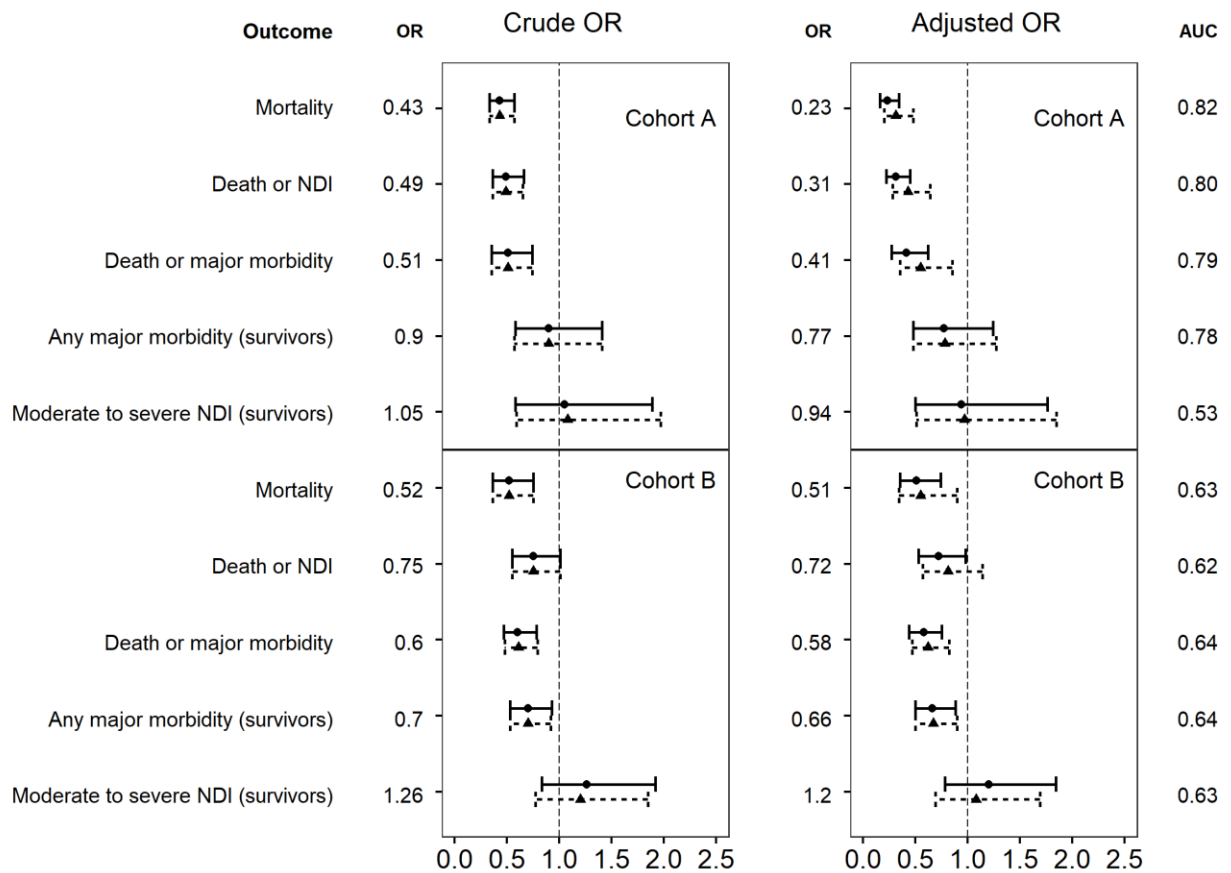


**Supplemental table 1. Center activity grouping cohort B (standardized ratios)**

	C4	C1	C2	C3	C6	C5	C7	C9	C8	Highest Proportion*
<b>Inborn [1]</b>	94	99	98	97	95	100	100	98	100	97.8%
<b>Full course antenatal steroids [2]</b>	74	86	90	94	88	90	86	100	84	80.4%
<b>Sectio [3]</b>	76	88	84	80	91	100	82	89	77	95.6%
<b>Obstetric activity</b>	84	94	94	93	94	100	92	99	90	-
<b>Delivery room intubation or CPAP [4]</b>	68	50	60	71	75	76	87	81	100	83.5%
<b>Surfactant &lt; 2 h [5]</b>	19	54	54	58	72	63	89	76	100	77.2%
<b>IC started [6]</b>	100	98	99	98	99	98	98	100	100	100%
<b>Admitted [7]</b>	98	100	98	99	98	98	97	100	100	100%
<b>Neonatal Activity</b>	72	76	78	81	86	84	93	89	100	-
<b>Activity Score</b>	76	83	84	86	89	90	91	92	93	-
<b>Activity group</b>	low	low	low	low	high	high	high	high	high	-

Legend: [1]-[3]: Key obstetric indicators; [4]-[7]: key neonatal indicators; C1 – C9: centers 1 – 9; CPAP: continuous pulmonary airway pressure. \*Highest proportion: actual proportion of infants receiving intervention in center with highest incidence, standardized as 100 in activity score.

Supplemental Figure 1. Odds ratios of outcome when born in a unit with high perinatal interventional activity after exclusion of all outborn infants



Legend: Odds ratios with 95% confidence interval of outcome when born in high activity units, crude or adjusted for GA, GA<sup>2</sup>, birth weight z-score, male sex, multiple births, socio-economic status. Dotted lines represent results received when using non-imputed data. AUC: area under receiver operator characteristic (ROC) curve representing predictive validity of risk adjustment.