The Effect of the Affordable Care Act's Expanded Coverage Policy on Access to Dental Care

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Background: The Affordable Care Act included a dependent coverage policy that extends parents' or guardians' health insurance to adults aged 19–25. This policy does not apply directly to private dental benefits. However, for various reasons it could still have an indirect "spillover" effect if employers voluntarily expand dental coverage in conjunction with medical coverage.

Objective: To assess the effect of the Affordable Care Act's dependent coverage policy on private dental benefits coverage, utilization, and financial barriers to dental care.

Research Design: Difference-in-differences models were used to measure the association between the dependent coverage policy and private dental benefits coverage, utilization, and financial barriers to dental care. We analyze 2008–2012 National Health Interview Survey data, comparing results in 2011 and 2012 with results from 2008 to 2010 (prereform period).

Subjects: Adults aged 19–25 were compared with adults aged 26–34.

Measures: Private dental benefits coverage, dental care utilization, and financial barriers to obtaining needed dental care.

Results: Relative to the prereform period, private dental benefits coverage among adults aged 19–25 increased by 5.6 percentage points in 2011 ($P < 0.001$) and 6.9 percentage points in 2012 ($P < 0.001$) compared with adults aged 26–34. Dental care utilization among adults aged 19–25 increased by 2.8 percentage points in 2011 ($P = 0.062$) and 3.3 percentage points in 2012 ($P = 0.038$) compared with adults aged 26–34. Adults aged 19–25 experienced a 2.1 percentage point decrease in 2011 ($P = 0.068$) and a 2.0 percentage point decrease in 2012 ($P = 0.087$) in financial barriers to dental care compared with adults aged 26–34.

Conclusions: The dependent coverage policy was associated with an increase in private dental benefits coverage and dental care utilization, and a decrease in financial barriers to dental care among young adults aged 19–25.

Key Words: dental benefits coverage, dental care utilization, financial barriers to care, Affordable Care Act

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America's oral health is an important concern to health care policy makers, and new links between oral and whole body health are continually being discovered.[1–4] Routine dental care and oral disease prevention are the most basic and critical drivers of oral health,[1] and evidence increasingly shows that investing in these drivers may avert future serious oral and whole body health care needs and costs.[5,6]

At the same time adults' access to dental care has fallen steadily since the early 2000s, largely because of a steady erosion of dental benefits.[7–9] Fewer adults have private dental benefits, and more are either covered by Medicaid, wherein adult dental benefits are optional, or are uninsured.[10,11] This downward trend is particularly pronounced for young adults.[12] Almost 1 in 5 adults under 35 years of age forego needed dental care because of cost,[13] and young adults are increasingly visiting the emergency room for dental conditions.[14]

Under the Affordable Care Act (ACA), medical benefits were extended to dependents aged 19–25,[15] and recent analysis shows that this policy significantly increased medical benefits coverage.[16] The analysis does not identify the source of the increased coverage (eg, employer or individual plans) but the majority of nonelderly adults in the United States obtain health insurance through their employer.[17] The dependent coverage policy requires any health insurance plan or issuer that offers medical benefits for dependents to make such benefits available until the dependent turns 26 years old.[18] Health plans were required to implement the policy on the first day of a health plan's coverage period beginning on or after September 23, 2010.[18]

Dental benefits are only automatically extended to dependents if they are part of a medical plan. The policy does not apply to stand-alone dental plans, which are separate insurance plans that only cover dental care services. Given that 99% of private dental coverage is provided through stand-alone plans,[19] the policy does not directly impact young adults' access to dental benefits. However, employers might voluntarily extend dental benefits to dependents, generating an indirect effect. This could be for several reasons including the high rank of dental care among the benefits employees most value for themselves and their dependents[20] and the perceived impact of dental care on medical costs.[6]

In this article, we first examine private dental benefits coverage patterns from 2008 through 2012 for young adults. We then estimate the effect of the ACA's dependent coverage policy on young adults aged 19–25 by comparing their private dental benefits coverage, utilization, and financial barriers to dental care patterns with those of a control group of adults

aged 26–34 who were not subject to the policy. We follow the same methodological approach as Sommers et al,[16] but we focus on dental benefits rather than medical benefits.

METHODS

Data

We used data from the nationally representative National Health Interview Survey (NHIS). The NHIS is a household interview survey that is conducted annually by the National Center for Health Statistics.[21,22] Survey respondents are asked questions about dental benefits coverage,[23] dental visits,[24] and financial barriers to dental care.[25] We used annual data from 2008 through 2012 as our period of study, primarily because the question pertaining to dental benefits coverage has only been asked since 2008. (We used 2 NHIS data files: the person file for analyzing dental benefits coverage and the sample adult file for analyzing dental visits and financial barriers to dental care. The analysis of dental benefits coverage from the NHIS person file had 92,171 observations after dropping missing values. The analysis of utilization and financial barriers from the NHIS sample adult files had 38,204 observations and 38,331 observations, respectively, after dropping missing values.)

Methodology

We conducted a difference-in-differences analysis to assess the effect of the policy on adults aged 19–25. We compared patterns for 3 outcomes of interest before and after the policy was implemented: private dental benefits coverage, whether a person visited a dentist at least once in the last 12 months (utilization), and whether a person reported financial barriers to obtaining needed dental care during the last 12 months. Similar to Sommers et al,[16] we used adults aged 26–34 as our control group, as they were not subject to the policy, and assume that they faced similar workforce and health insurance market conditions as our treatment group before and after implementation of the policy. This difference-in-differences approach helps us to separate the effect of the policy from other factors that might influence dental benefits coverage during our study period.

On the basis of previous research[26–29] and the variables available in the NHIS, we controlled for a wide range of covariates in our difference-in-differences analysis including educational attainment, employment status, ethnicity/race, sex, marital status, and region. We also included linear and quadratic time trend variables to adjust for preexisting coverage trends unrelated to the policy. We used a linear probability model, and our estimates, SEs, and computed t statistics accounted for the complex sampling design of the NHIS. (We conducted all analyses using the statistical software STATA, version 12.)

Limitations

There are a number of limitations to our study.

Although the NHIS measures family income, it captures information only on family members living in the same home. Thus, the family income reported for young adults living separately from their parents does not include their parents' income and may be biased. (Sommers et al[16] previously reported on this limitation of NHIS.) Therefore, we did not control for income in our analysis.

Plans offer coverage renewal at different times of the year, and some insurers may have implemented the policy before their standard renewal period. As a result, it is possible that dependent coverage was offered at different times throughout 2010 and 2011, and the policy may have been implemented gradually rather than on a specific date. (Similar to Sommers et al,[16] we assume for simplicity that the ACA dependent coverage policy was in effect for the entire fourth quarter of 2010.)

The NHIS does not definitively identify the source of private medical or dental benefits (eg, employer or individual purchase) and does not ask all survey respondents about dental benefits. Only individuals who indicate having private health insurance are asked about private dental benefits coverage. Therefore our analysis may exclude respondents that have private dental benefits but do not have private health benefits.[30] (We analyzed data from the most recent Medical Expenditure Panel Survey (2011) and found that the percentage of adults aged 19–64 who have private dental benefits but do not have private medical coverage is 2.0%.)

RESULTS

Figure 1 presents private dental benefits coverage patterns for adults aged 19–25 (treatment group) and adults aged 26–34 (control group). From 2008 through 2010, the prereform period, both groups of adults generally experienced similar year-to-year changes in private dental benefits coverage. [As a sensitivity check, we looked at the impact of the policy in calendar year 2010 relative to calendar years 2008 and 2009 and observed no statistically significant difference between the treatment (adults aged 19–25) and control (adults aged 26–34) groups ($P = 0.619$).]

However, following the implementation of the policy these trends changed. The percentage of adults aged 19–25 with private dental benefits increased from 37.5% in 2010 to 43.9% in 2012. For adults aged 26–34, there was very little change in the trend.

Table 1 presents the regression-based estimates of the effect of the policy. As our difference-in-differences results indicate, private dental benefits coverage increased for adults aged 19–25 compared with adults aged 26–34 in 2011 and 2012, relative to the prereform period of 2008–2010. In 2011, private dental benefits coverage increased by 5.6 percentage points for adults aged 19–25 compared with adults aged 26–34 ($P < 0.001$). By 2012 the impact was larger: private dental benefits coverage increased by 6.9 percentage points for adults aged 19–25 compared with adults aged 26–34 ($P < 0.001$). The magnitude of the increase in private dental benefits coverage is very similar to that of medical insurance coverage.[16]

Table 1 also presents estimates of the effect on dental care utilization as measured by whether or not an individual had a dental visit in the past 12 months. Looking at trends, the percentage of adults aged 19–25 with a dental visit increased from 54.3% in 2010 to 59.0% in 2012. The percentage of

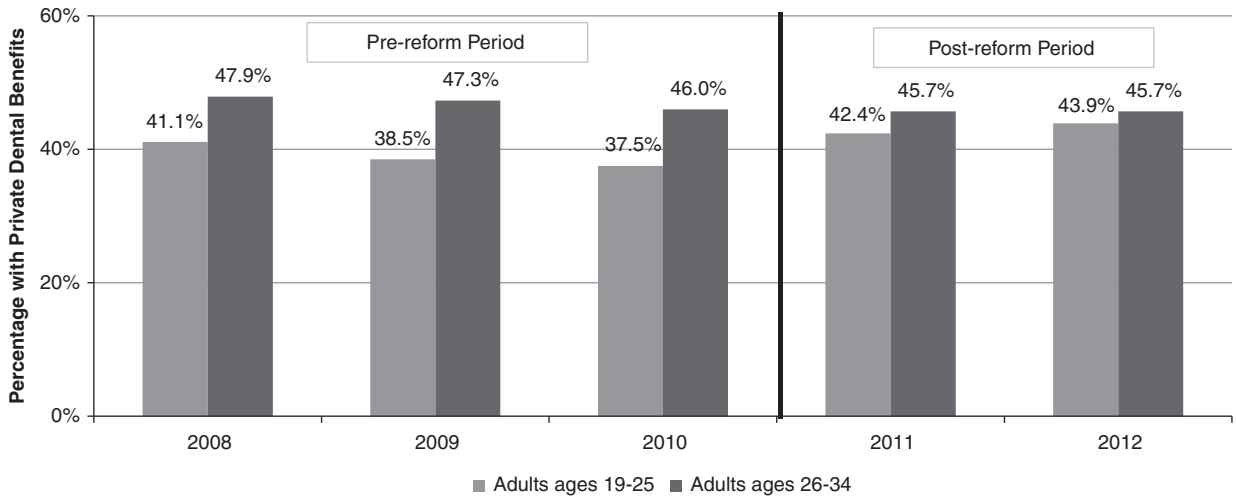

FIGURE 1. Private dental benefits coverage among young adults. Source: National Health Interview Survey, January 2008–December 2012. The Affordable Care Act dependent coverage policy allowing young adults to remain covered by their parents' or guardians' health insurance until age 26 took effect in September 2010.

adults aged 26–34 with a dental visit also increased from 56.2% in 2010 to 57.1% in 2012. The estimated effect of the policy, however, is seen in our difference-in-differences estimates. Relative to the prereform period, utilization among adults aged 19–25 in 2011 increased by 2.8 percentage points compared with adults aged 26–34 ($P = 0.062$). The effect increased slightly in 2012, when utilization among adults aged 19–25 increased by 3.3 percentage points compared with adults aged 26–34 ($P = 0.038$).

Finally, Table 1 presents estimates of the effect on financial barriers to dental care. The percentage of adults aged 19–25 reporting financial barriers to dental care decreased from 18.9% in 2010 to 14.1% in 2012. For adults aged 26–34 it remained stable, with 18.4% reporting financial barriers in 2010 and 17.6% reporting financial barriers in 2012. Relative to the prereform period, our difference-in-differences estimate indicates that adults aged 19–25 experienced a 2.1 percentage point decrease in financial barriers to dental care in 2011 ($P = 0.068$) and a 2.0 percentage point decrease in 2012 ($P = 0.087$) compared with adults aged 26–34.

DISCUSSION

Before the ACA, young adults in America were increasingly finding themselves without dental benefits and were seeing the dentist less often. They were also by far the most likely age group to forego or delay obtaining needed dental care because of cost.[31] One implication of these developments

TABLE 1. Effect of the Affordable Care Act's Dependent Coverage Policy on Young Adults

	Year							
	2010		2011		2012		2011	2012
Dependent Variable	Adults Aged 19–25 (%)	Adults Aged 26–34 (%)	Adults Aged 19–25 (%)	Adults Aged 26–34 (%)	Adults Aged 19–25 (%)	Adults Aged 26–34 (%)	Difference-in-differences Regression Estimate (Percentage Points)	
Private dental benefits coverage	37.5	46.0	42.4	45.7	43.9	45.7	5.6***	6.9***
Dental visit in the past 12 mo (utilization)	54.3	56.2	58.0	56.2	59.0	57.1	2.8*	3.3**
Financial barriers to dental care	18.9	18.4	14.7	18.5	14.1	17.6	−2.1*	−2.0*

Estimates and SEs accounted for the complex sampling design of the NHIS. We used linear probability regression models using difference-in-differences and conducted all analyses using the statistical software STATA, version 12. Regressions control for age, education, ethnicity/race, sex, marital status, and region. Total number of observations is 92,171 (private dental benefits), 38,204 (dental visit), and 38,331 (financial barriers).

*$P \leq 0.10$.

**$P \leq 0.05$.

***$P \leq 0.01$.

Source: Authors' analysis of data from the National Health Interview Survey (NHIS), January 2008–December 2012.

is that emergency room use for dental conditions is on the rise, with young adults accounting for almost all of the increase.[14] In addition, when looking at dental care utilization rates across the life cycle, there is a sharp fall in use around age 18, and young adults have one of the lowest utilization rates of any age group in the United States.[32] There is an emerging issue of access to dental care for young adults in the United States, and research has shown it is driven in part by eroding dental benefits.[7]

Because dental care services for adults are not an essential health benefit under the ACA,[33] little direct impact on coverage for, and access to, dental care is expected.[34]

Our findings show, however, that the ACA dependent coverage policy was associated with an expansion of private dental benefits coverage for adults aged 19–25. This is despite the fact that the dependent coverage policy does not apply to private dental benefits. Our findings are consistent with the hypothesis that employers, the near-exclusive source of private dental benefits coverage in the United States, voluntarily expanded dental benefits coverage to dependents as part of the ACA. In our opinion, this can be viewed as a positive "spillover" effect of the ACA.

Our research also shows that the ACA dependent coverage policy is associated with an increase in dental care utilization and a decrease in financial barriers to dental care among adults aged 19–25. This is not surprising because there is strong evidence linking dental benefits coverage with dental care utilization and affordability of dental care.[35,36]

Many oral health advocates feel that the ACA did not go far enough in increasing access to dental care for adults.[37] States are continuing to explore how both pediatric and adult dental benefits coverage can be offered in the health insurance marketplaces and what type of adult dental benefits should be offered through Medicaid, where they remain voluntary. These are critical issues that will have long-lasting implications for oral health. To our knowledge, our study is the first to demonstrate potential spillover effects of the ACA's dependent coverage policy on private dental benefits coverage, dental care utilization, and financial barriers to dental care. Future research should focus on long-term effects of this and other aspects of the ACA on access to dental care.

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