Effects of the ACA Dependent Coverage Expansion on Virginia's Young Adults

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Abstract

The Affordable Care Act (ACA) required that all insurance plans covering dependents extend that coverage to children up to age 26 beginning on or after September 23, 2010. This brief presents new research findings on the impact of the ACA's dependent coverage mandate on Virginia's young adults and their use of inpatient hospital care for all non-birth related admissions as well as mental illness and substance abuse admissions. Analysis of hospital discharge data from 2008-2014 shows that the ACA's dependent coverage mandate increased all non-emergency admissions as well as mental illness and substance abuse admissions. Additional evidence shows that the dependent coverage mandate reduced the share of young adults hospital admissions paid by Medicaid and increased the share of admissions paid by private insurance. The dependent coverage mandate also led to an increase in treatment intensity among hospitalized persons, defined as increased lengths of stay and total charges for non-birth admissions. Overall, this study shows that the ACA's dependent coverage mandate increases inpatient healthcare utilization. At the same time, a large fraction of patients aged 19-34 who were admitted to hospitals for mental illness treatment in the post-ACA period (2012-2014) remain uninsured. Policymakers may want to consider other means to expand coverage to those young adults left uninsured in Virginia.

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Snouffer is a 2015 Schroeder Center - Brock Institute (SC-BI) Health Policy Research Fellow. Under the SC-BI Fellowship Program, students from William & Mary and medical students from Eastern Virginia Medical School were competitively selected to conduct independent research studies focused on health policy/ health services issues in Virginia. This policy brief is drawn from that research. Jennifer Mellor, Ph.D., Director of the Schroeder Center for Health Policy, served as the William & Mary faculty mentor on this project.

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Policy Relevance

Young adults face significant employment obstacles compared to their slightly older cohorts; for example, the unemployment rate for 25-34 year olds is just under 6%, compared to nearly 10% for 20-24 year olds.[1] Young adults under age 35 also use more substance abuse and mental health services than do persons age 35 years and up, even though they have less comprehensive insurance coverage overall.[2] Prior to the implementation of the ACA, insurers in the Commonwealth of Virginia were subject to an existing state mandate, effective in 2008, that required insurance plans to offer dependent coverage to children aged 19-24 who resided with a parent or were full-time students.[3] For insurance plans beginning on or after September 23, 2010, the ACA expanded coverage to 25 year olds as well and prohibited any residency or student requirements. As a result, the ACA's dependent coverage mandate likely increased insurance coverage among Virginia's young adults. This study first examines the effect of this mandate on inpatient hospital admissions in general, and on hospital admissions related to mental illness and substance abuse in particular. In addition, this study analyzes the mandate's effect on the proportion of admissions paid by different payers (e.g., Medicaid, private, uninsured). Then, this study examines the effect of the ACA's dependent coverage mandate on the intensity of treatment among those hospitalized, defined as the length of the hospital stay, the number of procedures used during the stay, and the total charges associated with the stay. Finally, this study examines disparities in insurance coverage and diagnoses in the post-ACA period (2012-2014) among persons aged 19-34 with recent inpatient hospitalizations for mental illness and substance abuse.

Methodology

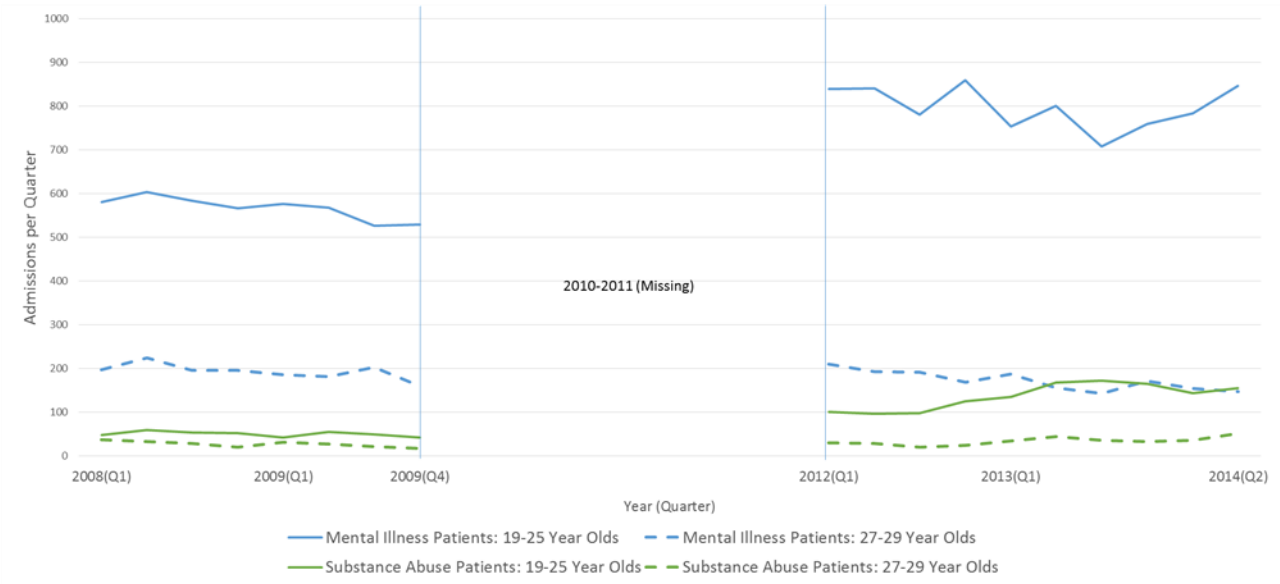
This project uses a "difference-in-difference" approach to identify the effect of the ACA on inpatient hospitalization rates of young adult Virginians.[4] This method measures the change in inpatient admissions among the group targeted by the policy (Virginians aged 19-25) before and after the dependent coverage mandate took effect, then calculates the difference between that change and the change in inpatient admissions among a comparison group of persons not targeted by the policy. Because Virginians aged 27-29 are similar in many other aspects to Virginians aged 19-25 before the dependent coverage mandate took effect, they serve as a useful comparison group. Because coverage impacts on 26 year olds may vary as they transition out of the age group targeted by the policy, 26 year olds are omitted from the analysis. A similar difference-in-difference approach is used to examine changes in treatment intensity resulting from the policy. Difference-in-difference models are estimated in a multivariate regression analysis allowing for the control of other factors that impact hospital utilization and treatment intensity. The study concludes with a brief examination of mental health and substance abuse admissions among 19-34 year olds, a group that is more likely to suffer from such conditions than other age groups.

Results

Figures 1 and 2 illustrate patterns in privately-paid inpatient admissions before the mandate (2008-2009) and after the mandate took effect (2012-2014). Both figures report the raw numbers of admissions, prior to adjustment for other factors; nonetheless, both are suggestive of the effects of the ACA on inpatient hospital use by young adults. Figure 1 shows a clear increase in inpatient utilization for all non-birth discharges per quarter among 19-25 year olds compared to slightly older adults. Figure 2 shows patterns in mental illness and substance abuse admissions over time, for the targeted group of 19-25 year olds and the comparison group of 27-29 year olds. Again, the raw data suggest that there are sharp increases in mental illness and substance abuse admissions after the ACA implementation for the targeted group, but not the comparison group. A comparison of the data in Figures 1 and 2 suggests that the percentage increase in mental illness and substance abuse admissions outweighs the percentage increase in all non-birth admissions.

Figure 1. Private Non-Birth Inpatient Admissions Per Quarter

Figure 2. Behavioral Health Inpatient Admissions per Quarter



The trends shown in Figures 1 and 2 are confirmed by multivariate regression analysis using the difference-in-difference approach. The multivariate regression analysis controls for the impact of other variables, such as local unemployment rates, hospital traits, and regional characteristics, on inpatient hospital use. The multivariate regression analysis shows that the ACA's dependent coverage mandate increased the rate of non-birth, non-emergency visits by nearly 9% among the targeted age group compared to the comparison group of 27-29 year olds. This impact exceeds the effect of the policy reported in a national analysis conducted by Antwi et al. (2015), which found an increase of only 6.4%.[5] The larger effect observed in Virginia may be due to the longer post-ACA period included in this study (2012-2014 vs. 2008-2009), or due to other differences in Virginia's hospital system or young adult population compared to the national average. Additional findings suggest that the ACA's dependent coverage mandate increased non-emergency mental illness admissions by almost 12% among covered young adults compared to the control group of 27-29 year olds.

This study also analyzed the effects of the ACA's dependent coverage mandate on the proportion of admissions paid by different payers (e.g., Medicaid, private, uninsured). Shares of admissions paid by each insurance type (Medicaid, Medicare, private, uninsured, and other insurance) were analyzed using the same basic difference-in-difference approach as the inpatient hospitalization rate analysis discussed earlier. Findings from this analysis suggest that the ACA's dependent coverage mandate decreased the share of all non-birth admissions paid for by Medicaid (by 2.5 percentage

points), decreased the share of all non-birth admissions among the uninsured (by 4.8 percentage points), and increased the share of all non-birth admissions paid for by private insurance (11.2 percentage points).

To examine the impact of the ACA's dependent coverage mandate on treatment intensity, this study used a multivariate regression model of treatment intensity using a sample of young adults hospitalized for inpatient care. This model controlled for the effects of other determinants of treatment intensity, such as gender, race, and the patient's number of diagnoses. Findings show that the dependent coverage mandate was responsible for an increase in average length of stay by roughly one fifth of a day, and an increase in average total charges by roughly $1,350.

Finally, this study examined the characteristics of mental illness admissions for adults aged 19-34 during the post-ACA period (2012-2014). Despite the increase in private admissions seen in the multivariate regressions, nearly 16% of patients in this sample were uninsured. Further analysis also shows that uninsured patients with mental illness admissions are more complex patients to treat. For example, 57% of the uninsured patients admitted for mental health illness also have substance abuse disorders (outside of tobacco use), compared to only 42% of privately insured patients admitted for mental health illness. This study also examined adults aged 19-34 during the post-ACA period admitted for substance abuse. While 30% of patients admitted for substance abuse were uninsured, 44% of all substance abuse patients leaving against medical advice were uninsured. Leaving against medical advice is a particular concern since previous studies have found it to be associated with increased risk of readmissions and mortality.[6, 7]

Conclusion

This study examined whether the ACA's dependent coverage mandate increased inpatient utilization among Virginia's 19-25 year olds compared to their older 27-29 year old counterparts. In addition, this study assessed whether the ACA mandate resulted in an increase in treatment intensity for those 19-25 year old young adults. The findings in this report are similar to previous national studies, with some key exceptions.[5, 8] This study found that the ACA's dependent coverage mandate increased all non-birth, non-emergency admissions, as well as non-emergency mental illness admissions, by roughly twice the amount found by Antwi and colleague's national level study.[5] This study also found an increase in treatment intensity for all non-birth related admissions, a finding not reported in prior analysis. Together these findings suggest that the Affordable Care Act's dependent coverage expansion increased inpatient utilization among young adults. However, a large share of young adults with hospitalizations for mental illness and substance use disorders remain uninsured in the post-ACA period.[9] This suggests that efforts to increase insurance coverage in this population could be beneficial in terms of improving access to care.

SOURCES

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[4] Virginia Health Information (VHI) has provided non-confidential patient level information used in this report, which it has compiled in accordance with Virginia law but which it has no authority to independently verify. By using this report, the user agrees to assume all risks that may be associated with or arise from the use of inaccurate data. VHI cannot and does not represent that the use of VHI's data was appropriate for this report or endorse or support any conclusions or inferences that may be drawn from the use of VHI's data.

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