## **Additional File 2**

## Title : Separate Analysis of Acute Hospital Data

Results of the separate analysis of acute hospitals. The controls were selected using propensity score generated with time-varying, non-time varying and demand variables.

Difference-in-difference estimator  $\delta 3$  using data from acute trust mergers alone.

Year, t	(1) Main Analysis	(2) Robustness Test	
	1 <sup>st</sup> – 3 <sup>rd</sup> Closest PS	4 <sup>th</sup> – 6 <sup>th</sup> Closest PS	7 – 9 <sup>th</sup> Closest PS
-2	0.022	0.028	0.038
	(0.016)	(0.017)	(0.015)
-1	0.040**	0.043**	0.042**
	(0.012)	(0.011)	(0.012)
0	0.014	0.013	0.018
	(0.013)	(0.012)	(0.013)
1	0.048**	0.053**	0.065**
	(0.018)	(0.018)	(0.019)
2	0.023	0.013	0.021
	(0.039)	(0.037)	(0.040)
3	0.025	0.030	0.028
	(0.037)	(0.038)	(0.038)
4	-0.011	-0.017	-0.011
	(0.035)	(0.038)	(0.036)

Note: Cluster robust standard errors in parentheses. Baseline: 3 years before merger is approved by the regulator.

<sup>\*</sup> *p*<0.05

<sup>\*\*</sup>p<0.01