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By Benjamin D. Sommers, Thomas Buchmueller, Sandra L. Decker, Colleen Carey, and Richard Kronick

# The Affordable Care Act Has Led To Significant Gains In Health Insurance And Access To Care For Young Adults

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**ABSTRACT** The Affordable Care Act enables young adults to remain as dependents on their parents' health insurance until age twenty-six, and recent evidence suggests that as many as three million young adults have gained coverage as a result. However, there has been no evidence yet on the policy's effect on access to care, and questions remain about the coverage impact on important subgroups. Using data from two nationally representative surveys, comparing young adults who gained access to dependent coverage to a control group (adults ages 26–34) who were not affected by the new policy, we found sizable coverage gains for adults ages 19–25. The gains continued to grow throughout 2011 (up 6.7 percentage points from September 2010 to September 2011), with the largest gains seen in unmarried adults, nonstudents, and men. Analysis of the timing of the policy impact suggested that early gains in coverage were greatest for people in worse health. We found strong evidence of increased access to care because of the law, with significant reductions in the number of young adults who delayed getting care and in those who did not receive needed care because of cost.

**W**hen fully implemented, the Affordable Care Act is expected to increase the number of Americans with insurance by more than thirty million.<sup>1</sup> The main drivers of this coverage expansion—increases in Medicaid eligibility (at states' option) and tax credits for private health coverage purchased through health insurance exchanges—take effect in 2014. However, one provision of the law that has already been implemented allows people to remain as dependents on their parents' private insurance policies until age twenty-six. This provision, which took effect for insurance plan renewals on or after September 23, 2010, extended coverage for many young adults by as much as seven years, depending on previous state regulations related to dependent insurance.

Many adults have already gained insurance

under this Affordable Care Act provision, according to multiple sources.<sup>2–5</sup> By one estimate, more than three million uninsured young adults gained coverage between September 2010 and December 2011.<sup>6</sup> The pattern of coverage seems to be attributable to the law: More young adults became covered as dependents, and this increase was partially offset by a decrease in the number of young adults with private insurance in their own names.<sup>7</sup>

Evidence is mounting from several studies that this provision has raised rates of insurance among young adults.<sup>8–10</sup> However, key questions remain: Which young adults were most likely to gain coverage? And, more important, did changes in coverage lead to improvements in access to care?

For several reasons, some young adults might benefit more from the law than others. Even before the policy went into effect, many insurers

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allowed full-time students to remain on their parents' plans. This suggests that nonstudents might experience greater benefits from the law than other young adults.

Health status probably also plays a role. Prior to September 2010, for young adults without employer-sponsored or public insurance, the nongroup insurance market was the main option for purchasing coverage. People in poorer health face higher premiums and more restricted access to coverage in this market, and therefore they may be more likely to benefit from the new law.

The ultimate goal of this policy, however, was not only to increase coverage for young adults but also to improve access to care. Historically, access for young adults has often been disrupted by the loss of coverage when they "age out" of their parents' plans.<sup>11</sup> People without health insurance are more than four times as likely as others are to delay or defer obtaining needed medical care because of cost.<sup>12</sup> Prior insurance expansions have improved access to care,<sup>13,14</sup> although such gains have typically been via Medicaid or the Children's Health Insurance Program rather than private insurance. To our knowledge, ours is the first study to examine whether the new policy affected access to care for young adults.

In this article we first document gains in coverage over the first year of the policy. Next we examine the policy's effect across subgroups, hypothesizing greater gains for people with fewer coverage options before the Affordable Care Act, such as nonstudents and those in worse health. Finally, we test the hypothesis that the policy not only increased young adults' insurance coverage but also improved their access to care.

## Study Data And Methods

**DATA** We used data from two nationally representative surveys. Our primary data source was the National Health Interview Survey—an annual household survey conducted by the Centers for Disease Control and Prevention's National Center for Health Statistics. This survey contains questions related to access to health care services, unlike the Census Bureau data used in previous analyses of the dependent coverage provision.<sup>7–10</sup>

The National Health Interview Survey also provides quarterly estimates for both insurance status and access measures, making it possible to account for the timing of the policy's implementation in September 2010. Quarterly data also allowed us to distinguish early effects of the policy from effects several months later. We used the survey's final data files for 2005–10 and early-

release data for the first three quarters of 2011.

Our second data source was the Annual Social and Economic Supplement to the Census Bureau's Current Population Survey, a nationally representative survey of the US civilian, non-institutionalized population. We used the 2006–11 data sets, covering calendar years 2005–10. This survey has a substantially larger sample than the National Health Interview Survey, providing us with greater power to detect differential effects of the policy among subgroups.

However, the Census Bureau's survey lacks information on access to care and does not allow for quarterly coverage estimates. Thus, it is difficult with the Current Population Survey to precisely identify the "pre" and "post" periods or to test whether the effect of the policy strengthened over time. We treated data from the 2011 survey as being from the postimplementation period, although it contains some preimplementation data and captures policy effects only through December 2010. For these reasons, we expected the National Health Interview Survey to capture a larger effect of the provision than the Census Bureau survey does.

Together, these two data sets have unique features that provide a more complete picture of the effects of the dependent coverage provision. Looking ahead to the Affordable Care Act's major insurance expansions of 2014, it is critical for researchers and policy makers to understand whether different national surveys are likely to produce different estimates of policy effects. The dependent coverage provision presents a useful case study for comparing these data sets.

**ANALYSIS** Our analytical approach was a difference-in-differences linear regression. This approach compared outcomes before and after the policy's implementation for the treatment group (those ages 19–25) and a control group (those ages 26–34), to measure the impact of the dependent coverage provision on coverage and access to care.<sup>15</sup> Because people ages 26–34 faced roughly similar conditions in the workforce and in the health insurance market as those ages 19–25 (other than under the provisions of the new law that allowed them to remain on their parents' health plans), we believe they represented a plausible control group. Our analysis produced similar results with alternative control groups (people ages 26–30 and ages 27–29).

We used linear regression to compare the change in coverage among all people ages 19–25 before and after the policy went into effect, versus the coverage change in the control group. We assumed for simplicity that the provision was in effect for the entire fourth quarter of 2010 but for none of the third quarter, thereby lagging the provision one week after its implementation on

# The ultimate goal of this policy was not only to increase coverage for young adults but also to improve access to care.

September 23.

We included linear and quadratic time trend variables to adjust for preexisting coverage trends unrelated to the law. We adjusted for race or ethnicity, sex, education, marital status, employment status, and region, although this adjustment had little effect on our results.

The primary outcome for our coverage analyses was whether a person reported having “any insurance.” We conducted additional analyses of private coverage and public coverage separately.

We then examined the following three measures of access to care for adults in our sample: whether they said they had a usual source of care other than an emergency department, whether they had delayed care because of cost in the prior year, and whether they had not received needed care in the prior year. Information on usual source of care is available for only one adult per household in the National Health Interview Survey, which means that our sample size and ability to detect changes in this measure were smaller than for the other measures.

Our base analysis estimated the policy’s average effect on coverage and access throughout the period after it was implemented, beginning with the fourth quarter of 2010. However, the policy’s full impact probably did not occur immediately.

Plans were required to offer dependent coverage to young adults on renewal after September 23, 2010. Since coverage is often extended on a calendar year basis, it is likely that many families and insurers did not renew policies until January 2011, or perhaps even later. Because coverage and access gains probably increased over time, we estimated models in which we traced the timing of the effect of the policy by each quarter, instead of averaging all of the quarters together for an overall annual increase in coverage.

We also assessed the policy’s impact on

different subgroups. We tested for these effects separately using the National Health Interview Survey and the Current Population Survey, since the former data set offers more precise timing and more recent data, while the latter data set offers larger sample sizes and additional variables. We measured changes in “any insurance” with our sample stratified by sex, marital status, race or ethnicity, employment status, respondent-reported health status, and full-time student status (available in the Census Bureau data only). We then tested for subgroup differences in the policy’s impact on coverage and access to care.

Our sample from the National Health Interview Survey contained 116,536 respondents, after we dropped 1,605 observations (1.3 percent) that were missing information on insurance status and 5,336 (4.3 percent) that were missing information on control variables. The analysis of usual source of care had 47,372 observations for sample adults, after we dropped 2,065 (4.2 percent) that had missing values.

Our sample from the Census Bureau data included 247,370 subjects. All analyses used weighting to produce national estimates and standard errors that accounted for the complex survey design.

**LIMITATIONS** Each of our two data sources has distinct advantages, as well as limitations. As noted, the National Health Interview Survey is ideal for analyzing the timing of the policy’s impact. The main limitation of this survey is its relatively small sample size, which reduced our power to detect differences among subgroups.

With its larger sample size, the Census Bureau survey is better suited for subgroup analyses. However, this survey is limited by the imprecision of the timing of insurance coverage data. The survey is conducted in March of each year and asks respondents to report all forms of coverage over the prior calendar year. The last date of coverage that should be captured in the 2011 data set is December 31, 2010, although some individuals may mistakenly respond with statements about their current coverage.<sup>16</sup> As a result, our analysis of Census Bureau data might capture some effect through March 2011.

In addition, our strategy relied on the assumption that people ages 26–34 are a good control group for those ages 19–25. Several factors support the assumption that, in the absence of the policy, coverage would have trended similarly for the two groups. For the period just before the policy went into effect, we found no significant difference between the coverage trends for the two groups. Although other provisions of the Affordable Care Act did go into effect at the same time—namely, the creation

of new insurance pools to cover people with pre-existing conditions—enrollment in these pools was modest (21,000 people of all ages, by April 2011).<sup>17</sup>

Ideally, we would like to understand how the effect of the insurance expansion varied by socioeconomic status. However, assessing socioeconomic status is challenging for young adults.

Family income measures may be misleading since household surveys capture information only on family members living in the same home. Thus, for young adults living separately from their parents, estimates of “family income” do not include their parents’ income. Similarly, many adults ages 19–25 have not yet completed their education, meaning educational attainment as reported in the survey may not accurately reflect their ultimate level of schooling. Because of these limitations, we did not analyze income or education as subgroups of interest, although our analyses did control for educational attainment.

Another minor limitation is that student status was not yet available in the 2011 National Health Interview Survey data at the time of our analysis, and it was reported only for people under twenty-five in the Census Bureau survey. This means that our analysis of student status did not have a natural control group of older adults. Instead, we compared students and nonstudents directly among people ages 19–24.

## Study Results

**INSURANCE COVERAGE FOR YOUNG ADULTS, 2005–11** Exhibit 1 presents quarterly data from 2005 to the third quarter of 2011 on the

percentages of people ages 19–25 and of those ages 26–34 with any health insurance coverage. Similar graphical presentations for private and public health insurance coverage are presented in the online Appendix (Exhibit A1).<sup>18</sup>

Historically, people in their early twenties generally had the lowest rate of insurance coverage of any age group.<sup>3</sup> In 2005 the proportion of people ages 19–25 covered by health insurance was roughly six percentage points lower than the rate for those ages 26–34.

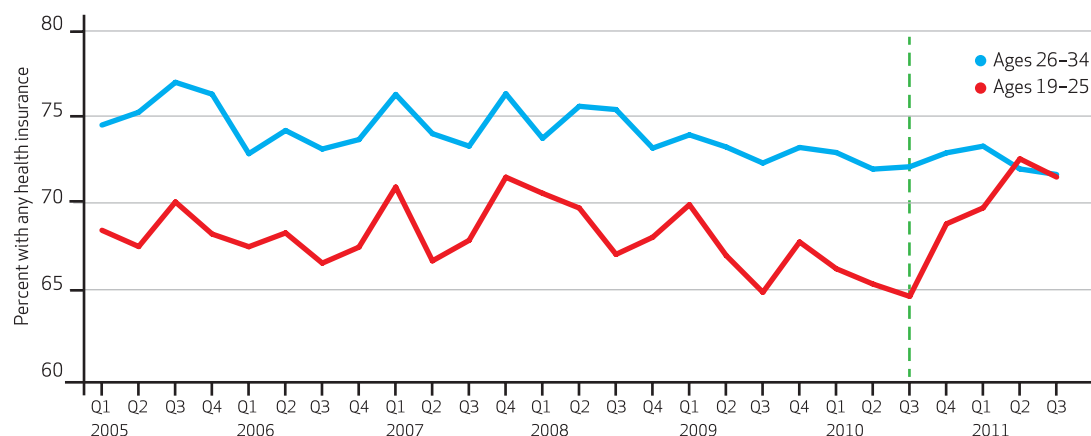
From 2005 to early 2010, coverage rates for the two groups experienced similar year-to-year changes. A test of the prepolicy trends showed no significant difference between the two groups ( $p = 0.95$ ), which supports our choice of control group.<sup>19</sup> Although the quarterly estimates fluctuated somewhat, for both groups we saw a slight downward trend in overall coverage rates.

The two groups diverged sharply after September 2010 (the third quarter). At that point overall coverage for younger adults increased significantly, while the older group experienced no major change. Private insurance rates similarly increased for people ages 19–25 after September 2010. For both groups, public coverage has been growing over the past six years, with no differential change in trend by age after September 2010.

**EFFECT ON RATES OF COVERAGE** Exhibit 2 presents the regression-based estimates for insurance coverage using data from the National Health Interview Survey. Over the entire post-implementation period, coverage among those ages 19–25 increased by a significant 4.7 percentage points more than among the control group (those ages 26–34). The chance of having private

### EXHIBIT 1

Health Insurance Coverage Among Young Adults, Ages 19–25 And 26–34, By Quarter, 2005–11



**SOURCE** National Health Interview Survey, January 2005–June 2011. **NOTE** The provision of the Affordable Care Act that allows young adults to remain covered by their parents’ health insurance until age twenty-six took effect in September 2010 (green dashed line).



coverage increased by 5.1 percentage points more for those ages 19–25 than for the control group. Public coverage was increasing for both age groups at the time of the policy's implementation, although this increase was not significantly different between the two groups.

Exhibit 2 also presents estimates of the magnitude and timing of the policy's coverage effect by quarter. The law was associated with an immediate increase in insurance coverage for young adults in the fourth quarter of 2010, with an increasingly large effect on coverage over time. By the third quarter of 2011, the coverage rate had increased by 6.7 percentage points for adults ages 19–25 relative to the control group.

#### EFFECT ON RATES OF COVERAGE BY SUBGROUP

Exhibit 3 summarizes the coverage effects of the new law on various subgroups, using data from the National Health Interview Survey. Appendix Exhibit A2 shows coverage trends for the additional subgroups of race and sex.<sup>18</sup> Coverage gains occurred among nearly all subgroups, with significant increases across all racial and ethnic groups, married and unmarried people, and working and nonworking people. The coverage increases were not statistically different across racial or ethnic groups, or for workers compared to nonworkers.

Both men and women ages 19–25 experienced significant gains in insurance coverage. The net coverage increase was larger for men (8.2 percentage points) than for women (4.9 percentage points), though the difference between these two estimates was not significant ( $p = 0.08$ ). Similarly, in this data set, we found larger gains in insurance for unmarried people compared to married ones in the younger age group, but this difference was not significant ( $p = 0.51$ ).

**SECONDARY ANALYSIS USING CENSUS DATA** We compared the results above from the National Health Interview Survey, which extended through the third quarter of 2011, with data from the Current Population Survey, which showed effects through the end of 2010 (and possibly some effect through March 2011).<sup>17</sup> Overall, both data sets showed the same general pattern.

Although the most recent data from the National Health Interview Survey indicated a larger effect, the estimates were quite close when we used the same time frame. The Census Bureau data showed a 3.1-percentage-point increase in insurance for people ages 19–25 relative to the control group (Appendix Exhibit A3),<sup>18</sup> which is very similar to the 2.7-percentage-point estimate through the first quarter of 2011 using data from the National Health Interview Survey (Exhibit 2).

Appendix Exhibit A3 also shows results by subgroup using Census Bureau data.<sup>18</sup> This survey's

## EXHIBIT 2

### Effect Of The Affordable Care Act (ACA) Dependent Coverage Provision On Insurance Status For Adults Ages 19–25 And 26–34

	Adults ages 19–25 with insurance, before ACA	Percentage-point change, before versus after ACA		Difference in percentage-point change between age groups
		Adults ages 19–25	Adults ages 26–34	
AVERAGE EFFECT				
Any insurance	68.1%	5.5****	0.8	4.7****
Private insurance	55.4	4.8****	–0.3	5.1****
Public insurance	11.0	2.2***	1.8***	0.5
EFFECT ON ANY INSURANCE, BY QUARTER				
2010 Q4	—	3.0**	1.0	2.0
2011 Q1	—	5.9****	2.6*	3.3**
2011 Q2	—	7.8****	1.1	6.7****
2011 Q3	—	7.6****	0.9	6.7****
EFFECT ON ANY INSURANCE, BY SIX-MONTH PERIOD				
2010 Q4–2011 Q1	—	4.1****	1.4	2.7**
2011 Q2–Q3	—	7.2****	0.5	6.7****

**SOURCE** Authors' analysis of data from the National Health Interview Survey, January 2005–September 2011. **NOTES** This exhibit shows results of linear probability regressions. Models controlled for region, sex, marital status, employment status, education, race or ethnicity, and linear and quadratic time trend terms.  $N = 116,536$ . People could report one or more types of insurance coverage. Since the National Health Interview Survey measures insurance status at a single point in time, only a small number of people ( $n = 475$ ) in the sample reported having both public and private coverage. Following the Census Bureau's approach, we included these people in both the public and private insurance subsamples. However, about 1.5 percent of the sample did not or could not provide information about the type of coverage they had, which is the primary reason why the sum of public and private insurance does not equal the total number with any insurance. Difference in percentage-point change is the difference-in-differences estimate of the net policy effect. \* $p < 0.10$  \*\* $p < 0.05$  \*\*\* $p < 0.01$  \*\*\*\* $p < 0.001$

larger sample size enabled us to detect several significant differences in the impact of the new law. In this survey, the larger estimated increases in coverage for men compared to women ( $p = 0.004$ ) and for unmarried compared to married adults ( $p = 0.02$ ) were both significant. In addition, coverage gains were more than twice as large among nonstudents (5.2;  $p < 0.001$ ) than among students (1.9;  $p = 0.24$ ), although this between-group difference did not reach statistical significance ( $p = 0.12$ ).

The pattern of coverage gains based on health status was more complex. The Census Bureau data show that, shortly after implementation, the policy's effect on coverage was largest among adults ages 19–25 in worse health: There was a 6.1-percentage-point difference-in-difference effect for those in fair or poor health, a 4.7-percentage-point effect for those in good health, a 2.9-percentage-point effect for those in very good health, and a 2.0-percentage-point effect for those in excellent health (all significant, with  $p < 0.05$ ). We observed a similar pattern in the early data from the National Health Interview Survey, with a 7.2-percentage-point increase for adults ages 19–25 in fair or poor

## EXHIBIT 3

Effect Of The Affordable Care Act (ACA) Dependent Coverage Provision On Insurance Status For Adults Ages 19–25 And 26–34, By Subgroups With Various Characteristics

Group	Percent of sample	Adults ages 19–25 with insurance, before ACA (%)	Percentage-point change, before versus after ACA		Difference in percentage-point change between age groups	p value for between-group difference — <sup>a</sup>
			Adults ages 19–25	Adults ages 26–34		
Full sample	100.0	68.1	7.2****	0.5	6.7****	
<b>SEX</b>						
Male	49.9	63.3	9.7****	1.4	8.2****	Ref
Female	50.2	72.9	4.4***	–0.5	4.9****	0.08*
<b>MARITAL STATUS</b>						
Married	37.3	67.9	4.0*	–1.2	5.2**	Ref
Unmarried	62.7	68.2	8.1****	1.7	6.4****	0.51
<b>RACE OR ETHNICITY</b>						
White, non-Hispanic	61.3	74.9	6.1****	–1.3	7.4****	Ref
Black, non-Hispanic	13.4	65.0	11.3****	4.9*	6.4**	0.75
Hispanic	19.0	46.2	6.2***	0.7	5.5***	0.75
Other	6.4	70.8	10.8**	6.5*	4.3	0.98
<b>EMPLOYMENT STATUS</b>						
Working	73.4	68.6	6.3****	–0.5	6.8****	Ref
Not working	26.6	67.1	9.1****	3.0	6.0***	0.87
<b>HEALTH STATUS</b>						
Excellent	40.5	73.4	7.6****	–0.2	7.8****	Ref
Very good	33.3	68.3	8.2****	1.6	6.6****	0.56
Good	21.4	58.7	4.8**	0.8	4.0*	0.41
Fair or poor	4.8	57.3	6.3	0.3	5.9	0.54

**SOURCE** Authors' analysis of data from the National Health Interview Survey, January 2005–September 2011. **NOTES** This exhibit shows results of linear probability regressions. Models controlled for region, sex, marital status, employment status, education, race or ethnicity, and linear and quadratic time trend terms.  $N = 116,536$ . Postimplementation outcomes were measured based on data from the second and third quarters of 2011. Difference in percentage-point change is the difference-in-differences estimate of the net policy effect. <sup>a</sup>There is no between-groups comparison for the full sample. \* $p < 0.10$  \*\* $p < 0.05$  \*\*\* $p < 0.01$  \*\*\*\* $p < 0.001$

health ( $p = 0.10$ ), a 5.3-percentage-point increase for those good health ( $p = 0.02$ ), a 2.7-percentage-point increase for those in very good health ( $p = 0.17$ ), and a 0.8-percentage-point increase for those in excellent health ( $p = 0.65$ ) (see Appendix Exhibit A4).<sup>18</sup>

However, in the more recent National Health Interview Survey data through the third quarter of 2011 (Exhibit 3), the selective insurance gain for those in worse health was no longer evident. Taken together, these results suggest that in the first six months of the new policy, adults ages 19–25 in worse health experienced rapid increases in coverage. However, in later months, coverage gains were trending similarly across all health status groups.

**EFFECT ON ACCESS TO CARE** Exhibit 4 shows the estimated effect of the dependent coverage provision on measures of access to care, using data from the National Health Interview Survey. We observed a decreased likelihood of people ages 19–25 reporting that they delayed getting or did not obtain care because of cost, and an increased likelihood of their reporting that they

had a usual source of care after the provision took effect, compared to the control group.

The policy's effect was smaller in the first two quarters following implementation and larger in the subsequent months. By the third quarter of 2011, the policy had reduced the chance that a person in the younger group delayed getting care because of cost by 4.0 percentage points ( $p = 0.001$ ) and had reduced the chance that a person in that group did not obtain care because of cost by 2.3 percentage points ( $p = 0.02$ ), compared to a person in the older group. A higher proportion of people in the younger group reported having a usual source of care after the law took effect, compared to the control group, but this effect was not significant ( $p = 0.30$ ).

Appendix Exhibit A5 shows the policy's effects on delaying or not obtaining care because of cost for different subgroups.<sup>18</sup> Consistent with the pattern observed for coverage, the law's effect on access was significantly greater for unmarried adults than for married adults ( $p = 0.001$ ). Otherwise, there were no significant differences in the policy's effects between subgroups.

## Discussion

Before passage of the Affordable Care Act, millions of young adults were unable to be covered on their parents' plans, and many of them could not obtain affordable private insurance. The dependent coverage provision of the Affordable Care Act substantially changed the insurance options for adults under age twenty-six.

We found that the policy significantly increased private health insurance for people ages 19–25 and also resulted in a significant improvement in access to care. The gains in coverage and access grew steadily after the policy's implementation in September 2010. The largest gains were evident in the most recent data we examined, for the second and third quarters of 2011. Over this same time period, we did not find any significant changes in coverage or access to care for a control group of people ages 26–34 who were not affected by this policy.

The policy's benefits for people ages 19–25 were widely distributed. We found significant increases in coverage across all racial and ethnic groups, and for both working and nonworking adults. However, some groups benefited in particular. Unmarried adults were more likely than married adults to gain coverage, and men were more likely than women to gain coverage. These findings, confirmed by other researchers,<sup>10</sup> indicate that the benefits of the new requirement were greatest for people who previously had limited access to affordable coverage. Single people have fewer insurance options than their married peers because they cannot be covered by a spouse. And young women, compared to their male peers, had higher coverage rates at baseline (largely because of Medicaid) and were more likely to be full-time students (37 percent versus 33 percent of those ages 19–24 in our Census Bureau data).

We found evidence suggesting that coverage gains were larger among nonstudents than students, and among those in worse health than those in better health. Both of these groups with larger gains were likely to have had fewer insurance options prior to the law—sicker people because of exclusions and denials of coverage in the nongroup market, and nonstudents because insurance plans prior to 2010 typically allowed parents to claim children ages 18–22 as dependents only if they were full-time students.

However, the relationship between the new law and health status is nuanced. Data through early 2011 showed a strong gradient in coverage gains by health status, but by the third quarter of 2011 this differential effect was no longer evident. This change suggests that people with greater health care needs may have signed up quickly when this new option became available,

### EXHIBIT 4

#### Effect Of The Affordable Care Act (ACA) Dependent Coverage Provision On Access To Care For Adults Ages 19–25 And 26–34

Average effect	Percentage-point change, before versus after ACA		Difference in percentage-point change
	Adults ages 19–25	Adults ages 26–34	
DELAYED GETTING CARE IN THE PAST YEAR BECAUSE OF COST			
2010 Q4–2011 Q1	-1.7	-0.5	-1.2
2011 Q2–Q3	-5.6****	-1.6	-4.0***
DID NOT GET CARE IN THE PAST YEAR BECAUSE OF COST			
2010 Q4–2011 Q1	-0.7	-0.4	-0.3
2011 Q2–Q3	-3.7***	-1.4	-2.3**
HAS A USUAL SOURCE OF CARE (NOT EMERGENCY DEPARTMENT)			
2010 Q4–2011 Q1	-1.5	-1.7	0.3
2011 Q2–Q3	3.9	1.4	2.6

**SOURCE** Authors' analysis of data from the National Health Interview Survey, January 2005–September 2011. **NOTES** This exhibit shows results from linear probability regressions. Models controlled for region, sex, marital status, employment status, education, race or ethnicity, and linear and quadratic time trend terms. The sample size is 116,536 for the first two outcomes and 47,372 for the outcome "usual source of care," since this question was asked of only one adult per household. The first row for each outcome shows the effect of the policy through March 2011; the second row shows the effect of the policy through September 2011. Difference in percentage-point change is the difference-in-differences estimate of the net policy effect. \*\* $p < 0.05$  \*\*\* $p < 0.01$  \*\*\*\* $p < 0.001$

while healthier young adults may have signed up at a more gradual rate.

What are the potential benefits of these gains in coverage? Health insurance increases access to care, which ultimately may lead to reduced morbidity and mortality.<sup>20</sup> Our study found that the coverage gains under the Affordable Care Act were indeed associated with significant reductions in barriers to care for this age group. We found a 2.3-percentage-point decline in the proportion of people who said they did not obtain care and a 4.0-percentage-point decline in the proportion of those who said they delayed getting care because of cost.

These effect sizes are plausible, given baseline differences in access between uninsured young adults and those with private coverage. One study from 2008–09 showed that among people in their twenties, 31 percent of those who were uninsured did not obtain medical care in the past year because of cost, compared to 9 percent of those with private insurance.<sup>21</sup> This ratio implies a 2.2-percentage-point decline in care not obtained for each 10.0-percentage-point gain in coverage. Our estimates are in this ballpark—a 2.3-percentage-point decline in care not obtained in the setting of a 6.7-percentage-point coverage gain.

Beyond access to care, there are other potential benefits of the dependent coverage provision that we were not able to test directly. First,



insurance has been shown to reduce the risk of financial strain from medical spending,<sup>13,22</sup> which is particularly relevant for young adults in poor health.

Second, young adults covered as dependents are freed from so-called job lock, in which they stay at a job just to maintain coverage. Instead, they can pursue additional education or new career opportunities without fear of losing coverage. Lastly, insurance obtained through parents may be more comprehensive than the coverage some young adults had previously, offering improved financial protection and access to care even for those who had not been uninsured.

Our analysis also provides insight into how results compare when assessing the same policy using alternative data sets. The National Health Interview Survey and the Current Population Survey are two of the most important data sources that researchers will use to evaluate the Affordable Care Act. The National Health Interview Survey contains more recent data and therefore indicates a larger effect of the policy than the Census Bureau survey. However, when we constructed an analysis with the National Health Interview Survey that matched the Census Bureau data in terms of timing, the results from the two surveys were quite similar. Furthermore, subgroup analyses using the two data sets showed similar patterns of coverage gains.

## Young adults covered as dependents are freed from so-called job lock, in which they stay at a job just to maintain coverage.

### Conclusion

To our knowledge, our study is the first to demonstrate that the dependent coverage provision of the Affordable Care Act resulted in increased access to care among young adults. We also found that although coverage and access gains were broad based, the policy was particularly beneficial for young men, unmarried people, and nonstudents.

We used multiple data sources—each with unique features—to conduct our analyses. Taken together, the consistent results from multiple sources offer persuasive evidence that the Affordable Care Act's dependent coverage provision has significantly expanded insurance coverage and access to care among young adults as intended. ■

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### NOTES

- 1 Congressional Budget Office. Letter to the Hon. Nancy Pelosi [Internet]. Washington (DC): CBO; 2010 Mar 18 [cited 2012 Nov 21]. Available from: [http://www.cbo.gov/sites/default/files/cbofiles/attachments/hr4872\\_0.pdf](http://www.cbo.gov/sites/default/files/cbofiles/attachments/hr4872_0.pdf)
- 2 Martinez ME, Cohen RA. Health insurance coverage: early release of estimates from the National Health Interview Survey, January–June 2011. Hyattsville (MD): National Center for Health Statistics; 2011.
- 3 DeNavas-Walt C, Proctor B, Smith J. Income, poverty, and health insurance coverage in the United States: 2010. Washington (DC): Census Bureau; 2011.
- 4 Mendes E. In U.S., significantly fewer 18- to 25-year-olds uninsured. Washington (DC): Gallup Organization; 2011.
- 5 Kaiser Family Foundation, Health Research and Educational Trust. Employer health benefits: 2011 summary of findings. Menlo Park (CA): KFF; 2011.
- 6 Sommers BD. Number of young adults gaining insurance due to the Affordable Care Act now tops 3 million. Washington (DC): Department of Health and Human Services; 2012.
- 7 Sommers BD, Kronick R. The Affordable Care Act and insurance coverage for young adults. *JAMA*. 2012;307:913–4.
- 8 Cantor JC, Monheit AC, Delia D, Lloyd K. Early impact of the Affordable Care Act on health insurance coverage of young adults. *Health Serv Res*. 2012;47:1773–90.
- 9 Holahan J, Chen V. Changes in health insurance coverage in the Great Recession, 2007–2010 [Internet]. Washington (DC): Kaiser Commission on Medicaid and the Uninsured; 2011 Dec [cited 2012 Nov 21]. (Issue Paper). Available from: <http://www.kff.org/uninsured/upload/8264.pdf>
- 10 Antwi YA, Moriya AS, Simon K. Effects of federal policy to insure young adults: evidence from the 2010 Affordable Care Act's dependent coverage mandate. Cambridge (MA): National Bureau of Economic Research; 2012.
- 11 Anderson M, Dobkin C, Gross T. The effect of health insurance coverage on the use of medical services. *American Economic Journal: Economic Policy*. 2012;4(1):1–27.
- 12 Cohen RA. Trends in health insurance and access to care from 1997–2008. Hyattsville (MD): National Center for Health Statistics; 2008.

- 13 Finkelstein A, Taubman S, Wright B, Bernstein M, Gruber J, Newhouse JP, et al. The Oregon health insurance experiment: evidence from the first year [Internet]. Cambridge (MA): National Bureau of Economic Research; 2011 Jul [cited 2012 Nov 21]. (NBER Working Paper No. 17190). Available from: <http://www.nber.org/papers/w17190>
- 14 Long SK, Coughlin T, King J. How well does Medicaid work in improving access to care? *Health Serv Res.* 2005;40:39–58.
- 15 Our regression included binary variables identifying “treatment” group, “postpolicy” period, and the interaction “treatment multiplied by postpolicy.” The coefficient on “postpolicy” measures the policy’s effect on the control group. The sum of the coefficients on “postpolicy” and “treatment multiplied by postpolicy” measures the policy’s effect on the treatment group. The coefficient on “treatment multiplied by postpolicy” is our difference-in-difference estimate.
- 16 Swartz K. Interpreting the estimates from four national surveys of the number of people without health insurance. *J Econ Soc Meas.* 1986; 14:233–42.
- 17 Government Accountability Office. Pre-existing condition insurance plans: program features, early enrollment and spending trends, and federal oversight activities [Internet]. Washington (DC): GAO; 2011 Jul [cited 2012 Nov 21]. Available from: <http://www.gao.gov/assets/330/322006.pdf>
- 18 To access the Appendix, click on the Appendix link in the box to the right of the article online.
- 19 A comparable test using Census Bureau data shows that the prepolicy trends did differ significantly ( $p = 0.02$ ) by age group when including the 2005 data, but not for the years from 2006 to 2010 ( $p = 0.23$ ). Nonetheless, our estimates based on Census Bureau data were essentially unchanged when we excluded the 2005 data. Thus, for simplicity, we used the same study period of 2005–11 for both data sets.
- 20 Hadley J. Sicker and poorer—the consequences of being uninsured: a review of the research on the relationship between health insurance, medical care use, health, work, and income. *Med Care Res Rev.* 2003; 60(2 Suppl):3S–75S; discussion 76S–112S.
- 21 Bloom B, Cohen RA. Young adults seeking medical care: do race and ethnicity matter? Hyattsville (MD): National Center for Health Statistics; 2011.
- 22 Gross T, Notowidigdo MJ. Health insurance and the consumer bankruptcy decision: evidence from expansions of Medicaid. *J Public Econ.* 2011;95:767–78.

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In this month’s *Health Affairs*, Benjamin Sommers and coauthors report on their study of the effects of an Affordable Care Act provision enabling young adults to remain as dependents on their parents’ health insurance until age twenty-six. Using data from two nationally representative surveys, and comparing young adults who gained dependent coverage to a control group (adults ages 26–34) who were not affected by the new policy, the authors found sizable coverage gains for adults ages 19–25, as well as strong evidence of increased access to care. Among those who benefited the most were unmarried adults, nonstudents, men, and those in worse health.

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