.4	32.7	38.7 **	45.8	25.6 **	46.6	24.8 **
Always/usually got appointment for care as soon as needed [b]	81.9	80.1	71.1	9.0 **	70.2	9.9 **	69.8	10.3 **
Needed necessary care, tests, or treatments [c]	73.0	72.1	64.7	7.4 **	70.1	2.0	68.8	3.3
Always/usually easy to get necessary care, tests, or treatments [c d]	89.2	82.2	69.2	13.0 **	66.0	16.2 **	65.6	16.6 **
Needed to see a specialist	32.2	37.5	16.3	21.2 **	29.4	8.1 **	29.9	7.6 **
Always/usually easy to see necessary specialist [e]	80.2	69.2	58.5	10.6 *	54.9	14.3 **	56.6	12.6 **
Patient-centered care measures (past 12 months)								
Doctor/other health providers always/usually listen carefully [c]	90.1	84.7	84.2	0.5	81.6	3.1	81.3	3.4
Doctor/other health providers always/usually explain things in a way that is easy to understand [c]	91.0	84.0	84.9	-0.9	82.2	1.8	83.0	1.0
Doctor/other health providers always/usually show respect [c]	91.5	84.6	86.4	-1.7	83.3	1.3	83.0	1.6
Doctor/other health providers always/usually spend enough time with patient [c]	85.1	78.6	77.9	0.7	73.8	4.8 *	74.4	4.2
Sample Size	19,245	1,221	4,428					

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

Notes: Insurance coverage is defined as full-year coverage. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). The overall category includes all non-elderly adults regardless of their insurance status.

† These regression-adjusted estimates are derived from multivariate regression models that control for age, gender, health status (physical and mental health), disability status, the presence of a number of chronic conditions (e.g. asthma, diabetes, emphysema, heart disease, hypertension, and stroke), pregnancy over the past 12 months, and body mass index (BMI). The means reported for uninsured adults are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage.

‡ These regression-adjusted estimates are derived from multivariate regression models that control for the variables in the first model (Model I) plus race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, spousal employment, health insurance unit (HIU) size, HIU income, and the health and disability status of the members of the HIU. The means reported for uninsured adults are regression-adjusted, using the characteristics (listed above) of the adults with Medicaid coverage.

* (**) Significantly different from zero at the .05 (.01) level, two-tailed test.

[a] Question only asked of persons that had an illness, injury, or condition that needed care right away.

[b] Question only asked of persons that had appointments for health care, not counting the times they needed care right away.

[c] Question only asked of persons that had at least one doctor or health professional visit.

[d] Question only asked of persons that needed necessary care, tests, or treatments.

[e] Question only asked of persons that needed to see a specialist.

Table 10. Unadjusted and Regression-Adjusted Estimates of Health Care Access and Use for Full-Year Insured Non-Elderly Adults (Age 19 to 64) with Medicaid at the Time of the Survey, Overall and Among Adults with SSI and without SSI, 2007-2009

Measure	All Medicaid Adults	SSI Adults	Non-SSI Adults		(Model I) Regression-adjusted Estimates for Non-SSI Adults †		(Model II) Regression-adjusted Estimates for Non-SSI Adults ‡	
	%	%	%	Percentage Point Difference from SSI Adults	%	Percentage Point Difference from SSI Adults	%	Percentage Point Difference from SSI Adults
Access and service use measures (past 12 months)								
Had a usual source of care [a]	87.0	92.6	88.3	4.2 **	91.7	0.9	91.2	1.4
Doctor's office or HMO	58.0	64.8	56.8	8.1 **	61.7	3.1	63.7	1.1
Clinic or health center	38.7	31.4	39.9	-8.5 **	35.6	-4.1	33.4	-2.0
Other place [b]	3.4	3.7	3.3	0.4	2.7	1.0	2.9	0.9
Had same usual source of care for past 12 months	89.3	89.9	90.6	-0.6	89.0	0.9	89.1	0.8
Any office or outpatient visit	87.6	93.0	87.3	5.7 **	93.7	-0.7	93.0	0.0
More than 1 office or outpatient visit	71.1	81.5	69.3	12.2 **	86.2	-4.7 *	86.1	-4.6 *
More than 3 office or outpatient visits	49.5	66.8	45.6	21.2 **	69.4	-2.6	70.0	-3.2
More than 15 office or outpatient visits	11.5	18.8	10.1	8.7 **	22.0	-3.2	20.8	-2.0
Any doctor visit	79.8	83.5	79.5	4.0	89.5	-6.0 **	89.7	-6.3 **
General doctor visit	69.0	76.4	68.5	7.9 **	82.8	-6.4 **	83.4	-7.1 **
Specialist visit [c]	48.3	49.5	48.1	1.4	56.2	-6.6 *	52.9	-3.3
Specialist visit, excluding OB/GYN visit	25.0	39.9	22.5	17.4 **	42.8	-2.9	40.7	-0.8
OB/GYN visit (women only)	47.5	30.6	50.3	-19.7 **	41.6	-11.0 **	38.1	-7.5 *
Any visit with nurse practitioner, physician assistant, or midwife	20.4	18.8	19.6	-0.9	26.2	-7.5 **	24.5	-5.7 *
Any mental health professional visit	16.4	32.5	13.1	19.3 **	27.9	4.5	30.4	2.0
Any visits to other providers	38.4	52.1	36.6	15.5 **	50.9	1.2	47.0	5.1
Any inpatient stay	17.8	23.3	15.2	8.1 **	21.1	2.1	20.7	2.6
Any home health visit	3.6	9.0	2.3	6.7 **	7.4	1.6	7.8	1.2
Any emergency department visit	38.3	48.1	34.2	13.9 **	45.5	2.6	45.2	2.9
Two or more emergency department visits	20.2	27.3	17.4	9.9 **	29.0	-1.6	29.3	-1.9
Three or more emergency department visits	8.1	11.8	6.7	5.1 **	14.4	-2.7	14.8	-3.0
Any unmet health care need because of costs	31.0	29.9	25.3	4.6 *	41.0	-11.0 **	40.0	-10.1 **
Medical care	10.5	7.8	6.7	1.1	14.4	-6.6 **	15.1	-7.3 **
Dental care	20.7	17.5	17.0	0.4	27.0	-9.5 **	25.7	-8.3 **
Prescription drugs	13.8	13.0	9.5	3.5 *	17.7	-4.7 **	17.2	-4.2 *
Mental health care or counseling	5.4	6.1	3.2	2.9 **	7.2	-1.2	7.5	-1.5
Eyeglasses	12.1	13.3	9.5	3.8 *	18.7	-5.3 **	18.6	-5.2 **
Any delayed medical care	25.8	31.0	21.1	9.9 **	36.3	-5.3 *	36.7	-5.7 *
Because of costs	11.7	8.9	8.0	0.9	17.0	-8.1 **	17.1	-8.2 **
Because couldn't get an appointment	9.9	11.9	8.9	3.0	14.0	-2.1	14.3	-2.4
Because couldn't go when open	4.6	5.2	4.0	1.3	7.3	-2.0	7.4	-2.1
Because have to wait too long to see doctor at site	9.2	11.0	8.5	2.5	13.5	-2.5	14.2	-3.1
Because didn't have transportation	7.2	15.1	5.0	10.1 **	11.5	3.6 *	13.8	1.3
Because couldn't get through on the phone	4.9	5.7	4.4	1.3	7.4	-1.7	8.3	-2.6
Sample Size	5,477	873	3,492					

Source: Urban Institute analysis for MACPAC of the 2007-2009 National Health Interview Survey (NHIS).

Notes: Sample sizes are average sample sizes across the five estimation samples derived from multiply imputed income data. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). SSI is Supplemental Security Income. HMO is health maintenance organization. OB/GYN is a medical doctor specilizing in obstetrics and/or gynecology.

† These regression-adjusted estimates are derived from multivariate regression models that control for age, gender, health status (physical and mental health), disability status, the presence of a number of chronic conditions (e.g. asthma, diabetes, emphysema, heart disease, hypertension, stroke, and kidney disease), pregnancy over the past 12 months, and body mass index (BMI). The means reported for non-SSI Medicaid adults are regression-adjusted, using the characteristics (listed above) of the SSI Medicaid adults.

‡ These regression-adjusted estimates are derived from multivariate regression models that control for the variables in the first model (Model I) plus race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, spousal employment, homeownership, health insurance unit (HIU) size, HIU income, and the health and disability status of the members of the HIU. The means reported for non-SSI Medicaid adults are regression-adjusted, using the characteristics (listed above) of the SSI Medicaid adults.

* (**) Significantly different from zero at the .05 (.01) level, two-tailed test.

[a] Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of advice about his/her health. USC is measured at the time of the survey and does not include individuals who reported the emergency department or multiple providers as a USC.

[b] Other place includes any place other than a clinic, health center, doctor's office, or HMO.

[c] Specialist include medical doctors who specialize in a particular medical disease or problem. For this analysis, specialists include obstetricians and gynecologists and exlude psychiatrists and ophthalmologists.

Table 11. Unadjusted and Regression-Adjusted Estimates of Timeliness and Provider Accessibility Measures, and Patient-Centered Care Measures for Non-Elderly Adults (Age 19 to 64) Overall and Among Full-Year Insured Adults with Medicaid or ESI, 2008

	All Medicaid Adults	SSI Adults	Non-SSI Adults		(Model I) Regression-adjusted Estimates for Non-SSI Adults †		(Model II) Regression-adjusted Estimates for Non-SSI Adults ‡	
Measure	%	%	%	Percentage Point Difference from SSI Adults	%	Percentage Point Difference from SSI Adults	%	Percentage Point Difference from SSI Adults
Access and service use measures (past 12 months)								
Had routine checkup	67.0	76.0	64.5	11.5 **	74.0	2.0	76.4	-0.4
Received mammogram (among women aged 30 and older)	36.6	43.4	33.7	9.7 **	42.5	0.9	42.8	0.6
Received flu vaccination	26.5	43.3	21.6	21.7 **	32.9	10.4 **	35.5	7.8 *
Timeliness and provider accessibility measures (past 12 months)								
Usual source of care has night/weekend hours	36.8	33.6	38.0	-4.3	32.7	0.9	30.5	3.1
Very/somewhat difficult to contact usual source of care after hours	44.6	48.2	43.3	4.9	47.4	0.7	45.1	3.1
Very/somewhat difficult to get to usual source of care	11.0	19.2	8.4	10.8 **	16.3	2.8	15.0	4.1
Very/somewhat difficult to contact usual source of care by telephone	22.3	24.4	21.9	2.4	27.6	-3.2	26.2	-1.8
Had an illness, injury, or condition that needed care right away	40.6	51.0	37.8	13.2 **	54.5	-3.5	55.0	-3.9
Always/usually got care as soon as needed [a]	79.4	80.6	78.9	1.7	79.5	1.1	81.0	-0.4
Had appointments for health care	69.0	76.5	66.9	9.6 **	80.5	-3.9	78.5	-2.0
Always/usually got appointment for care as soon as needed [b]	76.7	78.1	76.2	1.9	78.3	-0.2	75.9	2.2
Needed necessary care, tests, or treatments [c]	68.8	78.3	66.1	12.2 **	82.8	-4.5	81.0	-2.7
Always/usually easy to get necessary care, tests, or treatments [c d]	50.5	47.0	51.8	-4.8	51.9	-4.9	50.9	-3.9
Needed to see a specialist	36.3	50.2	32.7	17.5 **	52.3	-2.1	51.6	-1.4
Always/usually easy to see necessary specialist [e]	52.1	44.5	55.9	-11.4 **	55.8	-11.3 *	53.6	-9.1
Patient-centered care measures (past 12 months)								
Doctor/other health providers always/usually listen carefully [c]	85.3	84.2	86.0	-1.8	81.8	2.4	78.6	5.6
Doctor/other health providers always/usually explain things in a way that is easy to understand [c]	84.6	80.6	85.5	-4.9 *	82.0	-1.4	79.3	1.4
Doctor/other health providers always/usually show respect [c]	85.9	84.3	86.8	-2.5	81.9	2.4	79.4	4.9
Doctor/other health providers always/usually spend enough time with patient [c]	78.8	76.4	79.5	-3.1	75.7	0.7	72.9	3.5
Sample Size	3,823	770	2,923					

Source: Urban Institute analysis for MACPAC of the 2006-2008 Medical Expenditure Panel Survey (MEPS).

Notes: Insurance coverage is defined as full-year coverage. Medicaid includes both Medicaid and the Children's Health Insurance Program (CHIP). SSI is Supplemental Security Income.

† These regression-adjusted estimates are derived from multivariate regression models that control for age, gender, health status (physical and mental health), disability status, the presence of a number of chronic conditions (e.g. asthma, diabetes, emphysema, heart disease, hypertension, and stroke), pregnancy over the past 12 months, and body mass index (BMI). The means reported for non-SSI Medicaid adults are regression-adjusted, using the characteristics (listed above) of the SSI Medicaid adults.

‡ These regression-adjusted estimates are derived from multivariate regression models that control for the variables in the first model (Model I) plus race/ethnicity, citizenship, marital status, whether the individual is the parent of a dependent child, education, employment, health insurance unit (HIU) size, HIU income, and the health and disability status of the members of the HIU. The means reported for non-SSI Medicaid adults are regression-adjusted, using the characteristics (listed above) of the SSI Medicaid adults.

* (**) Significantly different from zero at the .05 (.01) level, two-tailed test.

[a] Question only asked of persons that had an illness, injury, or condition that needed care right away.

[b] Question only asked of persons that had appointments for health care, not counting the times they needed care right away.

[c] Question only asked of persons that had at least one doctor or health professional visit.

[d] Question only asked of persons that needed necessary care, tests, or treatments.

[e] Question only asked of persons that needed to see a specialist.