

## Introduction

The Dependent Coverage Provision (DCP), a provision of the Patient Protection and Affordable Care Act (ACA), enables dependents aged 19 – 25 to remain on parental insurance without restrictions. This increased access to health insurance for the population with the highest uninsured rate. Its impact has not been studied in neurosurgical population where the cost of care is disproportional based on insurance status.

## Methods

A National Inpatient Sampling database query was performed comparing an experimental (ages 19-25) and a control cohort (ages 27-33) and metrics before (January 2007 – March 2009) and after DCP implementation (October 2011 – December 2014). Those with a primary diagnosis of traumatic brain injury (TBI), ischemic or hemorrhagic stroke (Stroke) or primary brain tumor (Tumor) had the following metrics obtained: uninsured rate, comorbidity index, hospital length of stay (LOS), in-hospital mortality rates, and disposition status home. A difference-in-difference analysis was performed comparing the cohorts to assess direct effects of DCP.

## Results

There was a significant decrease in the uninsured rate for TBI ( $p < .0001$ ) and Stroke ( $p = .0019$ ) patients but not for Tumor ( $p = .6663$ ) patients after implementation of the DCP (Figure 1). There was no significant change in the comorbidity index, LOS, or in-hospital mortality for any diagnosis over the study period (Figures 2-4). An improvement occurred in these metrics in both age groups, however, the differences were insignificant. Lastly, there was an increase for the TBI control cohort to be discharged home ( $p = .0288$ ) that was not observed elsewhere (Figure 5).

## Conclusions

The DCP did decrease the uninsured rate in most neurosurgical patients. Other quality metrics were not different between the pre-DCP and post-DCP cohorts although both groups showed improvement in these metrics over time. The impact of the ACA on quality of care for neurosurgical patients should be further investigated.

## References

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4. Scott JW, Salim A, Sommers BD, Tsai TC, Scott KW, Song Z. Racial and Regional Disparities in the Effect of the Affordable Care Act's Dependent Coverage Provision on Young Adult Trauma Patients. *J Am Coll Surg.* 2015;221(2):495-501 e491.
5. Scott JW, Sommers BD, Tsai TC, Scott KW, Schwartz AL, Song Z. Dependent coverage provision led to uneven insurance gains and unchanged mortality rates in young adult trauma patients. *Health Aff (Millwood).* 2015;34(1):125-133.

## Learning Objectives

1. The Dependent Coverage Provision (DCP), part of the Affordable Care Act allows dependent's 19-25 to remain on parent's insurance
2. The provision went into effect October 2010 for all new or renewing plans, with all plans offering it by October 2011
3. The uninsured rate in the target population decreased significantly compared to a comparable cohort in those with a diagnosis of TBI or stroke
4. The uninsured rate was not significantly different compared to a comparable cohort in those with a diagnosis of brain tumor, likely secondary to the chronic illness of tumors in those within this age range.
5. Other healthcare metrics did not significantly change compared to a comparable cohort, but all cohorts did see a significant change individually indicating other health policy factors influence and not direct DCP influence.

## Figures

Figure 1: Change in Uninsured Rate

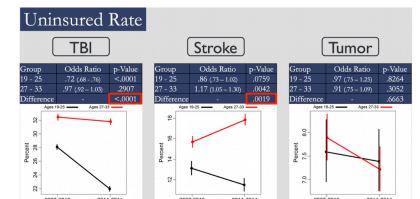


Figure 1: Change in uninsured rate in both cohorts with all diagnosis. Note the significant difference between cohorts in TBI and Stroke patients, but not in Tumor patients.

Figures demonstrating data

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