Monitoring Health Care Access and Utilization Following Implementation of the Affordable Care Act Using the National Health Interview Survey

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Abstract[1]
The Affordable Care Act (ACA) introduced changes in health care access, with some provisions implemented in 2010 and 2011. Monitoring the impacts of these changes requires not only establishing baseline information but collecting additional detail on their effects. One source of such information is the National Health Interview Survey (NHIS). Questions that have been on the NHIS for several years or more can be used to establish baseline estimates and to monitor the impacts of the ACA provisions as they are implemented. Questions added to the NHIS in 2011 provide more detail about topics in health care access and utilization addressed by the legislation. Using NHIS data, we examine four topics of interest: public perception of the financial burden of medical bills; expanded access to health insurance for young adults aged 19-25; reasons for emergency room use among adults; and state-level estimates of health insurance coverage.

Key Words: National Health Interview Survey (NHIS); National Center for Health Statistics (NCHS); Affordable Care Act (ACA)

1. Introduction

The Affordable Care Act (ACA), signed in March 2010, introduced changes to health insurance coverage and health care access for children, adults, and seniors. While some provisions immediately took effect, others have been implemented gradually. Monitoring the impact of these provisions on health insurance coverage, health care access, and utilization of care requires baseline estimates for target groups as well as consistent monitoring of the population over time. One source of this information is the National Health Interview Survey (NHIS), a representative survey of the health of the civilian, noninstitutionalized population of the United States.

Administered by the National Center for Health Statistics (NCHS), the survey contains core questions on many health-related factors, as well as demographic and socio-economic characteristics. Supplements, several of which can be added to the NHIS each year, can ask detailed questions on issues already covered in the survey or add questions covering topics not found elsewhere on the survey. The NHIS has been conducted virtually continuously since 1957, with data files released annually. Information on the NHIS and related data products can be found at the NHIS website (http://www.cdc.gov/nchs/nhis.htm). More detail on the role that NCHS is playing in monitoring the effects of the ACA can be found in the other presentations from this session (Cohen, 2012; Decker, 2012a; Decker, 2012b; Gentleman, 2012).

[1] The findings and conclusions in this paper are those of the author(s) and do not necessarily represent the views of the Department of Health and Human Services, the Centers for Disease Control and Prevention, and the National Center for Health Statistics.

This paper illustrates the use of both core and supplemental NHIS questions in monitoring issues related to the Affordable Care Act, highlighting preliminary analyses that were previously published as part of the NHIS Early Release Program (http://www.cdc.gov/nchs/nhis/releases.htm). The topics addressed in this paper are: financial burden of medical care, expansion of health insurance access to young adults ages 19-25, emergency room use among adults aged 18-64, and state-level estimates of health insurance coverage.

2. Financial Burden of Medical Care

People who worry that they won't be able to pay their medical bills may delay their medical care or forgo it completely. Provisions in the Affordable Care Act are aimed at reducing families' financial burden of medical care by capping out-of-pocket expenses for consumers and requiring preventive care to be fully covered by insurers.

To capture families' perceived financial burden of medical care, three new questions addressing this topic were added to a supplement in the 2011 NHIS. The first addressed problems paying medical bills in past 12 months—("In the past 12 months did [you/ anyone in the family] have problems paying or were unable to pay any medical bills? Include bills for doctors, dentists, hospitals, therapists, medication, equipment, nursing home or home care."). The second asked whether the family currently has medical bills being paid over time ("[Do you/Does anyone in your family] currently have any medical bills that are being paid off over time? This could include medical bills being paid off with a credit card, through personal loans, or bill paying arrangements with hospitals or other providers. The bills can be from earlier years as well as this year."). Families with problems paying bills were also asked whether the family currently has medical bills that they are unable to pay at all— ("[Do you/Does anyone in your family] currently have any medical bills that you are unable to pay at all?").

An Early Release report using NHIS data from January-June 2011 examined the financial burden of medical care (Cohen, Gindi, and Kirzinger, 2012). The analysis showed that 20% of persons were in a family that had problems paying medical bills in the past 12 months, 26% of persons were in a family currently paying medical bills over time, and 11% were in a family that currently had medical bills they were unable to pay at all (Table 1). More than 30% of persons were in a family with any of these financial burdens.

Analyses by age group found that the chances of being in families experiencing any financial burden of medical care decreased with age. Almost 40% of children aged 0-17 years were in families that had any financial burden of medical care, falling to 12% among those aged 75 and older (Table 1).

Other variables related to financial burden addressed in the Early Release report were poverty, health insurance, and out-of-pocket medical expenditures. Future research on the topic will include associations of these types of financial burdens with actual use of health care services and prescription drug costs.

Table 1. Percentages of persons who were in families with selected types of financial burdens of medical care, by selected demographic characteristics: United States, January–June 2011

	Problems paying medical bills in past 12 months	*Currently have medical bills that are being paid over time*	*Currently have medical bills that they are unable to pay at all*	*Any financial burden of medical care*
Age group in years	Percent (standard error)			
All ages	20.0 (0.42)	26.2 (0.48)	10.5 (0.32)	32.4 (0.51)
0–17	23.7 (0.63)	31.7 (0.71)	13.4 (0.54)	38.6 (0.74)
18–64	20.9 (0.45)	26.8 (0.51)	10.7 (0.34)	33.4 (0.55)
65–74	10.2 (0.57)	15.9 (0.79)	4.8 (0.39)	19.0 (0.85)
75 and over	6.7 (0.54)	9.3 (0.64)	2.4 (0.29)	12.4 (0.70)

Note: A family was classified as having "any financial burden of medical care" if there was a positive response to "problems paying medical bills in the past 12 months" or a positive response to "currently have medical bills that are being paid over time." Only those who responded positively to the former question were asked if they currently had medical bills that they were unable to pay at all.

3. Expansion of Health Insurance Access to Young Adults Aged 19-25

In September 2010, ACA extended dependent private health insurance coverage for young adults between the ages of 19-25. Unemployment or underemployment after young adults leave high school or college can result in having limited or no health benefits. The lack of health insurance coverage can leave young adults vulnerable to high out-of-pocket expenses in the event of a serious illness or injury (Schwartz and Schwartz, 2008; Collins, 2008).

Core NHIS questions about sources of health insurance coverage for each family member by age group were used in this analysis. Associations with other core questions on health care access and utilization were examined.

In this analysis, "private health insurance coverage" excludes plans that pay for only one type of service such as accidents or dental care. "Public health plan coverage" includes Medicaid, Children's Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plans, Medicare, and military plans. "Uninsured" persons do not have private health insurance, Medicare, Medicaid, CHIP, state-sponsored or other government-sponsored health plan, or military plan at the time of interview, but may have Indian Health Service coverage or plans that pay for only one type of service such as accidents or dental care.

An Early Release report on trends in health insurance coverage examined coverage in this age group quarterly from 2008 through 2011 (Cohen and Martinez, 2012). Among young adults aged 19–25, the percentage uninsured at the time of interview decreased from 35.6% in Quarter 3 of 2010 to 25.2% in Quarter 4 of 2011. (Figure 1) The data are presented quarterly to highlight changes that occurred after the September 2010 implementation of the provision extending private health insurance to dependents between the ages of 19-25. Most of the coverage gains for young adults aged

19-25 during this period can be attributed to increases in private health insurance, with nonsignificant increases in public coverage.

The observed increases in insurance coverage have implications for medical care utilization among young adults. An Early Release report examining health care access and utilization by young adults aged 19-25 (Kirzinger, Cohen, and Gindi, 2012) found that young adults with public or private coverage were significantly more likely to have a usual place for medical care and to have visited a doctor in the past 12 months than young adults who were uninsured (Table 2). However, 36% of young adults with public coverage had visited the emergency room in the past year – significantly more than the 25% of uninsured and 18% of privately insured young adults.

Other variables related to health insurance among young adults addressed in the Early Release report were sex, race/ethnicity, and poverty. Future research on this topic will utilize new NHIS questions on relationship of the young adult to the private insurance policyholder as well as existing questions for this age group about employment and employer-based coverage.

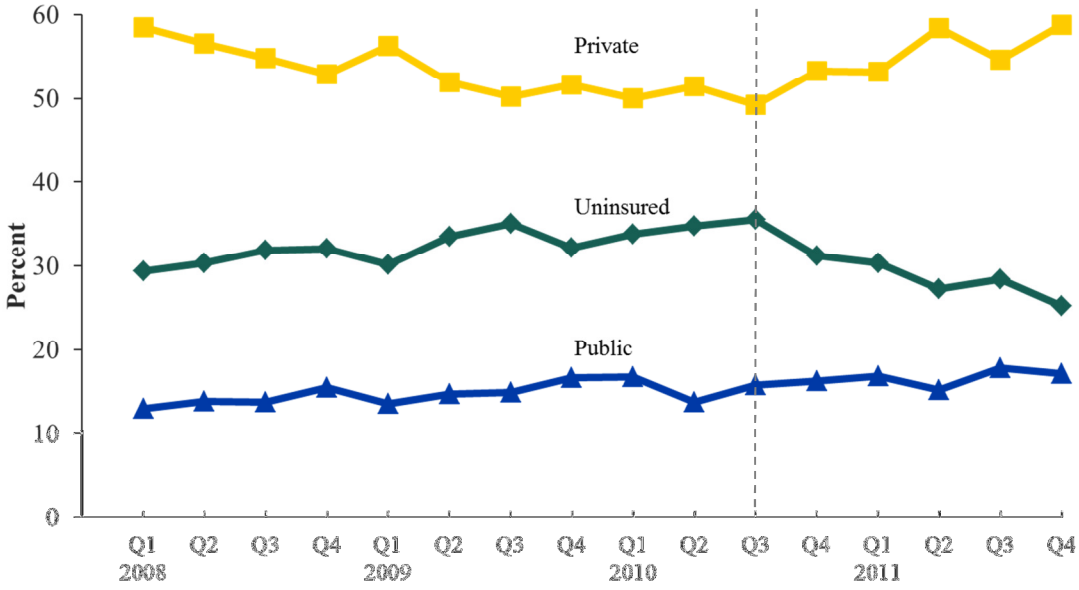

Figure 1: Percentage of adults aged 19-25 with health insurance, by coverage type, and percentage uninsured at time of interview: United States, 2008-2011.

Note: Dashed line indicates the quarter in which the coverage extension provision was implemented (September 2010).

Table 2. Percentages of adults aged 19–25 who had a usual place for health care, a doctor visit in the past 12 months, and an emergency room visit in the past 12 months, by health insurance coverage status: United States, January–September 2011

	Usual place for health care	*Doctor visit in the past 12 months*	*Emergency room visit in the past 12 months*
	Percent (standard error)		
Total	70.3 (1.22)	70.0 (1.13)	23.2 (0.91)
Health insurance coverage status at interview			
Uninsured	38.4 (2.34)	48.1 (2.23)	25.1 (2.03)
Private	83.1 (1.20)	77.9 (1.39)	18.3 (1.28)
Public	84.7 (1.80)	83.3 (2.53)	35.9 (2.44)

4. Emergency Room Use among Adults Aged 18-64

Previous surveys have shown that about 20% of U.S. adults had used the emergency room (ER) in the past 12 months, with usage most common for those with public health plan coverage (Garcia, Bernstein, and Bush, 2010). Affordable Care Act provisions support the expansion of Medicaid, and there are concerns that the burden on ERs will rise with increases in public coverage. Consistent monitoring of the prevalence of ER use by coverage type will be needed to track changes associated with coverage expansion. Understanding the reasons that people seek ER care rather than less expensive outpatient or office-based care will also be informative (Machlin, 2006).

Prevalence of ER use is addressed in the NHIS core with the question, "During the past 12 months, how many times have you gone to a hospital emergency room about your own health (This includes emergency room visits that resulted in a hospital admission.)?" In 2011, a series of supplemental questions about the most recent ER visit were added. Respondents who had been to an ER were asked, "Did this emergency room visit result in a hospital admission?" Those who indicated that the emergency room visit did not result in a hospital admission were then asked additional questions about the reason for the visit, "Tell me which of these apply to your last emergency room visit? You didn't have another place to go. Your doctor's office or clinic was not open. Your health provider advised you to go. The problem was too serious for the doctor's office or clinic. Only a hospital could help you. The emergency room is your closest provider. You get most of your care at the emergency room. You arrived by ambulance or other emergency vehicle." Respondents could select more than one reason.

An Early Release report using data from January – June 2011 showed that 20% of adults aged 18-64 had used the emergency room at least once in the past 12 months (Gindi, Kirzinger, and Cohen, 2012). Of these, 73% had not been admitted at the last ER visit. This group of respondents was asked to provide reasons for the last ER visit.

While 66% of adults aged 18-64 had visited the ER due to one or more reasons that reflected the seriousness of the medical problem, 80% of adults aged 18-64 had visited the ER due to one or more reasons that reflected the lack of access to other providers (Figure 2). Respondents could select more than one reason; therefore percentages add up to more than 100%. The most common individual reasons for the last

emergency room visit (only a hospital could help, the doctor's office was not open, and there was no other place to go) were explored in more detail.

The prevalence of certain reasons for ER visits differed by insurance coverage status. Adults who were uninsured were more likely than adults with public or private insurance coverage to visit the ER because they had no other place to go. (Table 3). Almost two-thirds of adults with public coverage went to the ER because their doctor's office or clinic was not open, significantly higher than uninsured adults or those with private insurance. In contrast, slightly more than half of adults went to the ER because they felt that only the hospital could help, regardless of insurance status.

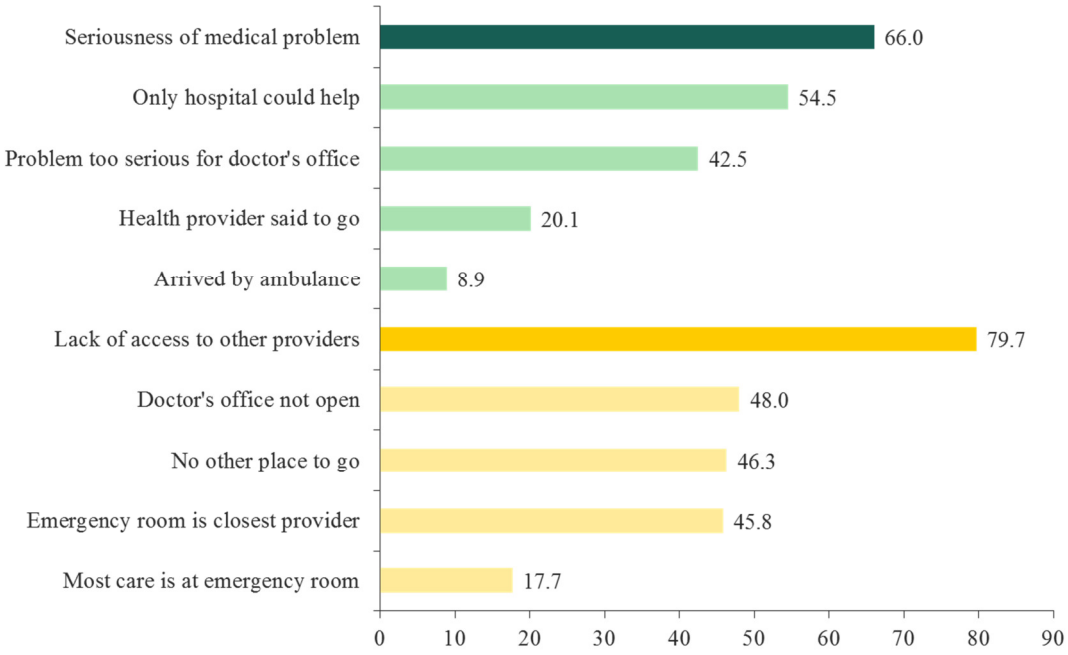

Figure 2: Percentage with reason for last ER visit, among adults aged 18–64 whose last visit in past 12 months did not result in hospital admission: United States, January–June 2011

Note: "Seriousness of medical problem" and "Lack of access to other providers" (dark bars) are summary variables based on positive responses to any of the related detailed reasons (light bars immediately below). Respondents could select more than one reason.

Other variables related to ER use addressed in the Early Release report were race/ethnicity, urbanicity, and having a usual place for medical care. Further research on this topic will explore reasons for ER use among children and among adults aged 65 and over. Supplemental questions on the 2011 NHIS about timing of ER use (night or weekend visits) will also be addressed.

Table 3. Percentage who had selected reasons for last visit, among adults aged 18–64 whose last emergency room visit in the past 12 months did not result in hospital admission, by health insurance coverage status: United States, January–June 2011

	Selected reason for last emergency room visit		
	No other place to go	*Doctor's office or clinic was not open*	*Only a hospital could help*
	Percent (standard error)		
Total	46.3 (1.46)	48.0 (1.46)	54.5 (1.41)
Health insurance coverage status at interview			
Uninsured	61.6 (3.34)	30.9 (2.85)	51.8 (3.16)
Private	38.9 (1.92)	49.9 (1.97)	55.6 (2.11)
Public	48.5 (2.75)	59.7 (2.58)	53.4 (2.36)

5. State-Level Estimates of Health Insurance Coverage

The eventual implementation of Medicaid expansions and health insurance exchanges under ACA will vary from state to state. NHIS can provide state-level estimates of health insurance coverage for a growing number of states.

State-level estimates of health insurance coverage are produced annually in the June Early Release report (Cohen and Martinez, 2012). Estimates of the percentage of uninsured were obtained using NHIS core questions about sources of health insurance coverage for each family member, by state of residence and age group.

In 2011, 21.3% of adults in the United States aged 18-64 were uninsured at the time of interview. Figure 3 displays comparisons of state-specific estimates of the percentage of uninsured adults in this age group to the national percentage. Eleven states (concentrated in the Northeast and upper Midwest) have significantly lower percentages of uninsured adults than the percentage in the US overall. Seven states (in the South and West) have significantly higher percentages of uninsured adults than the US overall. Fourteen states have percentages that are not significantly different from the national estimate. Eighteen states and the District of Columbia have estimates with a relative standard error greater than 50%. These estimates do not meet the NCHS standards of reliability or precision and are not categorized.

Currently, state-level estimates of health insurance are not routinely examined by subgroups other than age on an annual basis, but larger NHIS sample sizes in 2011 and beyond may make it possible to include additional covariates in these analyses. Future research on this topic will include state-level estimates of other health care access and utilization measures that will be useful in monitoring ACA issues as states continue to interpret and implement provisions.

6. Conclusion

These brief examples illustrate how NHIS data can be used to monitor health insurance coverage, health care access, and medical care utilization. The stable core questions on the NHIS can be used to establish baseline estimates, and to monitor the impacts of the ACA provisions as they are implemented. The supplemental questions on

NHIS provide flexibility in exploring changes in health care utilization after the ACA is implemented. The rich NHIS data set allows for exploration and modeling of these issues with many important health correlates.

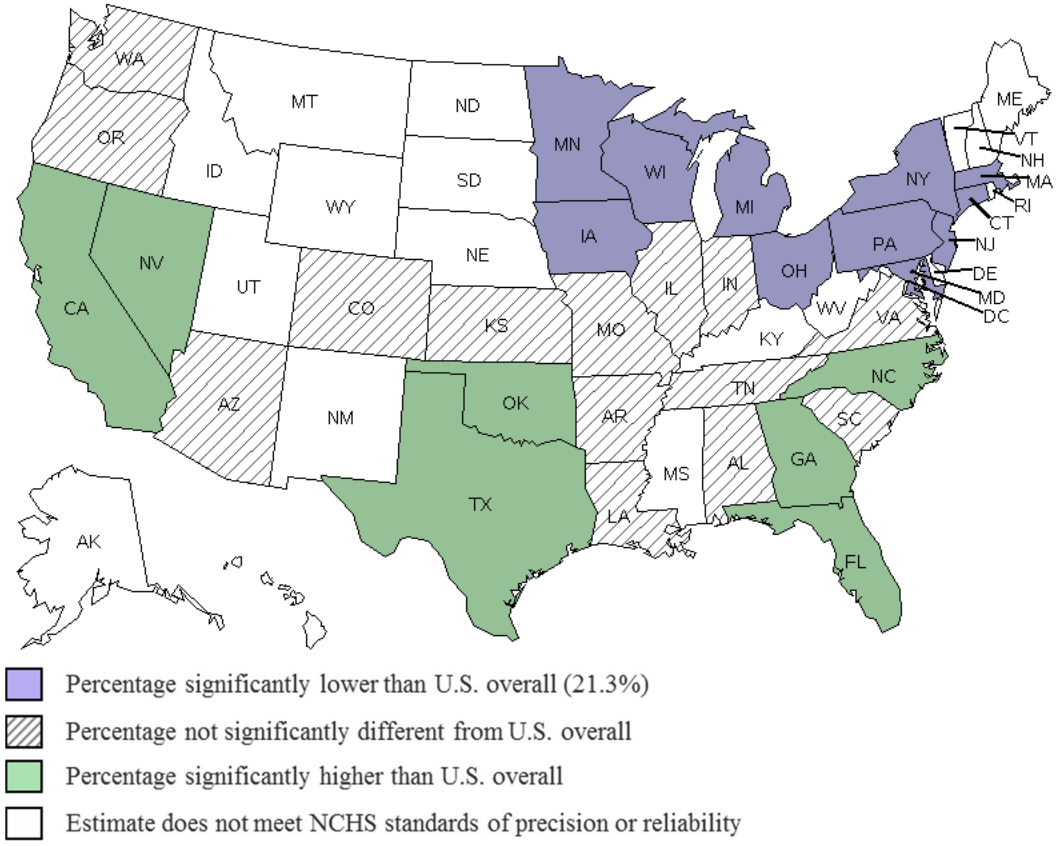

Figure 3: Percentage of persons aged 18-64 who were uninsured at the time of interview, by state: United States, 2011

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