

Risk Ratio (SMRs) Paediatric open heart operations (excl. transplants) Units, Under 5s, 2006/12

Report date: 24/10/2012 16:05:20

Criteria Selection Summary

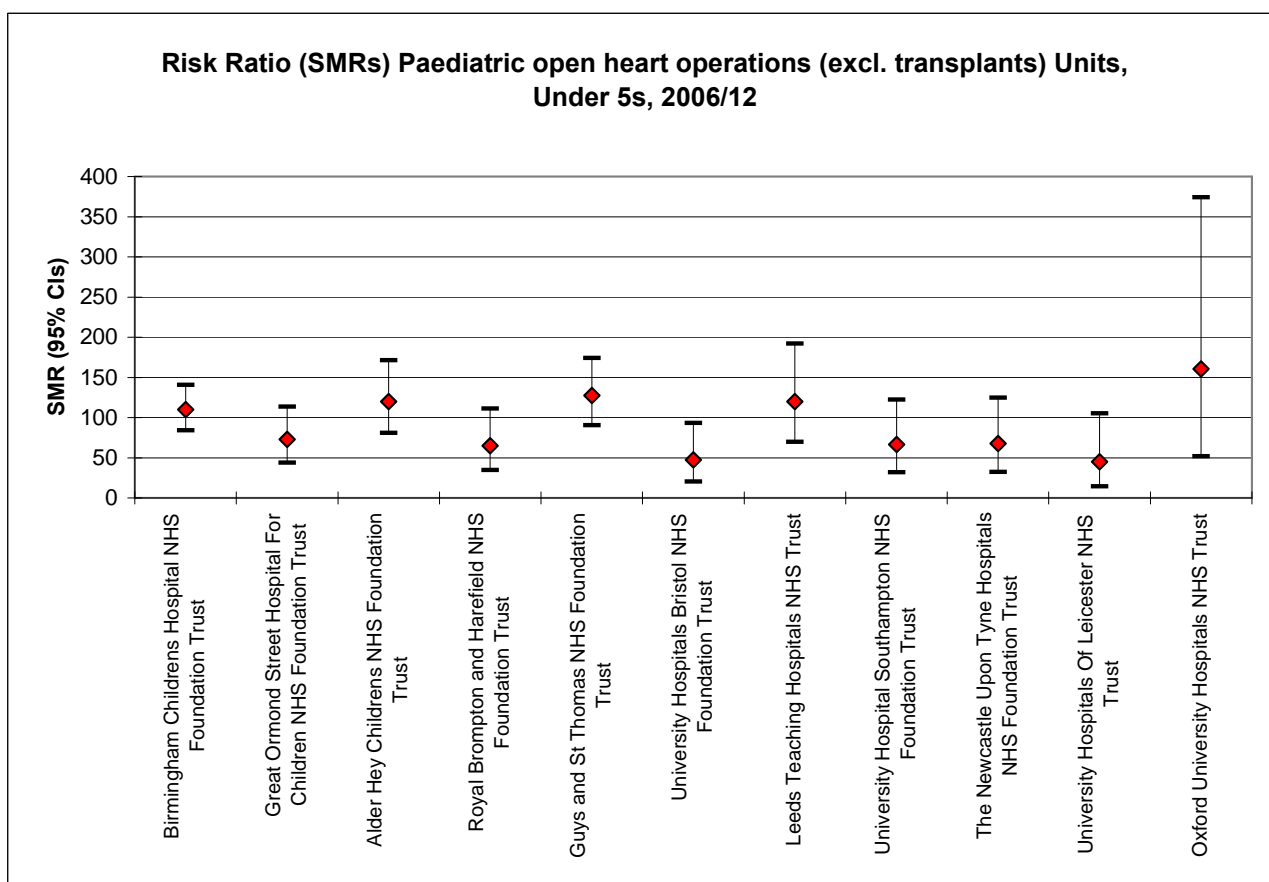
Basket: Procedures - Monitored for Mortality, LOS & Readmission, Data Year Outcome: Mortality in-hosp 30 days

Chapter: Heart Procedure Group: Paediatric open heart operations (excl. transplant... Department: All Team: All

Admission Type: All Sex: All Deprivation: All Age Range: 0-4

Spells: 9762 Superspells: 9747 (9737 / 10) First / Last: Apr-06 / Mar-12 Deaths: 218 (2.2%) Expected: 233.8 (2.4%) Relative Risk: 93.2 (81.3 - 106.5) C-Statistic: 0.8 (Average) LoS: 17.9 / 18.1

	Spells	Superspells	Deaths	Expected	RR	Low	High
Birmingham Childrens Hospital NHS Foundation	1560	1555	62	56.5	109.8	84.2	140.8
Great Ormond Street Hospital For Children NHS	1316	1313	19	26.1	72.8	43.8	113.7
Alder Hey Childrens NHS Foundation Trust	1162	1162	30	25	119.9	80.9	171.2
Royal Brompton and Harefield NHS Foundation	1052	1050	13	20	64.9	34.5	111
Guys and St Thomas NHS Foundation Trust	1019	1016	39	30.6	127.5	90.6	174.3
University Hospitals Bristol NHS Foundation Trust	830	830	8	16.9	47.4	20.4	93.4
Leeds Teaching Hospitals NHS Trust	756	755	17	14.2	119.9	69.8	192
University Hospital Southampton NHS Foundatio	680	680	10	15	66.6	31.9	122.4
The Newcastle Upon Tyne Hospitals NHS Found	595	595	10	14.8	67.7	32.4	124.6
University Hospitals Of Leicester NHS Trust	579	579	5	11.1	45.1	14.5	105.2
Oxford University Hospitals NHS Trust	198	198	5	3.1	160.4	51.7	374.3



Risk Ratio (SMRs) Paediatric open heart operations (excl. transplants) Units, Under 5s, 2008/12 (England=100)

Report date: 24/10/2012 16:07:24

Criteria Selection Summary

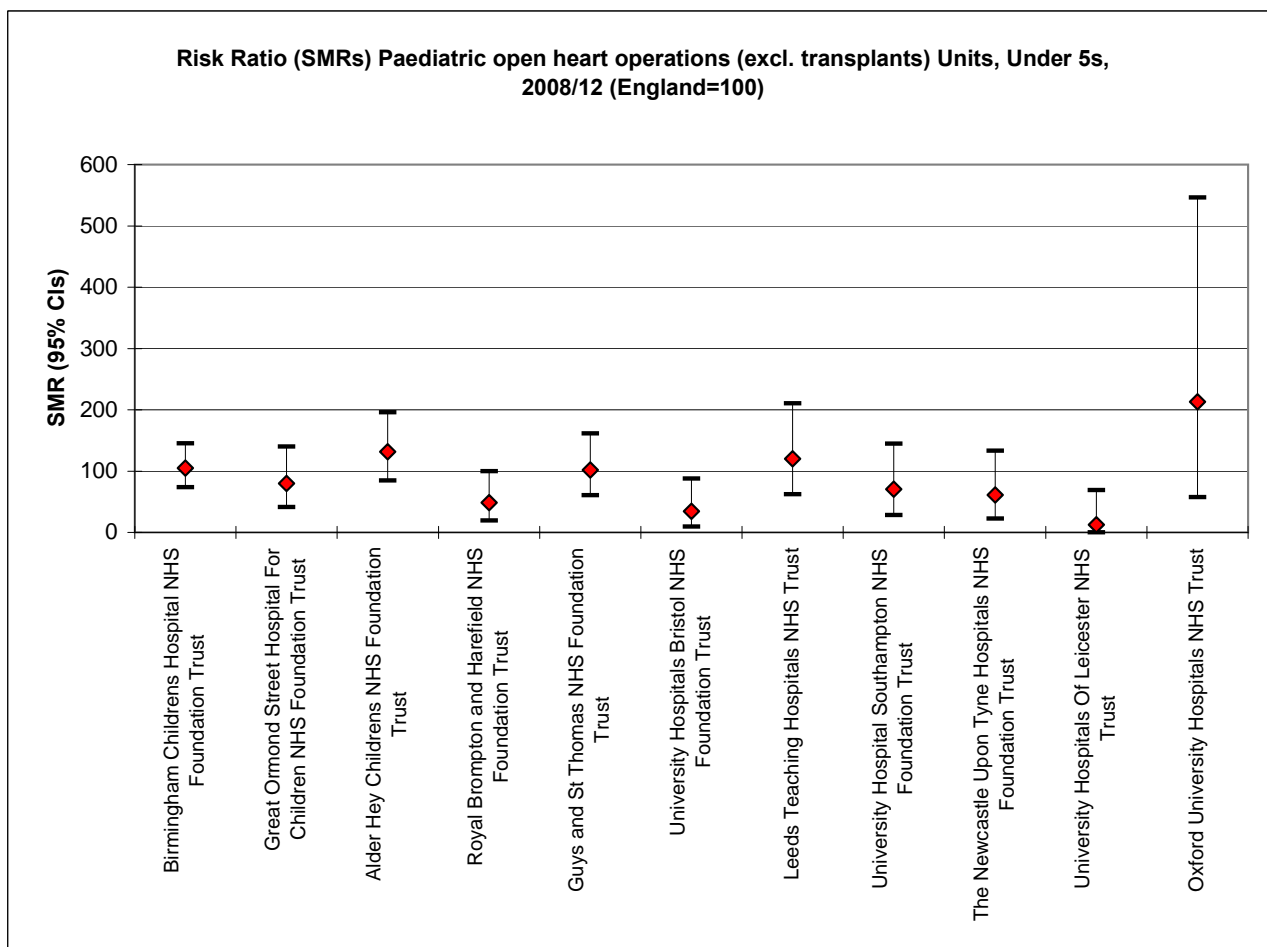
Basket: Procedures - Monitored for Mortality, LOS & Readmission, Data Year Outcome: Mortality in-hosp 30 days

Chapter: Heart Procedure Group: Paediatric open heart operations (excl. transplant... Department: All Team: All

Admission Type: All Sex: All Deprivation: All Age Range: 0-4

Spells: 6554 Superspells: 6548 (6542 / 6) First / Last: Apr-08 / Mar-12 Deaths: 131 (2.0%) Expected: 151.5

	Spells	Superspells	Deaths	Expected	RR	Low	High
Birmingham Childrens Hospital NHS Foundation	1037	1036	36	34.3	104.8	73.4	145.1
Great Ormond Street Hospital For Children NHS	834	833	12	15	80.1	41.3	140
Alder Hey Childrens NHS Foundation Trust	814	814	24	18.2	131.7	84.4	196
Royal Brompton and Harefield NHS Foundation Trust	725	724	7	14.4	48.5	19.4	100
Guys and St Thomas NHS Foundation Trust	655	653	18	17.7	101.9	60.4	161.1
University Hospitals Bristol NHS Foundation Trust	572	572	4	11.7	34.3	9.2	87.9
Leeds Teaching Hospitals NHS Trust	539	539	12	10	120.3	62.1	210.2
University Hospital Southampton NHS Foundation Trust	493	493	7	10	70.3	28.2	144.9
The Newcastle Upon Tyne Hospitals NHS Foundation Trust	399	399	6	9.8	61.2	22.4	133.3
University Hospitals Of Leicester NHS Trust	374	374	1	8.1	12.4	0.2	68.7
Oxford University Hospitals NHS Trust	102	102	4	1.9	213.3	57.4	546.1



Notes regarding the Paediatric Cardiac Surgery methodology used

The procedure groups are based on those used for the Bristol Royal Infirmary Inquiry, 2001 (<http://www.bristol-inquiry.org.uk>) case load during the 1980s. Current caseloads will have changed since then.

The casemix model is based on age, sex, elective/non-elective admission, Carstairs Index of social deprivation, Charlson Index, previous emergency admissions, source of admission and diagnostic subgroup (valves or other). The area under the ROC curve (c-statistic) is 0.80. The CCAD (Central Cardiac Audit Database) data may give a better model and possibly include additional procedures (with additional OPCS procedure codes) and give significant results if analysed for a long enough period to be meaningful. We have applied for, but not yet received, that data.

The data are for children under 5, paediatric open heart operations (excluding transplants), from April 2006 and April 2008 up to the end of the latest full financial year, i.e. up to end March 2012.

The procedure group is adjusted by two sub-groups, based on diagnoses (the first being "with aortic or mitral valve malformations" and the second "with other diagnoses"). The OPCS codes are below:

K04-K12, K14, K171-7, K18-K20, K27-K31, K33, K342-9, K36, K37, K53, L01, L051, L061-2, L091, L098-9, L10, L123-9 (Age<19)		With aortic or mitral valve malformations
K04-K12, K14, K171-7, K18-K20, K27-K31, K33, K342-9, K36, K37, K53, L01, L051, L061-2, L091, L098-9, L10, L123-9 (Age<19)		With other diagnoses

Brian Jarman, 24 October 2012