

Table S1. Cox regression of the socioeconomic covariates related to paediatric inpatient and outpatient care of viral gastroenteritis in Jönköping County Council.

Socioeconomic covariates:	Jönköping County Council Difference-in-Differences estimate of HR (95 % CI)	
<i>After vs. Before Vaccine start (reference in italic)</i>	Inpatient care for gastroenteritis	Outpatient care for gastroenteritis
Maternal primary education vs. <i>Tertiary education</i>	1.26 (0.63-2.50)	1.06 (0.73-1.53)
Maternal secondary education vs. <i>Tertiary education</i>	0.12 (0.02-0.90)	0.72 (0.43-1.21)
Paternal primary education vs. <i>Tertiary education</i>	1.05 (0.54-2.04)	1.11 (0.73-1.42)
Paternal secondary education vs. <i>Tertiary education</i>	0.41 (0.14-1.20)	1.13 (0.51-1.22)
Maternal age<25 at birth vs. <i>Other</i>	1.46 (0.75-2.82)	1.45 (1.06-1.99)
Use social welfare benefit vs. <i>Other</i>	1.53 (0.70-3.33)	1.47 (1.00-2.17)
Both parents foreign born vs. <i>At least one Swedish-born parent</i>	1.26 (0.70-2.29)	1.03 (0.77-1.39)
Single parenthood household vs. <i>Cohabitation</i>	1.27 (0.58-2.81)	1.45 (0.96-2.19)

Bold text indicates statistical significant associations on the p <0.05 level.

Table S2. The study population of the sensitivity analysis. N=519,128.

	Stockholm County Council*		All other Swedish county councils*	
	Born Before Vaccine (N= 83,031) (%)	Born After Vaccine (N= 52,900) (%)	Born Before Vaccine (N=235,287) (%)	Born After Vaccine (N=147,910) (%)
Outcome				
Inpatient care gastroenteritis	2.4	0.8	1.8	1.1
Outpatient care gastroenteritis	9.6	6.5	6.2	5.0
Child characteristics				
<i>Sex</i>				
Boy	51.4	51.8	51.4	51.6
Girl	48.6	48.2	48.6	48.4
<i>Birth year</i>				
2009	26.2	0.0	27.9	0.0
2010	34.8	0.0	33.9	0.0
2011	33.6	0.0	32.8	0.0
2012	5.4	0.0	5.4	0.0
2013	0.0	0.0	0.0	0.0
2014	0.0	46.2	0.0	45.6
2015	0.0	53.8	0.0	54.4
<i>Preterm</i>				
Yes	5.4	5.3	5.9	5.6
Family characteristics				
<i>Maternal age at birth of child</i>				
<25 years	8.1	7.0	14.4	12.8
25 or older	91.9	93.0	85.7	87.2
<i>Maternal education</i>				
Primary education	12.2	10.7	13.5	13.9
Secondary education	8.2	7.2	8.3	7.1
Tertiary education	79.6	82.1	78.2	79.0
<i>Paternal education</i>				
Primary education	15.7	16.0	15.3	16.7
Secondary education	12.4	9.8	15.6	11.5
Tertiary education	71.9	74.2	69.2	71.8
<i>Use of social welfare benefit</i>				
Yes	5.1	3.1	9.5	8.6
<i>Cohabitation of parents in early pregnancy</i>				
No	11.9	12.8	9.5	10.2

Parental country of birth

Both parents foreign born	20.7	23.6	84.5	80.3
<i>At least one Swedish-born parent</i>	79.4	76.4	15.5	19.7

* The "Born Before Vaccine" group consisted of children born from March 2009-February 2012. The "Born After Vaccine" group consisted of children born from March, 2014.

Table S3. Sensitivity analysis of Cox regression of paediatric inpatient and outpatient care of viral gastroenteritis.

After vs. <i>Before</i> Vaccine start: (reference in <i>italic</i>)	Difference-in-Differences estimate of HR (95 % CI)
Inpatient care for gastroenteritis	
Stockholm vs <i>Rest of Sweden</i> *	0.64 (0.57-0.71)
Outpatient care for gastroenteritis	
Stockholm vs <i>Rest of Sweden</i> *	0.92 (0.88-0.96)

* The "Born Before Vaccine" group consisted of children born from March 2009-February 2012. The "Born After Vaccine" group consisted of children born from March, 2014.

Table S4. Sensitivity analysis of Cox regression of the socioeconomic covariates related to paediatric inpatient and outpatient care due to viral gastroenteritis.

Socioeconomic covariates:	Difference-in-Differences estimate of HR (95 % CI)	
After vs. <i>Before</i> Vaccine start (reference in <i>italic</i>)	Inpatient care for gastroenteritis	Outpatient care for gastroenteritis
	Stockholm County Council*	
Maternal primary education vs. <i>Tertiary education</i>	1.00 (0.76-1.32)	1.25 (1.12-1.39)
Maternal secondary education vs. <i>Tertiary education</i>	1.44 (1.06-1.97)	1.15 (1.02-1.31)
Paternal primary education vs. <i>Tertiary education</i>	1.16 (0.91-1.47)	1.18 (1.07-1.29)
Paternal secondary education vs. <i>Tertiary education</i>	0.96 (0.69-1.32)	1.14 (1.01-1.28)
Maternal age<25 at birth vs. <i>Other</i>	0.95 (0.67-1.34)	1.30 (1.15-1.46)
Use social welfare benefit vs. <i>Other</i>	1.23 (0.80-1.89)	1.39 (1.17-1.64)
Both parents foreign born vs. <i>At least one Swedish-born parent</i>	0.95 (0.76-1.17)	1.15 (1.06-1.25)
Single parenthood household vs <i>Cohabitation</i>	1.00 (0.78-1.29)	1.10 (1.0-1.23)

* The "Born Before Vaccine" group consisted of children born from March 2009-February 2012. The "Born After Vaccine" group consisted of children born