Medicaid Expansion on Uncompensated Care

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Uncompensated care is defined as health care that hospitals provide for which they do not receive any payment. According to the American Hospital Association (AHA), since 2000, hospitals have provided around $ 745 billon in uncompensated care to patients. Using Healthcare Cost Report Information System (HCRIS) data from the Center for Medicare & Medicaid Services (CMS), this report provides evidence of reduction on uncompensated care after The Affordable Care Act's (ACA) Medicaid expansion.

Table 1 shows descriptive statistics for uncompensated care and total revenue reported by hospitals. The amount of uncompensated care that hospitals have reported is around $30 to $50 million dollars. On the other hand, total revenue is in between $400 to $700 million dollars. There are negative values both on uncompensated care and revenue which it could be due to reporting errors.

	Uncompensated Care				Total Revenue			
	Mean	SD	Min	Max	Mean	SD	Min	Max
Year								
2012	37	86	-1	1881	418	766	-12	11865
2013	39	81	0	1812	444	833	0	12752
2014	37	88	-26	1990	478	905	0	13376
2015	33	87	-1	2037	517	967	0	14144
2016	45	401	0	20404	561	1060	0	15619
2017	41	102	0	2747	602	1165	0	16863
2018	39	100	0	2597	652	1284	0	18677
2019	49	121	-98	2639	706	1420	0	22001

Table 1. Descriptive statistics for uncompensated care and total revenue of hospitals in millions of dollars from 2012 to 2019.

Figures 1 and 2 show the evolution of uncompensated care reported by hospitals. Figure 2 shows that for-profit hospitals keep the trend of increasing uncompensated care. Instead not-for-profit hospitals show a change in the trend after 2014, that iswhen Medicaid expansion occured.

Table 2 shows the effect of Medicaid expansion on hospital uncompensated care using a two-way fixed effects (TWFE) estimation. Using the full sample, regardless of treatment timing, there is a reduction of %45 on uncompensated care after the introduction of Medicaid expansion. We find a similar result using the states that introduced it on 2014.
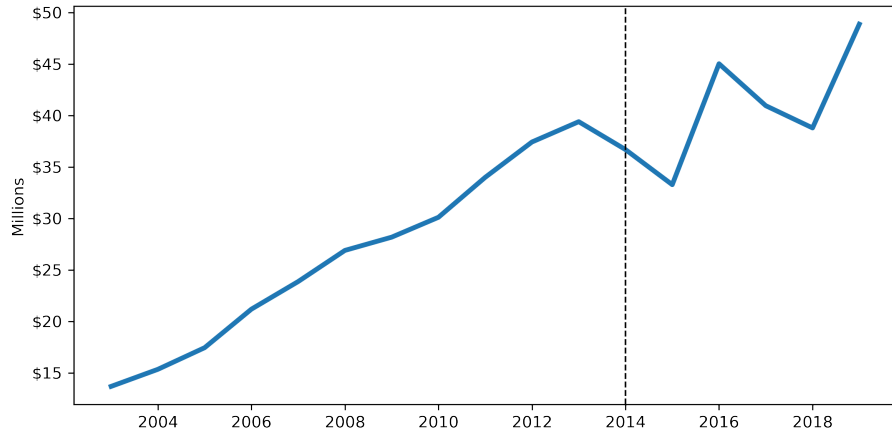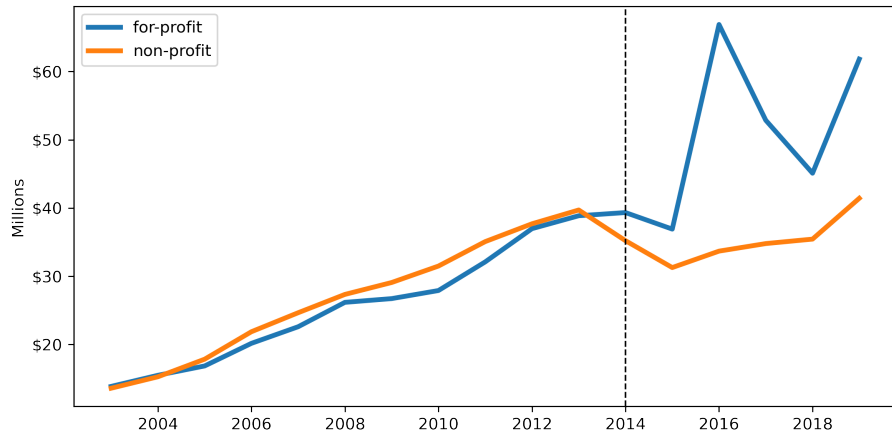
Figure 1. Total Uncompensated Care

Figure 2. Total Uncompensated by Type of Hospital

Table 3 shows the event study using Sun & Abraham estimation. Figure 3 shows average effects y lenght of exposure using Callaway & Sant'Anna approach. In both estimations in year 0 there is a decrease in uncompensated care of 20%, and in year 1 a decrease of 45%.

Dependent Variable:	Log Uncompensated Care			
Model:	(Total)	(2014)	(2015)	(2016)
Variables				
Treatment	-0.4504***	-0.5152***	-0.1329**	-0.5629***
	(0.0259)	(0.0297)	(0.0592)	(0.0753)
Fixed-effects				
Hospital	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Fit statistics				
Observations	42,151	36,814	20,627	19,060
R^2	0.85582	0.85795	0.86887	0.87910

Clustered (Hospital) standard-errors in parentheses

Table 2. Effect of Medicaid expansion on hospital uncompensated care using a two-way fixed effects (TWFE) estimation.
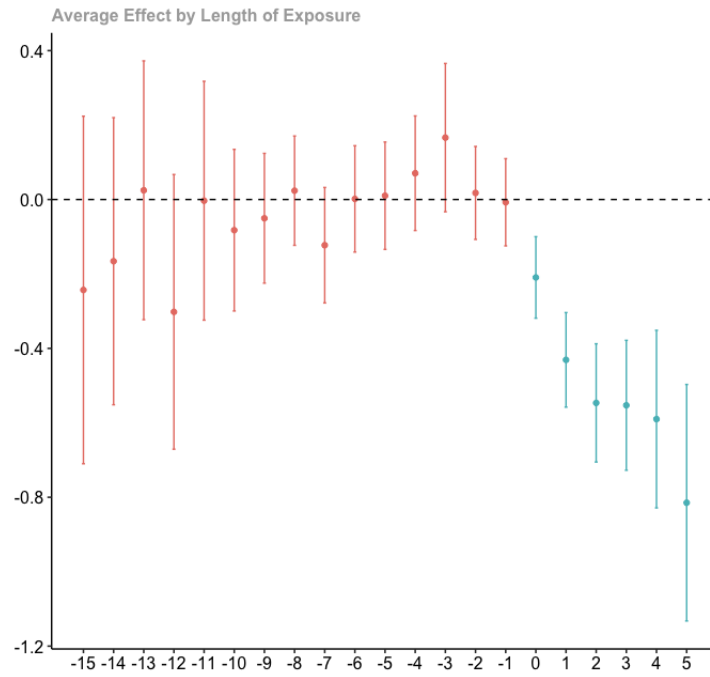

Figure 3. Callaway & Sant'Anna approach.

Dependent Variable:	Log Uncompensated Care			
Model:	(Total)	(2014)	(2015)	(2016)
Variables				
year = -5	-0.1531***	-0.1589***	-0.2220**	-0.2127
	(0.0432)	(0.0513)	(0.0881)	(0.1488)
year = -4	-0.1057***	-0.1117**	-0.1564*	-0.1597**
	(0.0386)	(0.0462)	(0.0866)	(0.0748)
year = -3	0.1345***	0.1673***	0.0790	-0.1637**
	(0.0242)	(0.0290)	(0.0552)	(0.0708)
year = -2	0.0494***	0.0634***	0.0151	-0.0834
	(0.0191)	(0.0231)	(0.0440)	(0.0678)
year = 0	-0.1810***	-0.1999***	-0.0350	-0.2201***
	(0.0191)	(0.0224)	(0.0554)	(0.0759)
year = 1	-0.4424***	-0.4510***	-0.2284***	-0.8217***
	(0.0244)	(0.0276)	(0.0691)	(0.0777)
year = 2	-0.6244***	-0.6286***	-0.4931***	-0.9140***
	(0.0259)	(0.0281)	(0.0694)	(0.0989)
year = 3	-0.6657***	-0.6629***	-0.5068***	-1.163***
	(0.0291)	(0.0313)	(0.0657)	(0.0974)
year = 4	-0.6246***	-0.6490***	-0.4840***	
	(0.0370)	(0.0395)	(0.0740)	
year = 5	-0.7076***	-0.7076***		
	(0.0443)	(0.0443)		

Clustered (Hospital) standard-errors in parentheses

Table 3. Effect of Medicaid expansion on hospital uncompensated care using Sun & Abraham's estimation.