The true relative financial cost of Planned Caesarean Birth (PCB) versus Planned Vaginal Birth (PVB) in England for the year 2018/19 taking into account litigation and compensation for harm: a sensitivity analysis.

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## Abstract

OBJECTIVE: To determine the true financial costs of Planned Caesarean Section and Planned Vaginal Birth in England for the year 2018/19 after accounting for litigation and compensation for harm (LCFH) DESIGN: Sensitivity analysis BACKGROUND: Average base costs per delivery remitted to NHS maternity providers for Planned Caesarean Birth (PCB) and Planned Vaginal Birth (PVB) in 2018/19 were £3,948 and £3,270 respectively leading to a perception that PCB is more costly than PVB. Indemnity costs potentially related to planned mode of delivery, however, add an average of £1,571/delivery to overall costs. METHOD: Retrospective analysis of costs according to planned mode of birth was performed based on data and previous research published by NHS Resolution and NHS England. Weighting of results according to PCB and PVB rates was performed in a manner similar to the sensitivity analysis of PCB v PVB (without accounting for LCFH) performed by the National Institute for Health and Care Excellence (NICE) in 2011 RESULTS: Additional costs of LCFH resulted in revised costs of £4,245 and £5,030 for PCB and PVB respectively – a cost advantage of £785 per delivery in favour of PCB. CONCLUSION: Providers should not be discouraged from offering or women refused PCB on grounds of cost.

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Figure 1. Total number and value of claims reported by the NHS Litigation Authority according to category over a ten year period  $^{9}$ 

Category	Number of	(%)	Total value	(%)
Accident	Claims 58	1.14	£728,796	0.02
			,	
Anaesthetic	172	3.38	£19,249,853	0.61
Antenatal care	391	7.68	£144,811,665	4.64
Antenatal investigations	230	4.52	£149,986,770	4.81
Bladder	72	1.41	£8,824,269	0.28
Caesarean section	674	13.24	£216,167,223	6.93
Cerebral palsy	542	10.65	£1,263,581,324	40.52
CTG interpretation	300	5.89	£466,393,771	14.95
Drug error	83	1.63	£8,759,430	0.28
Management of labour	715	14.05	£424,039,651	13.60
Maternal death	38	0.74	£20,253,906	0.64
Nursing care	35	0.68	£511,700	0.01
Operative vaginal delivery	160	3.14	£93,659,223	3.00
Other	265	5.20	£40,252,783	1.29
Perineal trauma	441	8.66	£31,202,836	1.00
Postpartum haemorrhage	111	2.18	£3,024,833	0.1
Psychological	28	0.55	£681,791	0.02
Retained swabs	186	3.65	£3,021,910	0.1
Shoulder dystocia	250	4.91	£103,520,832	3.32
Stillbirth	251	4.93	£15,712,695	0.50
Uterine rupture	85	1.67	£103,264,627	3.31
Total	5,087		£3,117,649,888	

FIGURE 2. Calculations and derivation of the PVB:PCB claims values

Total Claims Values (TCV) 1	£3,117,649,888.00a)	
PCB rate <sup>2</sup>	0.095b)	
PVB rate <sup>2</sup>	0.905c)	
Ratio PVB:PCB = ('x:1')	9.526 c/bd)	
Births (2000-2010) 3	5500000e)	
PVB births =	4977500 c*ef)	
PCB births =	522500 b*eg)	
Proportion of TCV due to PVB <sup>2</sup>	0.8258h)	
Proportion of TCV due to PCB <sup>2</sup>	0.0081i)	
Value due specifically to PCB =	£25,252,964.09 a*ij)	
Value due specifically to PVB =	£2,574,555,277.51 a*hk)	
Value due specifically to both =	£2,599,808,241.60 j+km)	
Total cost shared = (TCV-both) =	£517,841,646.40 a-mn)	
Shared cost/2 =	£258,920,823.20 n/2p)	
Shared cost/2 per birth	£47.08 p/eq)	
Total cost less shared due to 4977500 PVB births = (/birth)	£517.24 k/fr)	
Total cost less shared due to 522500 PCB births = (/birth)	£48.33 j/gs)	
Total cost/birth incl. shared costs PVB =	£564.32 r+qt)	
Total cost/birth incl. shared costs PCB =	£95.41 s+qv)	
Ratio PVB:PCB =	5.91 t/v	
1 from Figure 1; 2 see text; 3 reference (9);		

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