

## Appendix A The Swedish Salut child health intervention programme

**Table A1** Västerbotten County Council's vision and the Salut Programme's aims and focus areas

<b>Vision, aims, focus areas</b>	<b>Content</b>
<b>Vision</b>	By 2020, the health and wellbeing of the population will be the best in the world.
<b>Overall aim</b>	Good health is achieved by salutogenic interventions in collaboration with societal actors and the family with the child's best in focus. Through systematic improvements, interventions are developed and implemented to promote satisfactory conditions during childhood, increased physical activity, and healthy eating habits.
<b>Main focus areas</b>	To promote healthy eating habits, physical activity and good psychosocial health, and to prevent obesity and caries.
<b>Aims during pregnancy period</b>	<p>Avoidance of maternal and foetal pregnancy complications related to maternal lifestyle.</p> <p>Healthy maternal weight gain during pregnancy.</p> <p>A minimum of 30 minutes daily physical activity.</p> <p>Regular meals.</p> <p>Five fruits and vegetables a day.</p> <p>Tooth-brushing twice a day with fluoride toothpaste.</p> <p>Regular dental health care visits.</p> <p>Parents are feeling prepared for their parental roles.</p> <p>Pregnant women are living in relations free from intimate partner violence.</p>
<b>Aims for parents and children 0-18 months</b>	<p>Pregnant women refrain from tobacco, alcohol and drug use.</p> <p>Normal weight development for 18-month olds.</p> <p>Retain of pre-pregnancy weight.</p> <p>Sufficient sleep (parents and children).</p> <p>Environments free from tobacco and drug use, and alcohol use is limited.</p> <p>A minimum of one hour daily physical activity (play) for children.</p> <p>A minimum of 30 minutes daily physical activity for parents.</p> <p>Avoidance of TV-viewing and TV/computer games for children.</p> <p>Six months exclusive breastfeeding, and thereafter partly continued for 1 year or longer.</p> <p>Introduction of 5 fruits and vegetables a day for children.</p> <p>Five fruits and vegetables a day for parents.</p> <p>Regular meals for both parents and children.</p> <p>Avoidance of discretionary foods for children.</p> <p>Tooth-brushing twice a day with fluoride toothpaste (from the first tooth for the children).</p> <p>Regular dental health care visits.</p> <p>Parents feel confident in their parental roles.</p> <p>Satisfying parental-child attachment and interaction.</p> <p>Women/children live in an environment free from violence and violation.</p>

**Table A2** Care-as-usual and the Salut Programme’s interventions targeting parents-to-be and their children during pregnancy and until the child is 18 months, and significant changes in professionals’ practices post Salut implementation

Care-as-usual	Arena
Maternal and foetal surveillance (7-9 check-ups)	ANC
Psychosocial- and lifestyle counselling	ANC, CHC
Participation in parental support groups	ANC, CHC
Health and development check-ups, and immunizations (about 10 visits when the child is 0-18 months, and more often when needed)	CHC
Advice on teeth brushing twice a day	CHC, DHC
Oral health check-up and health promoting advice (child age 2-3 years)	DHC
Socialization at open preschools for children not yet enrolled in regular preschools and their parents	OPS
<b>The Salut Programme</b>	<b>Arena</b>
<i>Strengthening or restructuring of ‘care-as-usual’</i>	
Motivational Interviewing (MI)	ANC, CHC*, DHC
Collaboration between any of involved sectors	ANC*, CHC*
Involvement in parental support groups	ANC, CHC
Lifestyle counselling	ANC, CHC*, DHC*
Edinburgh Postnatal Depression Scale (EPDS) at “mother’s visit” (Child age 8 weeks)	ANC
Activities to enhance early parent-child attachment, parent relationships, children’s physical activity and linguistic development	CHC, OPS
Activities to promote healthy snacks/food and drinks	OPS*
Activities to encourage physical activity	OPS
<i>The Salut Programme specific interventions</i>	
Questionnaires for health surveillance	ANC, CHC, DHC
Free dental health counselling for the parents-to-be	DHC
Collaboration between any of involved sectors	DHC*, OPS*
Contribution to parental support groups	DHC, OPS
Questions for domestic violence during pregnancy and at “mother’s visit” (child age 8 weeks)	ANC*, CHC*
Focus on fathers’ experiences of change in life situation at “father’s visit” (child age 10 months)	CHC*
Oral health investigation (child age 12 months)	DHC

ANC- Antenatal Care; CHC- Child Health Care; DHC- Dental Health Care; OPS- Open Pre-Schools.

\*Significant changes in professionals’ practices pre- and 6 months’ post-implementation ( $p \leq 0.01$ ) according to.[1].

## **Appendix B Effectiveness analysis strategies**

### **Matching strategy**

In the difference-in-difference analyses exact matching was imposed on the categorical covariate (education) and caliper matching was used to find matches on age. A caliper of 0.6 was used which means that an observation is considered a match if it is equal to or within 0.6 sample standard deviations of the matching variable. For example, if the age sample standard deviation is 5 in the Salut area at postmeasure then a matching observation from one of the other three groups would have the same level of education and be within 3 years of the age of the considered observation in the Salut area at postmeasure. The reason for using caliper matching instead of exact matching is that it can be difficult to find exact matches on covariates that are not categorical. Using a caliper means that we avoid dropping observations due to no exact matches. In cases where there were tied matches, i.e., several observations matching the birth in Salut area at postmeasure, a weighted average of the outcomes from the tied observations was used. Matching was done “with replacement”, i.e. the same observation could be used as a match for more than one observation in the Salut area at postmeasure. In the longitudinal subsample, for each birth in the Salut area at premeasure, a matching observation was found among the births in the non-Salut area at premeasure. An observation was considered a match if it, in the premeasure period, had similar values on the outcome variable as well as on mother’s level of education and age. Matching was otherwise performed analogously to the difference-in-difference analysis.

### **Standard error computation**

In the difference-in-difference analyses bootstrap estimates of the standard error was computed using ordinary non-parametric bootstrapping. Specifically, 1000 bootstrap samples were constructed by sampling with replacement from the original sample and, following the procedure described above, a difference-in-difference estimate was computed for each bootstrap sample. The estimated standard error was taken as the sample standard deviation of the 1000 bootstrap difference-in-difference estimates. Using the difference-in-difference estimate based on the original sample and the bootstrap estimated standard error, confidence intervals and p-values were computed under the assumption that the distribution of the difference-in-difference estimator could be approximated by a normal distribution. In the longitudinal analyses standard errors were computed according to Abadie and Imbens (2006). Using the simple matching estimate and the estimated Abadie-Imbens standard error, confidence intervals and p-values were computed under the assumption that the distribution of the simple matching estimator could be approximated by a normal distribution.

## Appendix C Costing analysis

### Costing methods

We estimated intervention costs as consisting of two main components: Salut Programme costs, and the opportunity cost of professionals to attend the learning seminars. Salut Programme staff consisted of healthcare developers (1-3 people), whose input amounted to 86 person-months, and seven other staff who contributed 10-20 person-months each (change process consultants, a paediatrician, researcher, midwife, dentist, and a statistician). Salut staff salaries and the costs of travel, materials (e.g. manuals, training materials, questionnaires and information leaflets), rent of venues and refreshments were extracted from the accounting system.

The opportunity cost associated with learning seminars was estimated by multiplying the number of attendees in each seminar by daily pay (assuming 8 hours per seminar). Table D1 describes the average hourly pay of professionals and total seminar attendance over 2005-2007. Speakers external to the Salut Programme staff who did not receive financial compensation for their efforts are also included here. Not all seminars were relevant for all professionals, e.g. midwives only attended seminars related to the unborn child. Where the number of attendees was missing, we used the median number of attendees per type of seminar and staff category. Average hourly pay was estimated for each staff category for the years 2005, 2006 and 2007 using average monthly pay for the sex and age group of the average participant from Statistics Sweden [32] to which social security contributions were added [33]. The total time contribution was estimated to equal 2464 hours or approximately 10 person-months.

**Table C1** Professionals' seminar attendance and unit costs

Staff category	Hourly pay (INT\$)	Total seminar attendance (hours)	Number of attendees (median, per seminar)
Midwife	22	312	4
Child health nurse	27	712	12
Dental hygienist / dental nurse	25	848	5.5
Pre-school teacher	44	200	3
Manager (child health care)	23	192	3
External speakers	29	200	1

Table C2 specifies the allocation rules applied to Salut Programme costs identified in the accounting data. Decision rules by calendar year was the most feasible way to separate between start-up up and intervention costs on the one hand, and between the Salut activities evaluated in this study and other activities on the other hand, because appropriate staff time use information was not available. Start-up costs were annualised over 10 years assuming straight-line depreciation. An equivalent of 4.5 years of annualised start-up costs were included in the total intervention cost, corresponding to the implementation period under study (January 2006-June 2010). In parallel to implementation of the Programme, interventions for older children were being developed. From 2008, Salut staff was preparing to scale up the intervention to the rest of the county.

**Table C2** Joint cost allocation rules (%) and division of Salut Programme costs between start-up and implementation

Year	Salut Programme (%)	Interventions for older children (%)	Scale-up of the Salut Programme (%)
2005	100 (start-up)	0	0
2006	60 (of which 1/2 start-up, 1/2 implementation)	40	0
2007	50 (of which 1/3 start-up)	50	0
2008	30 (implementation)	30	40
2009	10 (implementation)	10	80
2010 <sup>a</sup>	10 (implementation)	10	80

<sup>a</sup> First six months.

**Table C3** Unit costs used in costing analysis, healthcare and other societal costs

Costs	Unit costs (2013 INT\$)	Source
<b>Healthcare costs</b>		
Average cost of delivery <sup>a</sup>		Swedish Association of Local Authorities and Regions [2]
Vaginal delivery	5 414	
Caesarean section	8 460	
Average cost mother's inpatient care (per day) <sup>b</sup>	4 119	Swedish Association of Local Authorities and Regions [2]
Average cost child's inpatient care (per day) <sup>c</sup>		Swedish Association of Local Authorities and Regions [2]
<1 year olds	11 610	
1 year olds	5 208	
2 year olds	5 274	
Average cost mother's outpatient care (per visit) <sup>b</sup>	322	Swedish Association of Local Authorities and Regions [2]
Average cost child's outpatient care (per visit) <sup>c</sup>		Swedish Association of Local Authorities and Regions [2]
<1 year olds	312	
1 year olds	333	
2 year olds	335	
<b>Productivity losses</b>		
Mother's average salary (per day) <sup>d</sup>	233	Statistics Sweden [3]

<sup>a</sup> Average cost with and without complications. Each unit cost is weighted by the total number of vaginal deliveries and caesarean sections with or without complications registered in 2013.

<sup>b</sup> Average cost for mothers aged between 18-40 years.

<sup>c</sup> Average cost for males and females in each age group.

<sup>d</sup> Including social charges of 31.42%.



<sup>g</sup> A healthy child according to a paediatrician's examination.

<sup>h</sup> Mother's inpatient care related to delivery.

<sup>i</sup> Early inpatient care for mother and child, respectively, during the first two months after the child's birth, but not related to the delivery.

<sup>j</sup> Cumulative duration of inpatient care for mother and child, respectively, over the child's first two years, excluding care due to delivery complications.

<sup>k</sup> Number of outpatient visits for mother and child, respectively, over the child's first two years, excluding care for the mother due to delivery complications.





**Table D4** Exclusions and final analytical sample sizes in difference-in-difference analyses

		Exclusions due to missingnes s	Eligible for matching	Used for matching	
<b>Health outcomes</b>					
<b><i>Pregnancy, delivery and around the child's birth</i></b>					
Smoking <sup>c</sup> (yes)	Salut <sup>a</sup> pre <sup>b</sup>	135	868	866	
	Salut <sup>a</sup> post <sup>b</sup>	62	826	826	
	Non-Salut <sup>a</sup> pre <sup>b</sup>	629	6 035	5 985	
	Non-Salut <sup>a</sup> post <sup>b</sup>	354	5 705	5 653	
Pregnancy length ( $\geq 37$ weeks)	Salut pre	84	919	916	
	Salut post	34	854	854	
	Non-Salut pre	303	6 361	6 310	
	Non-Salut post	189	5 870	5 820	
Caesarean section (yes)	Salut pre	84	919	916	
	Salut post	34	854	854	
	Non-Salut pre	303	6 361	6 310	
	Non-Salut post	188	5 871	5 821	
Birth weight ( $\geq 2 500$ g)	Salut pre	84	919	916	
	Salut post	35	853	853	
	Non-Salut pre	308	6 356	6 305	
	Non-Salut post	191	5 868	5 818	
Birth length (cm)	Salut pre	88	915	912	
	Salut post	36	852	852	
	Non-Salut pre	328	6 336	6 285	
	Non-Salut post	214	5 845	5 795	
LGA <sup>d</sup> (yes)	Salut pre	118	885	882	
	Salut post	55	833	833	
	Non-Salut pre	486	6 178	6 127	
	Non-Salut post	325	5 734	5 688	
SGA <sup>e</sup> (yes)	Salut pre	118	885	882	
	Salut post	55	833	833	
	Non-Salut pre	486	6 178	6 127	
	Non-Salut post	325	5 734	5 688	
Apgar score <sup>f</sup> ( $\geq 7$ ) at 1 minute	Salut pre	89	914	911	
	Salut post	39	849	849	
	Non-Salut pre	333	6 331	6 280	
	Non-Salut post	219	5 840	5 790	
	at 5 minutes	Salut pre	89	914	911
		Salut post	39	849	849
		Non-Salut pre	335	6 329	6 278
		Non-Salut post	225	5 834	5 784

	at 10	Salut pre	96	907	904
minutes		Salut post	45	843	843
		Non-Salut pre	442	6 222	6 174
		Non-Salut post	322	5 737	5 690
Healthy child <sup>g</sup> (yes)		Salut pre	84	919	912
		Salut post	34	854	854
		Non-Salut pre	303	6 361	6 310
		Non-Salut post	188	5 871	5 821
Mother's inpatient care <sup>h</sup> (yes)		Salut pre	24	979	976
		Salut post	19	869	869
		Non-Salut pre	67	6 597	6 545
		Non-Salut post	67	5 992	5 942
<b><i>During the first two years after the child's birth</i></b>					
Mother with early inpatient care <sup>i</sup> (yes)		Salut pre	24	979	976
		Salut post	19	869	869
		Non-Salut pre	67	6 597	6 545
		Non-Salut post	67	5 992	5 942
Child with early inpatient care <sup>i</sup> (yes)		Salut pre	24	979	976
		Salut post	19	869	869
		Non-Salut pre	67	6 597	6 545
		Non-Salut post	67	5 992	5 942
Mother's inpatient care <sup>j</sup> (days)		Salut pre	24	979	976
		Salut post	19	869	869
		Non-Salut pre	67	6 597	6 545
		Non-Salut post	67	5 992	5 942
Child's inpatient care <sup>j</sup> (days)		Salut pre	24	979	976
		Salut post	19	869	869
		Non-Salut pre	67	6 597	6 545
		Non-Salut post	67	5 992	5 942
Mother's outpatient visits <sup>k</sup>		Salut pre	24	979	976
		Salut post	19	869	869
		Non-Salut pre	67	6 597	6 545
		Non-Salut post	67	5 992	5 942
Child's outpatient visits <sup>k</sup>		Salut pre	24	979	976
		Salut post	19	869	869
		Non-Salut pre	67	6 597	6 545
		Non-Salut post	67	5 992	5 942

<sup>a</sup> Salut area – Geographical area in Västerbotten county where the Salut Programme was implemented from 2006 and onwards; non-Salut area – remaining part of Västerbotten county.

<sup>b</sup> Premeasure period 2002-2004; postmeasure period 2006-2008.

<sup>c</sup> Smoking status at first antenatal visit, around pregnancy week 12.

<sup>d</sup> Large for gestational age (LGA) –  $\geq 2$  SD above the reference population's mean weight.

<sup>e</sup> Small for gestational age (SGA) –  $\leq 2$  SD below the reference population's mean weight.

<sup>f</sup> A measure of the newborn's physical condition 1, 5 and 10 minutes after birth, range 0-10 points.

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<sup>g</sup> A healthy child according to a paediatrician's examination.

<sup>h</sup> Mother's inpatient care related to delivery.

<sup>i</sup> Early inpatient care for mother and child, respectively, during the first two months after the child's birth, but not related to the delivery.

<sup>j</sup> Cumulative duration of inpatient care for mother and child, respectively, over the child's first two years, excluding care due to delivery complications.

<sup>k</sup> Number of outpatient visits for mother and child, respectively, over the child's first two years, excluding care for the mother due to delivery complications.



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<sup>i</sup> Early inpatient care for mother and child, respectively, during the first two months after the child's birth but not related to the delivery.

<sup>j</sup> Cumulative duration of inpatient care for mother and child, respectively, over the child's first two years, excluding care due to delivery complications.

<sup>k</sup> Number of outpatient visits for mother and child, respectively, over the child's first two years, excluding care for the mother due to delivery complications.

\*Statistically significant effect at the  $\alpha=0.05$  level after a Bonferroni correction for multiple comparisons, i.e. with the 38 outcome variables this implies a significance threshold of  $0.05/38=0.001$ .

\*\*Statistically significant effect at the  $\alpha=0.01$  level after a Bonferroni correction for multiple comparisons, i.e. with the 38 outcome variables this implies a significance threshold of  $0.01/38=0.00026$ .

**Table D6** Exclusions and final analytical sample sizes in the longitudinal subsample analyses

		Exclusions due to missingness	Eligible for matching	Used for matching	No matches found
<b>Health outcomes</b>					
<b><i>Pregnancy, delivery and around the child's birth</i></b>					
Smoking <sup>c</sup> (yes)	Salut <sup>a</sup>	36	111	111	0
	Non-Salut <sup>a</sup>	148	1 101	963	
Pregnancy length ( $\geq 37$ weeks)	Salut	24	123	123	0
	Non-Salut	72	1 177	957	
Caesarean section (yes)	Salut	24	123	123	0
	Non-Salut	72	1 177	967	
Birth weight ( $\geq 2 500$ g)	Salut	25	122	121	1
	Non-Salut	72	1 177	984	
Birth length (cm)	Salut	25	122	121	1
	Non-Salut	79	1 170	439	
LGA <sup>d</sup> (yes)	Salut	28	119	119	0
	Non-Salut	91	1 158	965	
SGA <sup>e</sup> (yes)	Salut	28	119	117	2
	Non-Salut	91	1 158	971	
Apgar score <sup>f</sup> ( $\geq 7$ ) at 1 minute	Salut	26	121	120	1
	Non-Salut	81	1 168	957	
at 5 minutes	Salut	26	121	120	1
	Non-Salut	82	1 167	1 048	
at 10 minutes	Salut	28	119	118	1
	Non-Salut	127	1 122	1 017	
Healthy child <sup>g</sup> (yes)	Salut	24	123	123	0
	Non-Salut	72	1 177	911	
Mother's inpatient care <sup>h</sup> (yes)	Salut	5	142	137	5
	Non-Salut	7	1 242	605	
<b><i>During the first two years after the child's birth</i></b>					
Mother with early inpatient care <sup>i</sup> (yes)	Salut	5	142	142	0
	Non-Salut	7	1 242	1 135	
Child with early inpatient care <sup>i</sup> (yes)	Salut	5	142	142	0
	Non-Salut	7	1 242	1 104	
Mother's inpatient care <sup>j</sup> (days)	Salut	5	142	141	1
	Non-Salut	7	1 242	1 081	
Child's inpatient care <sup>j</sup> (days)	Salut	5	142	141	1
	Non-Salut	7	1 242	972	
Mother's outpatient visits <sup>k</sup>	Salut	5	142	142	0
	Non-Salut	7	1 242	1 145	
Child's outpatient visits <sup>k</sup>	Salut	5	142	142	0
	Non-Salut	7	1 242	1 076	

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- <sup>a</sup> Salut area – Geographical area in Västerbotten county where the Salut Programme was implemented from 2006 and onwards; non-Salut area – remaining part of Västerbotten county.
- <sup>b</sup> Premeasure period 2002-2004; postmeasure period 2006-2008.
- <sup>c</sup> Smoking status at first antenatal visit, around pregnancy week 12.
- <sup>d</sup> Large for gestational age (LGA) –  $\geq 2$  SD above the reference population's mean weight.
- <sup>e</sup> Small for gestational age (SGA) –  $\leq 2$  SD below the reference population's mean weight.
- <sup>f</sup> A measure of the new-borns physical condition 1, 5 and 10 minutes after birth, range 0-10 points.
- <sup>g</sup> A healthy child according to a paediatrician's examination.
- <sup>h</sup> Mother's inpatient care related to delivery.
- <sup>i</sup> Early inpatient care for mother and child, respectively, during the first two months after the child's birth but not related to the delivery.
- <sup>j</sup> Cumulative duration of inpatient care for mother and child, respectively, over the child's first two years, excluding care due to delivery complications.
- <sup>k</sup> Number of outpatient visits for mother and child, respectively, over the child's first two years, excluding care for the mother due to delivery complications.
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## Appendix E Healthcare and other societal costs

**Table E1** Mean healthcare costs and productivity losses for the total sample (2013 INT\$)

	Salut <sup>a</sup>	Salut	Non-Salut <sup>a</sup>	Non-Salut	Salut post vs. Salut pre <sup>c</sup>	Non- Salut post vs. Non-Salut pre <sup>d</sup>
	pre <sup>b</sup>	post <sup>b</sup>	pre	post		
Children, n	1 003	888	6 664	6 059		
<b>Healthcare costs</b>						
<i>Pregnancy, delivery and around the child's birth</i>						
Delivery <sup>f</sup>	51 443 (9 769)	51 849 (10 128)	51 342 (9 671)	51 414 (9 738)	406 (458) p=0.39	72 (172) p=0.68
<i>During the first two years after the child's birth</i>						
Mother's inpatient care	13 581 (74 369)	16 381 (114 098)	179 178 (186 633)	15 925 (158 752)	2 800 (4 383) p=0.54	-1 993 (3 087) p=0.53
Child's inpatient care	178 499 (1 250 316)	131 243 (714 282)	137 163 (777 528)	120 308 (904 385)	-47 256 (47 636) p=0.36	-16 855 (14 917) p=0.26
Mother's outpatient visits	30 (287)	34 (304)	37 (364)	36 (317)	4 (14) p=0.80	-1 (6) p=0.81
Child's outpatient visits	85 (509)	160 (1 219)	100 (619)	139 (1 964)	74 (42) p=0.05	38 (25) p=0.08
<b>Total healthcare costs</b>	<b>243 639</b> <b>(1 256 313)</b>	<b>199 667</b> <b>(725 027)</b>	<b>206 561</b> <b>(817 517)</b>	<b>187 822</b> <b>(919 472)</b>	<b>-43 972</b> <b>(47 975)</b> <b>p=0.41</b>	<b>-18 739</b> <b>(15 400)</b> <b>p=0.23</b>
<b>Productivity losses</b>						
<i>During the second year after the child's birth</i>						
Mother's inpatient care	493 (3 513)	422 (4 054)	485 (6 818)	475 (6 197)	-72 (174) p=0.69	-10 (116) p=0.93
Mother's outpatient visits	12 (152)	16 (174)	12 (158)	13 (160)	4 (8) p=0.78	1 (3) p=0.83
<b>Total productivity losses</b>	<b>505</b> <b>(3 538)</b>	<b>437</b> <b>(4 063)</b>	<b>497</b> <b>(6 843)</b>	<b>488</b> <b>(6 210)</b>	<b>-68</b> <b>(175)</b> <b>p=0.70</b>	<b>-9</b> <b>(116)</b> <b>p=0.94</b>
<b>Total healthcare costs and productivity losses</b>	<b>244 144</b> <b>(1 256 656)</b>	<b>200 104</b> <b>(725 624)</b>	<b>207 058</b> <b>(819 261)</b>	<b>188 310</b> <b>(920 400)</b>	<b>-44 040</b> <b>(47 994)</b> <b>p=0.41</b>	<b>-18 748</b> <b>(15 424)</b> <b>p=0.22</b>

<sup>a</sup> Salut area – Geographical area in Västerbotten county where the Salut Programme was implemented from 2006 and onwards; non-Salut area – remaining part of Västerbotten county.

<sup>b</sup> Premeasure period – 2002-2004; postmeasure period – 2006-2008.

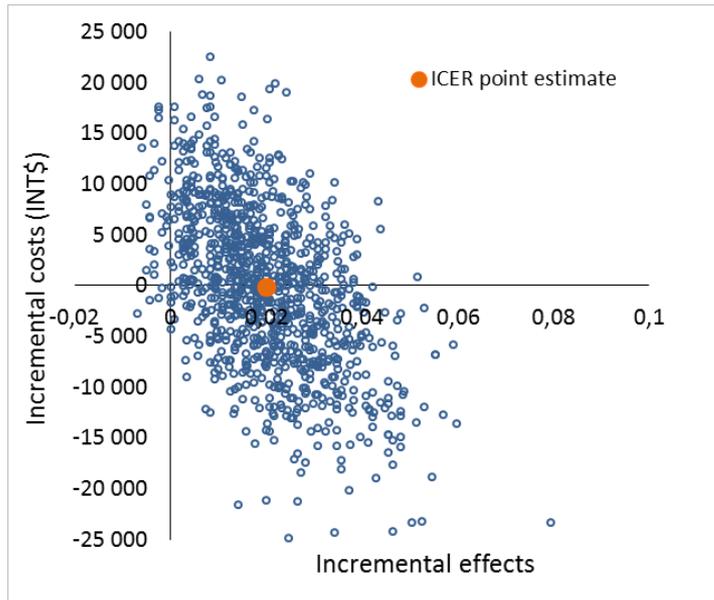
<sup>c</sup> P-values are based on permutation tests of the difference in means between Salut post and Salut pre.

<sup>d</sup> P-values are based on permutation tests of the difference in means between non-Salut post and non-Salut pre.

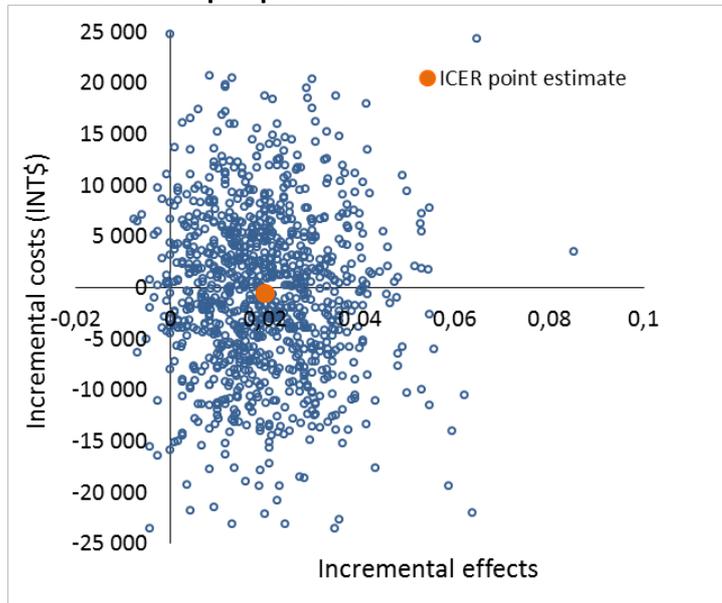
<sup>e</sup> P-values are based on permutation tests of the difference in means between Salut and non-Salut over time, i.e. the difference in means between non-Salut post and non-Salut pre subtracted from the difference in means between Salut post and Salut pre.

<sup>f</sup> For the 476 births with missing info on delivery type, the cost for Ceasarean section was imputed with probability 0.17 and with probability 0.83 the cost for vaginal delivery was imputed.

### Healthcare perspective

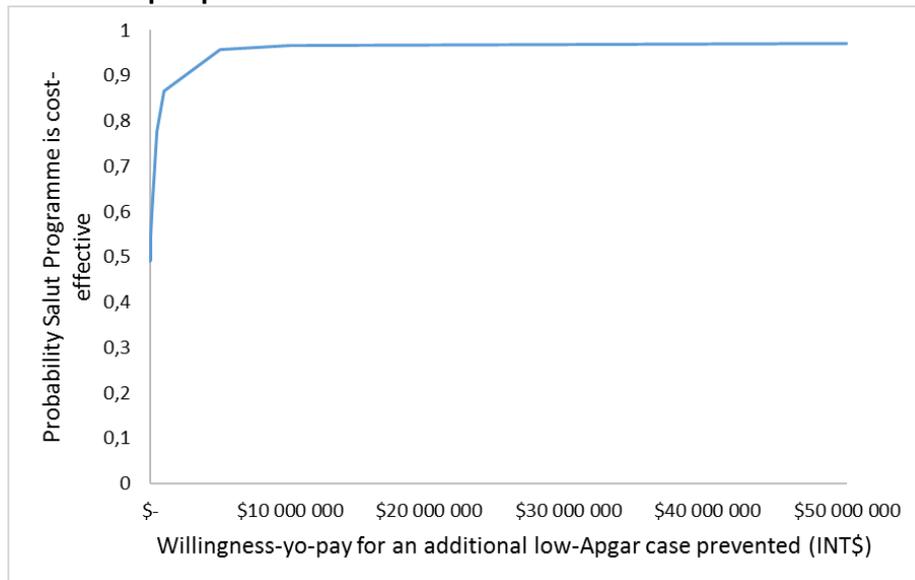


### Limited societal perspective

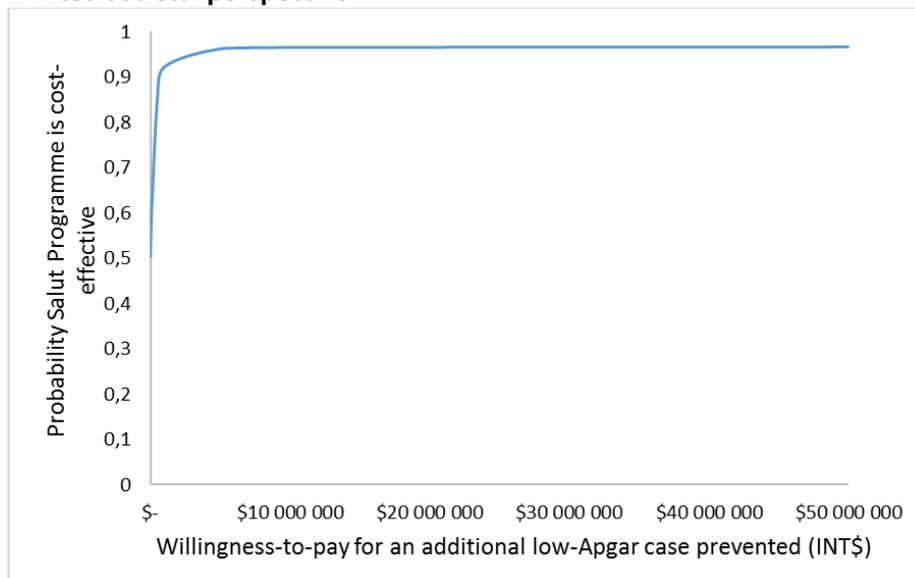


**Figure E1.** Cost-effectiveness planes for the healthcare and limited societal perspectives. The horizontal axis divides the plane according to incremental effect, and the vertical axis according to incremental cost, which divides the plane into four different quadrants. Each quadrant has a different implication for the cost-effectiveness decision. Iterations falling on the north-east quadrant are those where the intervention is more effective and more costly than the comparator; those on the south-east quadrant are more effective and less costly; those on the south-west quadrant are less effective and less costly; and those on the north-west quadrant are more costly and less effective.

### Healthcare perspective



### Limited societal perspective



**Figure E2.** Cost-effectiveness acceptability curve (CEAC) for the healthcare and limited societal perspectives. The CEAC shows the probability that the Salut Programme is cost-effective compared to care-as-usual, subject to a range of possible maximum values that a decision-maker would be willing to pay for an additional low-Apgar case prevented.

## References

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