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SUPPLEMENTARY ONLINE FILES

Supplementary Table S1: Characteristics of children in the dataset by ethnic group (n=5350)

Ethnic Group	White	British Asian	Black British	All Other	Ethnicity not stated
	N=3968	**N=604**	**N=240**	**N=320**	**N=218**
	N; % (95% CI)	**N;** % (95% CI)	**N;** % (95% CI)	**N;** % (95% CI)	**N;** % (95% CI)
INDIVIDUAL CHARACTERISTICS					
Male (n=2940)*	**2207;** 55.6 (54.0, 57.1)	**332;** 55.0 (50.9, 59.0)	**113;** 47.1 (40.9, 53.4)	**166;** 51.9 (46.4, 57.3)	**122;** 56.0 (49.3, 62.4)
Preterm (n=534)*	**391;** 9.9 (9.0, 10.8)	**64;** 10.6 (8.4, 13.3)	**25;** 10.4 (7.2, 14.9)	**35;** 10.9 (8.0, 14.8)	**19;** 8.7 (5.7, 13.2)
NON-CARDIAC CLINICAL DIAGNOSES					
Non-cardiac congenital anomalies (n=1125)	**823;** 20.7 (19.5, 22.0)	**132;** 21.9 (18.7, 25.3)	**60;** 25.0 (19.9, 30.8)	**83;** 25.9 (21.4, 31.0)	**27**§**;** 12.4 (8.7, 17.4)
Preoperative acquired comorbidities (n=354)	**253;** 6.4 (5.7, 7.2)	**45;** 7.5 (5.6, 9.8)	**23;** 9.6 (6.5, 14.0)	**24;** 7.5 (5.1, 10.9)	**9**§**;** 4.1 (2.2, 7.7)
Neuro-developmental problems (n=212)	**135;** 3.4 (2.9, 4.0)	**43;** 7.1 (5.3, 9.5)	**14;** 5.8 (3.5, 9.6)	**15;** 4.7 (2.9, 7.6)	**5**§**;** 2.3 (1.0, 5.3)
CARE-RELATED FACTORS					
Antenatally diagnosed (n=1549)*	**1113;** 28.0 (26.7, 29.5)	**178;** 29.5 (26.0, 33.2)	**85;** 35.4 (29.6, 41.7)	**89;** 27.8 (23.2, 33.0)	**84**§**;** 38.5 (32.3, 45.1)
Preoperative clinical deterioration (n=1014)	**732;** 18.4 (17.3, 19.7)	**118;** 19.5 (16.6, 22.9)	**51;** 21.3 (16.5, 26.9)	**72;** 22.5 (18.3, 27.4)	**41**§**;** 18.8 (14.2, 24.5)

Supplementary Table S1 (continued): Characteristics of children in the dataset by ethnic group (n=5350)

Ethnic Group	White	British Asian	Black British	All Other	Ethnicity not stated
	N=3968	**N=604**	**N=240**	**N=320**	**N=218**
	N; % (95% CI)	**N;** % (95% CI)	**N;** % (95% CI)	**N;** % (95% CI)	**N;** % (95% CI)
PRIMARY CARDIAC DIAGNOSIS					
HLH	**231;** 5.8 (*5.1, 6.6)*	**30;** 5.0 (3.4, 7.0)	**22;** 9.2 **(**5.8, 13.5)	**17;** 5.3 (3.1, 8.4)	**16;** 7.3 (4.3, 11.6)
UVH	**193;** 4.9 **(***4.2, 5.6)*	**41;** 6.8 (4.9, 9.1)	**16;** 6.7 (3.9, 10.6)	**11;** 3.4 (1.7, 6.1)	**11;** 5.0 (2.5, 8.8)
CAT	**72;** 1.8 (1.4, 2.3)	**8;** 1.3 (0.6, 2.6)	**<5**	**9;** 2.8 (1.3, 5.3)	**<5**
TGA with VSD	**354;** 8.9 (8.0, 9.9)	**44;** 7.3 (5.3, 9.7)	**11;** 4.6 (2.3, 8.1)	**30;** 9.4 (6.4, 13.1)	**16;** 7.3 (4.3, 11.6)
IAA	**51;** 1.3 (1.0, 1.7)	**5;** 0.8 (0.3, 1.9)	**<5**	**<5**	**<5**
TGA + IVS	**128;** 3.2 (2.7, 3.8)	**27;** 0.4 (3.0, 6.4)	**<5**	**13;** 4.1 (2.2, 6.8)	**8;** 3.7 (1.6, 7.1)
PA + IVS	**104;** 2.6 (2.1, 3.2)	**22;** 3.6 (2.3, 5.5)	**<5**	**6;** 1.9 (0.7, 4.0)	**<5**
PA + VSD	**129;** 3.3 (2.7, 3.9)	**23;** 3.8 (2.4, 5.6)	**9;** 3.7 (1.7, 7.0)	**17;** 5.3 (3.1, 8.4)	**<5**
Misc. primary cardiac diagnoses	**222;** 5.6 (4.9, 6.4)	**33;** 5.5 (3.8, 7.6)	**11;** 4.6 (2.3, 8.1)	**13;** 4.1 (2.2, 6.8)	**8;** 3.7 (1.6, 7.1)
Complete AVSD	**360;** 9.1 (8.2, 10.0)	**36;** 6.0 (4.2, 8.2)	**37;** 15.4 (11.1, 20.6)	**26;** 8.1 (5.4, 11.7)	**20;** 9.2 (5.7, 13.8)
Fallot's tetralogy	**416;** 10.5 (9.5, 11.5)	**80;** 13.2 (10.6, 16.2)	**16;** 6.7 (3.9, 10.6)	**29;** 9.1 (6.2, 12.8)	**20;** 9.2 (5.7, 13.8)
Aortic stenosis	**106;** 2.7 (2.2, 3.2)	**8;** 1.3 (0.6, 2.6)	**<5**	**<5**	**<5**
Abnormal tricuspid valve	**35;** 0.9 (0.7, 1.3)	**5;** 0.8 (0.3, 1.9)	**<5**	**<5**	**<5**
Abnormal mitral valve	**38;** 1.0 (0.7, 1.3)	**7;** 1.2 (0.5, 2.4)	**<5**	**7;** 2.2 (0.9, 4.5)	**<5**
TAPVC	**90;** 2.3 (1.8, 2.8)	**20;** 3.3 (2.0, 5.1)	**5;** 2.1 (0.7, 4.8)	**7;** 2.2 (0.9, 4.5)	**<5**
Aortic arch obstruction	**467;** 11.7 (10.7, 12.8)	**54;** 8.9 (6.8, 11.5)	**19;** 7.9 (4.8, 12.1)	**23;** 7.2 (4.6, 10.6)	**31;** 14.2 (9.9, 19.6)
PS	**143;** 3.6 (3.0, 4.2)	**12;** 2.0 (1.0, 3.4)	**7;** 2.9 (1.2 5.9)	**10;** 3.1 (1.5, 5.7)	**5;** 2.3 (0.7, 5.3)
VSD	**661;** 16.7 (15.5, 17.9)	**111;** 18.4 (15.4, 21.7)	**55;** 22.9 (17.8, 28.7)	**66;** 20.6 (16.3, 25.5)	**40;** 18.3 (13.4, 24.1)
ASD	**40;** 1.0 (0.7, 1.4)	**12;** 2.0 (1.0, 3.4)	**<5**	**12;** 3.7 (2.0, 6.5)	**6;** 2.8 (1.0, 5.9)
PDA	**74;** 1.9 (1.5, 2.3)	**19;** 3.1 (1.9, 4.9)	**6;** 0.2 (0.9, 5.4)	**7;** 2.2 (0.9, 4.5)	**7;** 3.2 (1.3, 6.5)
Misc. congenital terms	**41;** 1.0 (0.7, 1.4)	**<5**	**<5**	**<5**	**6;** 2.8 (1.0, 5.9)

Supplementary Table S1 (continued): Characteristics of children in the dataset by ethnic group (n=5350)

Ethnic Group	White	British Asian	Black British	All Other	Ethnicity not stated
	N; % (95% CI)	**N;** % (95% CI)	**N;** % (95% CI)	**N;** % (95% CI)	**N;** % (95% CI)
SOCIOECONOMIC DEPRIVATION (Index of Multiple Deprivation) QUINTILE †					
N	**N=3718**	**N=592**	**N=238**	**N=312**	**N=202**
1: most deprived	**919;** 24.7 (23.4, 26.1)	**304;** 51.4 (47.3, 55.4)	**127;** 53.4 (47.0, 59.6)	**138;** 44.2 (38.8, 49.8)	**52;** 25.7 (20.2, 32.2)
2	**788;** 21.2 (19.9, 22.5)	**141;** 23.8 (20.6, 27.4)	**68;** 28.6 (23.2, 34.6)	**54;** 17.3 (13.5, 21.9)	**46;** 22.8 (17.5, 29.0)
3	**694;** 8.7 (17.4, 20.0)	**73;** 12.3 (9.9, 15.2)	**26;** 10.9 (7.6, 15.5)	**53;** 17.0 (13.2, 21.5)	**37;** 18.3 (13.6, 24.2)
4	**641;** 17.2 (16.1, 18.5)	**49;** 8.3 (6.3, 10.8)	**10;** 4.2 (2.3, 7.6)	**39;** 12.5 (9.3, 16.6)	**30;** 14.9 (10.6, 20.4)
5: least deprived	**676;** 18.2 (17.0, 19.5)	**25;** 4.2 (2.9, 6.2)	**7;** 2.9 (1.4, 5.9)	**28;** 9.0 (6.3, 12.7)	**37;** 18.3 (13.6, 24.2)
WEIGHT Z-SCORE AT INDEX PROCEDURE‡					
N	**N=3592**	**N=512**	**N=214**	**N=281**	**N=192**
> -2SD	**2088;** 58.1 (56.5, 59.7)	**275;** 53.7 (49.4, 58.0)	**106;** 49.5 (42.9, 56.2)	**150;** 53.4 (47.5, 59.1)	**115;** 59.9 (52.8, 66.6)
-2 to -4SD	**1198;** 33.4 (31.8, 34.9)	**192;** 37.5 (33.4, 41.8)	**88;** 41.1 (34.7, 47.8)	**103;** 36.7 (31.2, 42.4)	**60;** 31.3 (25.1, 38.1)
< -4SD	**306;** 8.5 (7.6, 9.5)	**45;** 8.8 (6.6, 11.6)	**20;** 9.3 (6.1, 14.0)	**28;** 10.0 (7.0, 14.0)	**17;** 8.9 (5.6, 13.7)
AGE CATEGORIES AT INDEX PROCEDURE					
N	**N=3968**	**N=604**	**N=240**	**N=320**	**N=218**
> 3 months	**1632;** 41.1 (39.6, 42.7)	**248;** 41.1 (37.2, 45.0)	**121;** 50.4 (44.1, 56.7)	**131;** 40.9 (35.7, 46.4)	**77;** 35.3 (29.3, 41.9)
1-2 months	**717;** 18.1 (16.9, 19.3)	**100;** 16.6 (13.8, 19.7)	**39;** 16.2 (12.1, 21.4)	**75;** 23.4 (19.1, 28.4)	**39;** 17.9 (13.4, 23.5)
10-30 days	**582;** 14.7 (13.6, 15.8)	**108;** 17.9 (15.0, 21.1)	**25;** 10.4 (7.2, 14.9)	**38;** 11.9 (8.8, 15.9)	**36;** 16.5 (12.2, 22.0)
<10 days	**1037;** 26.1 (24.8, 27.5)	**148;** 24.5 **(**21.2, 28.1)	**55;** 22.9 (18.1, 28.6)	**76;** 23.8 (19.4, 28.7)	**66;** 30.3 (24.6, 36.7)

Notes: 95%CI=95% confidence intervals using binomial exact method;
*missing data: sex (n=2), gestation (n= 1681), antenatal diagnosis (n=278);
† excludes 288 children with no IMD data (250 White, 22 Asian/Black/Other, 16 no stated ethnicity);
‡ excludes 559 children without weight z-score (376 White, 92 British Asian, 26 Black British, 39 Other, 26 no recorded ethnicity);

Misc. (miscellaneous) primary cardiac diagnoses are a group of very rare but severe primary diagnoses; **Misc. (miscellaneous) congenital terms** comprise structural cardiac defects of varying severity, that are not recognized as distinct primary diagnoses. **Isolated subaortic stenosis** and **aortic regurgitation** are not shown as there were ≤10 children per subgroup.

Abbreviations: HLH=hypoplastic left heart; **UVH**=functionally univentricular heart; **CAT**=common arterial trunk; **TGA**=transposition of the great arteries; **IVS** intact ventricular septum; **DORV**=double outlet right ventricle; **PA**=pulmonary atresia; **AVSD**=atrioventricular septal defect; **TAPVC**= totally anomalous pulmonary venous connection; **PS**=pulmonary stenosis; **VSD**=ventricular septal defect; **ASD**=atrial septal defect; **PDA**=persistent ductus arteriosus;

Supplementary Table S2: Mortality risk during the first year of life (univariable)

	Primary outcome		***Secondary outcomes: mortality during/after index hospital admission***					
	Died within 1 year of birth		*Died in-hospital (index admission)*		*Died (unexpected death)*		*Died (during planned hospital readmission)*	
	RR	*95%CI*	**RR**	*95%CI*	**RR**	*95%CI*	**RR**	*95%CI*
Ethnic group (ref: White; missing n=218)								
British Asian	**1.65**	***(1.29, 2.10)***	**1.60**	***(1.11, 2.29)***	1.54	*(0.97, 2.43)*	**2.01**	***(1.14, 3.56)***
Black British	1.44	*(0.98, 2.12)*	1.61	*(0.94, 2.74)*	1.23	*(0.58, 2.62)*	1.35	*(0.49, 3.71)*
All Other (Chinese, Mixed, Other)	**1.73**	***(1.27, 2.36)***	**1.72**	***(1.09, 2.71)***	**1.85**	***(1.07, 3.20)***	1.52	*(0.66, 3.52)*
Sex (ref: boys; missing n=2)								
Girls	1.01	*(0.84, 1.20)*	1.07	*(0.83, 1.38)*	0.95	*(0.69, 1.31)*	0.94	*(0.60, 1.47)*
Deprivation (ref: quintile 5 = least deprived; missing n=288)								
Quintile 4	1.21	*(0.86, 1.72)*	1.01	*(0.61, 1.67)*	1.41	*(0.73, 2.71)*	1.56	*(0.68, 3.59)*
Quintile 3	0.99	*(0.69, 1.42)*	0.88	*(0.53, 1.45)*	1.40	*(0.74, 2.65)*	0.68	*(0.25, 1.82)*
Quintile 2	**1.54**	***(1.13, 2.11)***	**1.58**	***(1.03, 2.42)***	1.50	*(0.82, 2.76)*	1.49	*(0.68, 3.27)*
Quintile 1	1.30	*(0.96, 1.76)*	1.18	*(0.77, 1.80)*	1.51	*(0.84, 2.68)*	1.34	*(0.63, 2.87)*
Birth gestation (ref: term birth ≥37 completed weeks gestation; missing n=1681)								
Preterm (< 37 weeks)	1.33	*(0.94, 1.90)*	*Too few events*		**1.51**	***(0.98, 2.33)***	1.02	*(0.53, 2.00)*
Prenatal diagnosis (ref: not prenatally diagnosed; missing n=278)								
Prenatal diagnosis	**2.85**	***(2.37, 3.42)***	**3.27**	***(2.50, 4.27)***	**1.91**	***(1.37, 2.66)***	**4.11**	***(2.56, 6.61)***
Non-cardiac comorbidities and procedure-related clinical status (ref: no comorbidities; nil missing)								
Congenital anomalies	**1.56**	***(1.29, 1.90)***	1.23	*(0.92, 1.65)*	**1.96**	***(1.40, 2.74)***	**1.95**	***(1.22, 3.12)***
Acquired comorbidities	**1.65**	***(1.24, 2.19)***	**1.59**	***(1.05, 2.42)***	**1.98**	***(1.23, 3.21)***	1.21	*(0.53, 2.77)*
Neurodevelopment problem	**1.55**	***(1.08, 2.23)***	0.66	*(0.30, 1.46)*	**1.97**	***(1.08, 3.59)***	**3.67**	***(1.92, 7.04)***
Pre-procedure deterioration	**1.78**	***(1.47, 2.16)***	**1.64**	***(1.24, 2.18)***	**2.09**	***(1.49, 2.94)***	1.63	*(0.99, 2.69)*
Admission for first intervention (per 1 unit increase; weight z-score missing n=559)								
Age (per week)	**0.94**	***(0.93, 0.95)***	**0.95**	***(0.94, 0.97)***	**0.93**	***(0.91, 0.95)***	**0.91**	***(0.89, 0.94)***
Weight z-score	1.07	*(0.99, 1.16)*	*Too few events*		1.04	*(0.94, 1.15)*	1.13	*(0.98, 1.30)*

Supplementary Table S2 (continued): Mortality risk during the first year of life (univariable)

Primary cardiac diagnosis (ref: VSD = ventricular septal defect; nil missing)												
Hypoplastic left heart	**10.49**	***(7.09,***	***15.51)***	**14.76**	***(7.58,***	***28.76)***	**6.33**	***(3.40,***	***11.78)***	**13.58**	***(5.21,***	***35.42)***
Functionally univentricular heart	**7.45**	***(4.90,***	***11.32)***	**10.29**	***(5.10,***	***22.78)***	**4.16**	***(2.08,***	***8.34)***	**10.98**	***(4.06,***	***29.69)***
Common arterial trunk	**4.74**	***(2.60,***	***8.66)***	**9.82**	***(4.19,***	***22.99)***	1.40	*(0.32,*	*6.08)*	3.93	*(0.77,*	*19.98)*
TGA with VSD/DORV	1.41	*(0.81,*	*2.47)*	**2.46**	***(1.07,***	***5.65)***	0.73	*(0.27,*	*2.02)*	1.23	*(0.30,*	*5.13)*
Interrupted aortic arch	**4.45**	***(2.20,***	***9.01)***	**10.05**	***(3.95,***	***25.53)***	2.05	*(0.48,*	*8.83)*	*Too few events*		
TGA with intact ventricular septum	1.25	*(0.56,*	*2.81)*	1.04	*(0.23,*	*4.69)*	1.85	*(0.68,*	*5.08)*	*Too few events*		
Pulmonary atresia + IVS	**5.55**	***(3.33,***	***9.26)***	**1.07**	***(4.61,***	***21.96)***	**3.84**	***(1.64,***	***8.97)***	1.34	*(0.16,*	*11.41)*
Pulmonary atresia + VSD	**4.07**	***(2.41,***	***6.86)***	**8.20**	***(3.78,***	***17.78)***	**2.56**	***(1.05,***	***6.26)***	*Too few events*		
Miscellaneous primary cardiac diagnoses	**2.58**	***(1.52,***	***4.38)***	**3.25**	***(1.37,***	***7.73)***	1.63	*(0.66,*	*3.99)*	**3.90**	***(1.20,***	***12.69)***
Complete AVSD	**2.22**	***(1.36,***	***3.61)***	**2.53**	***(1.12,***	***5.73)***	**2.09**	***(1.02,***	***4.29)***	1.95	*(0.57,*	*6.70)*
Fallot's tetralogy/ DORV	1.09	*(0.62,*	*1.92)*	2.16	*(0.95,*	*4.90)*	0.48	*(0.16,*	*1.44)*	0.66	*(0.13,*	*3.42)*
Aortic valve stenosis	**5.01**	***(2.90,***	***8.66)***	**8.41**	***(3.65,***	***19.39)***	2.18	*(0.73,*	*6.53)*	**6.12**	***(1.67,***	***22.48)***
Tricuspid valve abnormality	**4.11**	***(1.79,***	***9.41)***	**7.94**	***(2.59,***	***24.38)***	2.84	*(0.66,*	*12.12)*	*Too few events*		
Mitral valve abnormality	**4.91**	***(2.44,***	***9.88)***	**7.91**	***(2.79,***	***22.39)***	**3.39**	***(1.00,***	***11.46)***	3.16	*(0.38,*	*26.64)*
Totally Anomalous Pulmonary Venous Connection	1.29	*(0.51,*	*3.26)*	0.75	*(0.10,*	*5.78)*	1.07	*(0.25,*	*4.64)*	2.99	*(0.59,*	*15.23)*
Aortic arch obstruction	1.30	*(0.76,*	*2.21)*	1.41	*(0.58,*	*3.46)*	1.35	*(0.63,*	*2.89)*	0.94	*(0.23,*	*3.93)*
Pulmonary stenosis	0.55	*(0.17,*	*1.77)*	1.05	*(0.23,*	*4.77)*	*Too few events*			1.05	*(0.12,*	*8.97)*
Subaortic stenosis	*Too few events*			*Too few events*			*Too few events*			*Too few events*		
Aortic regurgitation	*Too few events*			*Too few events*			*Too few events*			*Too few events*		
ASD	**3.04**	***(1.38,***	***6.71)***	**6.30**	***(2.21,***	***17.96)***	1.80	*(0.42,*	*7.78)*	*Too few events*		
PDA	1.71	*(0.72,*	*4.03)*	1.65	*(0.37,*	*7.44)*	1.77	*(0.52,*	*6.06)*	1.65	*(0.19,*	*14.01)*
Miscellaneous congenital terms	1.69	*(0.53,*	*5.39)*	*Too few events*			2.34	*(0.54,*	*10.04)*	3.27	*(0.39,*	*27.56)*

Key: Results from univariable complete-case models. Bold text indicates 95% confidence intervals do not include 1; rates for subaortic stenosis and aortic regurgitation not shown as sample size <10 children; **Abbreviations:** HLH hypoplastic left heart; UVH functionally univentricular heart; PA pulmonary atresia; IVS intact ventricular septum; DORV double outlet right ventricle; VSD ventricular septal defect

Supplementary Table S3. Death during planned readmission (multivariable analysis)

OUTCOME: Unexpected death in the community or after urgent readmission			
	Relative Risk (RR)	95%CI	p-value
Ethnicity (ref: White)			
British Asian	**1.86**	**(1.02, 3.39)**	**0.043**
Black British	1.11	(0.41, 3.03)	0.833
All Other	1.58	(0.68, 3.63)	0.285
Sex (ref: boys)			
Girls	1.03	(0.65, 1.64)	0.890
Area deprivation (IMD) quintile (ref: Quintile 5 = least deprived)			
Quintile 4	1.81	(0.75, 4.36)	0.184
Quintile 3	0.85	(0.31, 2.34)	0.752
Quintile 2	1.37	(0.58, 3.23)	0.471
Quintile 1: most deprived	1.02	(0.45, 2.35)	0.954
Birth gestation (ref: term birth ≥37 weeks gestation)			
Preterm (<37 weeks)	1.04	(0.51, 2.11)	0.917
Prenatal diagnosis (ref: not prenatally diagnosed)			
Prenatal diagnosis	**1.84**	**(1.05, 3.25)**	**0.034**
Non-cardiac comorbidities & procedure-related clinical status (ref: no comorbidities)			
Congenital anomalies	**2.68**	**(1.60, 4.49)**	**<0.001**
Acquired comorbidities	1.04	(0.44, 2.48)	0.924
Neurodevelopmental problems	1.75	(0.90, 3.43)	0.101
Pre-procedure deterioration	1.21	(0.68, 2.18)	0.518
Index admission			
Age (per week increase)	**0.93**	**(0.89, 0.97)**	**<0.001**
Weight z-score	0.92	(0.74, 1.13)	0.405
Primary cardiac diagnoses (ref: VSD)			
Hypoplastic left heart syndrome	**4.61**	**(1.47, 14.51)**	**0.009**
Functionally univentricular heart	**4.41**	**(1.35, 14.45)**	**0.014**
Common arterial trunk	1.51	(0.27, 8.43)	0.642
TGA with VSD/DORV-TGA type	0.66	(0.14, 3.15)	0.606
Interrupted aortic arch	*Too few events*		
TGA + IVS	*Too few events*		
Pulmonary atresia + IVS	0.51	(0.06, 4.45)	0.539
Pulmonary atresia + VSD	*Too few events*		
Miscellaneous primary cardiac diagnoses	2.44	(0.75, 7.91)	0.138
Complete AVSD	1.23	(0.37, 4.16)	0.736
Fallot's tetralogy/ DORV-Fallot type	0.72	(0.15, 3.48)	0.681
Aortic valve stenosis (isolated)	3.89	(0.91, 16.63)	0.067
Tricuspid valve abnormality	*Too few events*		
Mitral valve abnormality	3.32	(0.40, 27.73)	0.268
TAPVC	1.99	(0.38, 10.49)	0.417
Aortic arch obstruction	0.51	(0.12, 2.26)	0.377
Pulmonary stenosis	0.99	(0.12, 8.33)	0.992
ASD	*Too few events*		
PDA	1.43	(0.17, 12.15)	0.745
Miscellaneous congenital terms	*Too few events*		

Key: Results obtained from multivariable Poisson model including 5132 infants and using 20 imputed datasets. TAPVC Totally Anomalous Pulmonary Venous Connection; IVS intact ventricular septum; TGA transposition of the great arteries; DORV double outlet right ventricle; ASD/VSD atrial/ventricular septal defect; AVSD atrioventricular septal defect; PDA persistent ductus arteriosus. Bold text indicates significant result at p<0.05.

Supplementary Table S4. Unexpected death following discharge (multivariable analysis)

OUTCOME: Unexpected death in the community or after urgent readmission			
	Relative Risk (RR)	95%CI	p-value
Ethnicity (ref: White)			
British Asian	1.29	(0.80, 2.10)	0.296
Black British	1.03	(0.49, 2.16)	0.939
All Other	1.63	(0.93, 2.85)	0.086
Sex (ref: boys)			
Girls	0.99	(0.71, 1.38)	0.956
Area deprivation (IMD) quintile (ref: Quintile 5 = least deprived)			
Quintile 4	1.44	(0.73, 2.84)	0.296
Quintile 3	1.60	(0.81, 3.15)	0.173
Quintile 2	1.32	(0.69, 2.53)	0.395
Quintile 1: most deprived	1.37	(0.72, 2.60)	0.335
Birth gestation (ref: term birth ≥37 weeks gestation)			
Preterm (<37 weeks)	1.49	(0.95, 2.32)	0.080
Prenatal diagnosis (ref: not prenatally diagnosed)			
Prenatal diagnosis	1.07	(0.72, 1.59)	0.733
Non-cardiac comorbidities & procedure-related clinical status (ref: no comorbidities)			
Congenital anomalies	**2.00**	**(1.35, 2.98)**	**0.001**
Acquired comorbidities	**1.92**	**(1.16, 3.17)**	**0.011**
Neurodevelopmental problems	1.07	(0.59, 2.00)	0.844
Pre-procedure deterioration	**1.68**	**(1.17, 2.41)**	**0.005**
Index admission			
Age (per week increase)	**0.91**	**(0.88, 0.95)**	**0.001**
Weight z-score	**0.86**	**(0.74, 0.97)**	**0.020**
Primary cardiac diagnoses (ref: VSD)			
Hypoplastic left heart syndrome	**2.57**	**(1.19, 5.57)**	**0.016**
Functionally univentricular heart	1.93	(0.86, 4.33)	0.112
Common arterial trunk	0.61	(0.13, 2.78)	0.525
TGA with VSD/DORV-TGA type	0.39	(0.13, 1.19)	0.098
Interrupted aortic arch	0.71	(0.15, 3.28)	0.657
TGA + IVS	0.91	(0.31, 2.73)	0.870
Pulmonary atresia + IVS	1.74	(0.70, 4.33)	0.232
Pulmonary atresia + VSD	1.34	(0.52, 3.49)	0.543
Miscellaneous primary cardiac diagnoses	0.98	(0.38, 2.48)	0.958
Complete AVSD	1.44	(0.69, 3.06)	0.330
Fallot's tetralogy/ DORV-Fallot type	0.63	(0.21, 1.85)	0.398
Aortic valve stenosis (isolated)	1.28	(0.41, 3.96)	0.670
Tricuspid valve abnormality	1.84	(0.41, 8.20)	0.426
Mitral valve abnormality	2.94	(0.91, 9.53)	0.073
TAPVC	0.49	(0.11, 2.15)	0.345
Aortic arch obstruction	0.69	(0.30, 1.62)	0.397
Pulmonary stenosis	*Too few events*		
ASD	1.89	(0.46, 7.70)	0.375
PDA	1.47	(0.44, 4.93)	0.534
Miscellaneous congenital terms	1.60	(0.37, 6.86)	0.528

Key: Results obtained from multivariable Poisson model including 5132 infants and using 20 imputed datasets. TAPVC Totally Anomalous Pulmonary Venous Connection; IVS intact ventricular septum; TGA transposition of the great arteries; DORV double outlet right ventricle; ASD/VSD atrial/ventricular septal defect; AVSD atrioventricular septal defect; PDA persistent ductus arteriosus. Bold text indicates significant result at $p<0.05$.