

Legislations Mandating Insurance Coverage are Highly Effective in Delivering Surgical Care of Transgender Patients

Adam Faletsky, BS^{1,2}, Michael M. Jonczyk, MD, MS¹, Lfei Guo, MD, PhD¹

¹Lahey Hospital & Medical Center, Burlington, MA

²Tufts University School of Medicine, Boston, MA 02111



Objective

While gender-affirming surgeries are becoming more widely performed, few studies have examined any temporal correlation between legislations mandating transgender care and the actuation of such surgical care.

Methods

- Retrospective review of the National Inpatient Sample (NIS) database from 2000 to 2018
- Diametrically opposite regions (Divisions 1 & 2 vs. Divisions 6 & 7) were selected and compared.
- Division 1 & 2 states mandate explicit inclusion of gender-affirming care.
- Division 6 & 7 states mandate explicit exclusion or have no explicit statement of gender-affirming care.
- We segregated all major payers in NIS into two groups:
 - those impacted by state-specific legislature, (*Medicaid and private insurance*)
 - those not impacted by state-specific legislature, (*Medicare and self-pay*)

Statistics:

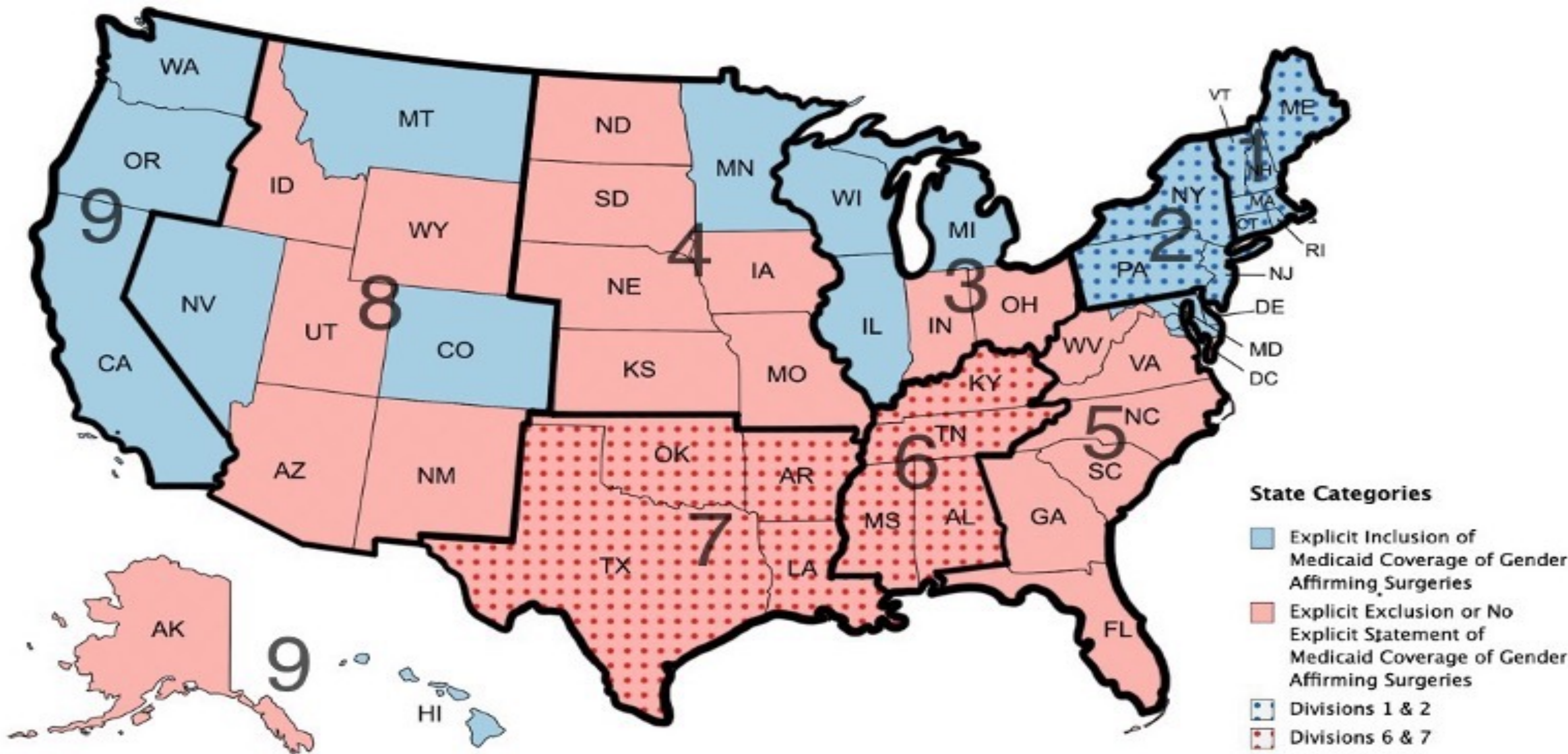
- Annual temporal trend analysis utilized
 - A smoothed linear regression model*
 - A non-parametric Mann-Kendall trend test*
 - Interrupted time series analyses*
- Impact of policy change mandating transgender care
 - Segmental regression to estimate the longitudinal impact after 2015*

Results

- In states with explicit inclusion of gender-affirming care, a significant increase in the number of patients on state-dependent insurance receiving gender affirming surgeries occurred when states began mandating care and thereafter.
- This significance was not seen in any regions among patients under non-state-dependent payers.

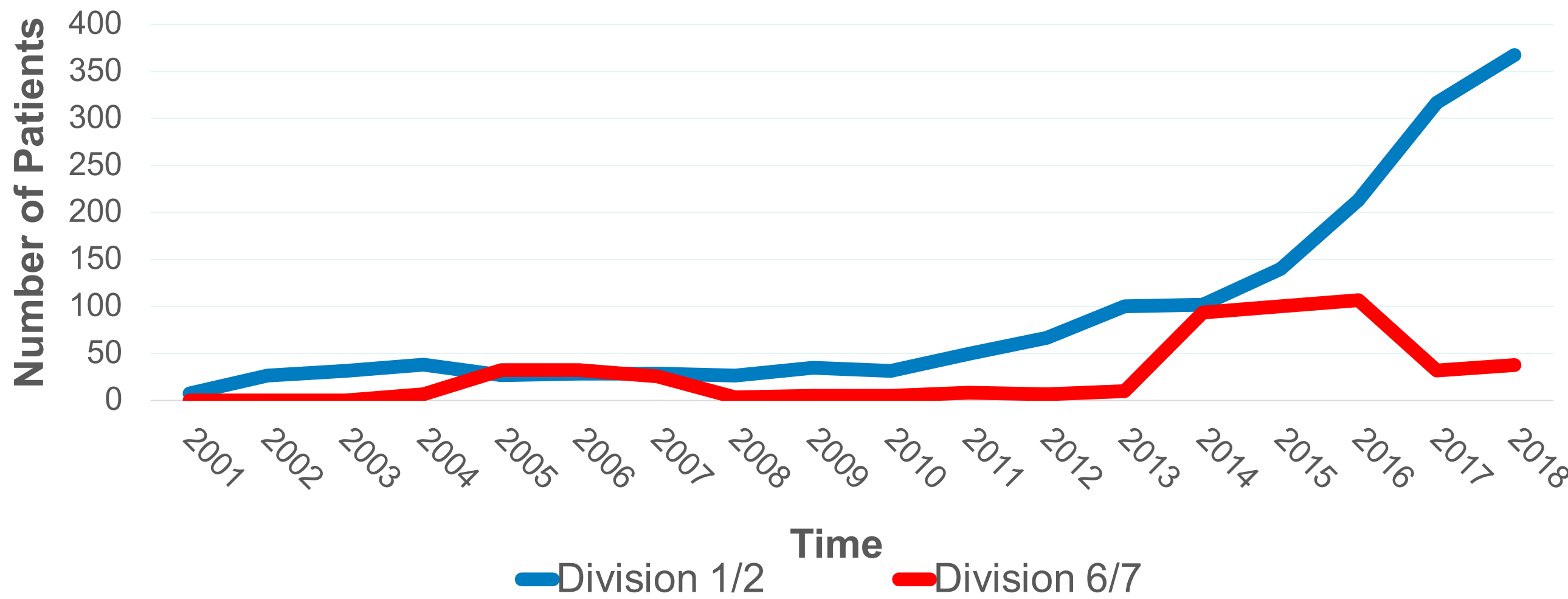
Insurance	Division	Coefficient	Estimate	CI		p-value
Medicare & Self-pay	1 & 2	Policy Change	-10.93	-76.01	54.14	0.72
		Time Since	1.04	-27.73	29.82	0.94
Medicaid & Private Insurance	1 & 2	Policy Change	79.13	35.59	122.66	<0.01
		Time Since	68.73	49.48	87.98	<0.01
Medicare & Self-pay	6 & 7	Policy Change	-21.60	-103.97	60.77	0.58
		Time Since	0.33	-36.10	36.75	0.99
Medicaid & Private Insurance	6 & 7	Policy Change	-45.10	-183.41	93.21	0.50
		Time Since	-17.35	-55.55	66.78	0.85

Regions of insurance Coverage



Hospital census divisions as categorized by the National Inpatient Sample database

Interrupted time series analysis: the impact of Medicare policy in 2015



A significant increase in the number of patients covered under state legislation-dependent insurance (Medicaid and private insurance) receiving gender affirming surgeries around the time during which state legislations began mandating care and in the years thereafter (both $p < 0.01$).

Conclusions

- The impact of expansion of coverage for gender-affirming surgery on its utility within specific regions of the United States cannot be understated.
- Within a geographical region, only the population covered by state-specific insurance carriers exhibited any uptick in utilization of transgender surgical care if there were state legislative mandates in place.
- A direct correlation was seen between the utility of gender-affirming surgery and the enactment of legislation ensuring coverage of these surgeries.
- Transgender patients may be less likely to receive gender-affirming surgery simply due to their state's legislature.
- More work must be done to ensure that transgender patients are not disadvantaged simply due to the state in which they reside and its corresponding legislature.