

CRM Device Procedures 2019/20: 1-Year Reintervention Rates

Only first implants during 2019/20 have been counted as index procedures.

Each patient has followed for 365 days to determine whether that patient has undergone any further pacemaker or complex device procedure (at the same Hosp. or any other).

Reinterventions have been identified where either NHS No. or [Centre + Hosp. No] recurs (the latter has been included in this year's audit to improve sensitivity).

For each patient, only the first reintervention has been counted.

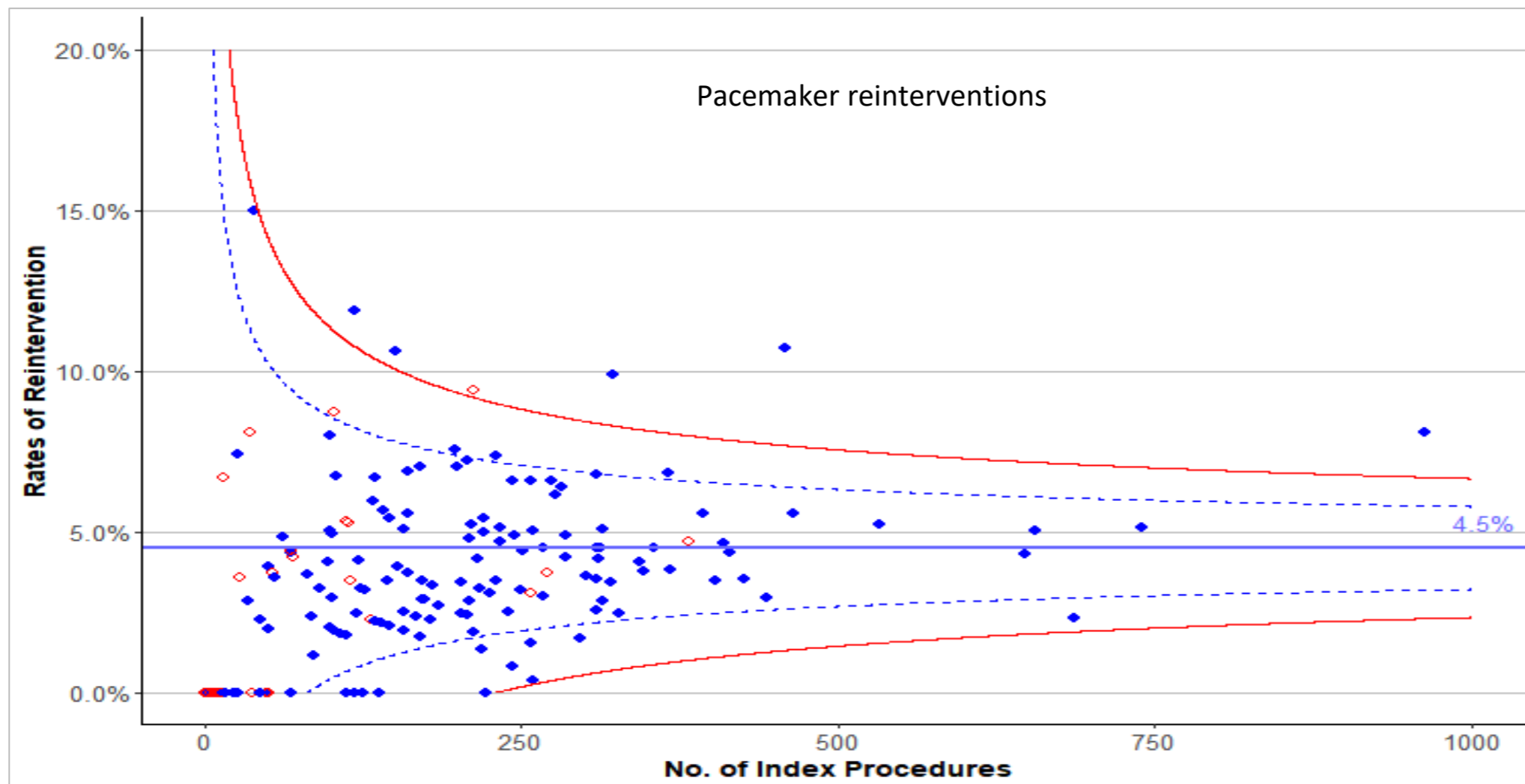
"Tier 1" centres submitted $\geq 90\%$ NHS Nos during both the index year (2018/19) and followup (2019/20): their reintervention rates are considered credible and are represented by solid blue markers.

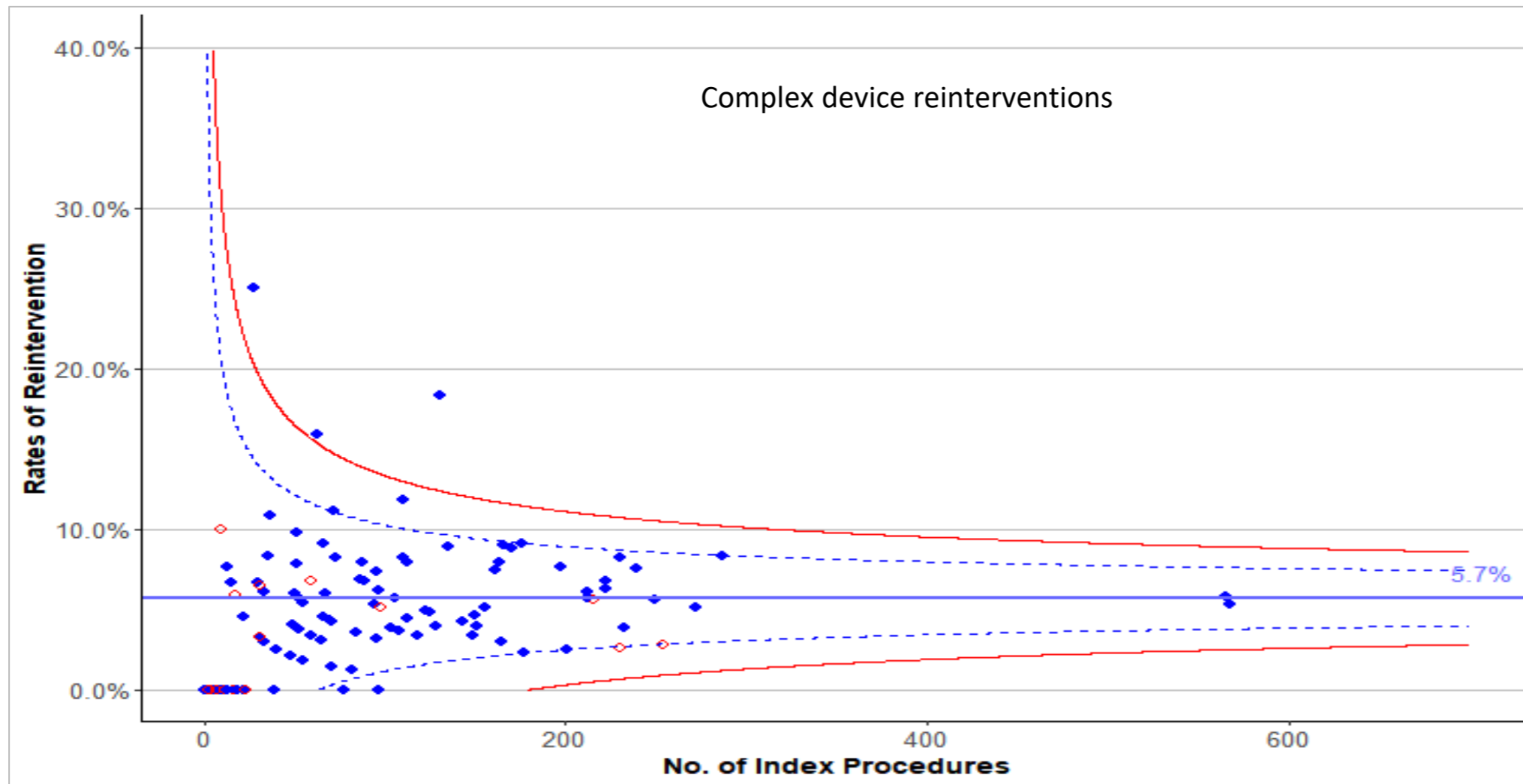
"Tier 2" centres did not achieve sufficient NHS No. submission for their reintervention rates to be credible (the true rates are likely to be significantly higher): they are therefore greyed out and represented as hollow red markers.

Centres coloured pink have significantly very high reintervention rates (≥ 3 SE above national mean); those coloured orange have rates ≥ 1.96 SE above national mean.

Centres coloured green have significantly low reintervention rates ≥ 2 SE below national mean

In accordance with ONS guidance, exact data have been suppressed where case numbers are less than 3, to ensure anonymity of the patient data included in the reporting.





Hospital	Hosp. code	Region	Category	NHS No Completeness %				New Pacemaker Implants		New ICD/CRT Implants	
				Compl. NHS No 2019-20	Compl. NHS No 2010-21	>90% NHS No	Tier	PM index cases	PPM reinterv%	Complex index cases	Complex reinterv%
Addenbrookes Hospital	ADD	England	NHS Adult	99.5	99.6	Yes	1	240	2.5	97	0
Aintree University Hospital	FAZ	England	NHS Adult	98.2	99.3	Yes	1	231	3.46	0	0
Airedale General Hospital	AIR	England	NHS Adult	99.1	100	Yes	1	104	6.73	30	6.67
Alder Hey Hospital	ACH	England	Children's	91.9	100	Yes	1	16	0	4	0
Arrowe Park Hospital	WIR	England	NHS Adult	100	99.6	Yes	1	211	5.21	0	0
Barnet General Hospital	BNT	England	NHS Adult	99	99.6	Yes	1	314	2.87	95	3.16
Barnsley Hospital	BAR	England	NHS Adult	100	100	Yes	1	101	4.95	0	0
Barts And The London	BAL	England	NHS Adult	98.2	99.7	Yes	1	963	8.1	565	5.84
Basildon Hospital	BAS	England	NHS Adult	99.9	99.9	Yes	1	208	7.21	149	3.36
Basingstoke & North Hampshire Hospital	NHH	England	NHS Adult	100	100	Yes	1	277	6.14	73	8.22
Bedford Hospital	BED	England	NHS Adult	100	100	Yes	1	134	5.97	0	0
Birmingham Childrens Hospital	BCH	England	Children's	100	100	Yes	1	4	0	4	0
Birmingham City Hospital	DUD	England	NHS Adult	99.7	100	Yes	1	160	6.88	84	3.57

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Blackpool Victoria Hospital	VIC	England	NHS Adult	89.4	94.3	No	2	270	3.7	216	5.56
Bradford Royal Infirmary	BRD	England	NHS Adult	100	100	Yes	1	161	3.73	54	5.56
Bristol Royal Infirmary	BRI	England	NHS Adult	99.7	99.6	Yes	1	368	3.8	222	6.31
Bronglais General Hospital	BRG	Wales	NHS Adult	100	100	Yes	1	24	0	0	0
Broomfield Hospital	BFH	England	NHS Adult	100	100	Yes	1	62	4.84	0	0
Calderdale Royal Hospital	RHI	England	NHS Adult	100	99.5	Yes	1	311	4.18	94	5.32
Central Middlesex Hospital	CMH	England	NHS Adult	96.8	95.2	Yes	1	27	7.41	<3	0
Cheltenham General Hospital	CHG	England	NHS Adult	99.4	99.6	Yes	1	327	2.45	97	6.19
Chesterfield Royal Hospital	CHE	England	NHS Adult	99.5	100	Yes	1	161	5.59	0	0
Colchester General Hospital	COL	England	NHS Adult	81.9	83.2	No	2	257	3.11	0	0
Conquest Hospital	CGH	England	NHS Adult	100	100	Yes	1	146	2.05	12	0
Countess of Chester Hospital	COC	England	NHS Adult	100	100	Yes	1	258	1.55	0	0
Craigavon Area Hospital	CRG	N Ireland	NHS Adult	NaN	100	NA	NA	0	0	0	0
Cromwell Hospital	CRO	England	Private	0	0	No	2	12	0	4	0
Croydon University Hospital	MAY	England	NHS Adult	100	98.5	Yes	1	99	2.02	31	3.23
Cumberland Infirmary	CMI	England	NHS Adult	98.2	99	Yes	1	141	5.67	0	0
Darent Valley Hospital	DVH	England	NHS Adult	97.4	99.2	Yes	1	87	1.15	<3	0
Darlington Memorial Hospital	DAR	England	NHS Adult	100	100	Yes	1	244	0.82	0	0
Derriford Hospital	PLY	England	NHS Adult	98.8	100	Yes	1	301	3.65	59	3.39
Diana, Princess of Wales Hospital Grimsby	GGH	England	NHS Adult	100	100	Yes	1	147	5.44	22	4.55
Doncaster Royal Infirmary	DID	England	NHS Adult	100	100	Yes	1	198	7.58	<3	0
Dorset County Hospital	WDH	England	NHS Adult	99.5	100	Yes	1	233	5.15	65	3.08
Duchy Hospital, Truro	DUC	England	Private	100	100	Yes	1	44	2.27	15	6.67
Ealing Hospital	EAL	England	NHS Adult	99.1	100	Yes	1	49	0	0	0
East Surrey Hospital	ESU	England	NHS Adult	98.9	99.7	Yes	1	285	4.21	77	0
Eastbourne District General Hospital	DGE	England	NHS Adult	99.6	100	Yes	1	157	1.91	33	3.03
Edinburgh Royal Infirmary	ERI	Scotland	NHS Adult	98.7	99.8	Yes	1	0	0	0	0
Epsom Hospital	EPS	England	NHS Adult	100	100	Yes	1	69	0	0	0
Exeter Heart	EXH	England	Private	8	90.3	No	2	13	0	8	0
Fairfield General Hospital	BRY	England	NHS Adult	100	100	Yes	1	297	1.68	155	5.16
Forth Valley Royal	FVH	Scotland	NHS Adult	87	100	No	2	28	3.57	11	0
Freeman Hospital Newcastle	FRE	England	NHS Adult	99.7	99.8	Yes	1	310	4.52	287	8.36
Frenchay Hospital	FRY	England	NHS Adult	76.1	92.9	No	2	114	5.26	10	10
Frimley Park Hospital	FRM	England	NHS Adult	99.1	99.4	Yes	1	202	2.48	36	8.33
George Eliot Hospital	NUN	England	NHS Adult	96.5	100	Yes	1	82	3.66	0	0
Glan Clwyd District General Hospital	CLW	Wales	NHS Adult	100	98.4	Yes	1	69	4.35	0	0
Glangwili General Hospital	WWG	Wales	NHS Adult	98.5	100	Yes	1	135	6.67	0	0
Glenfield Hospital	GRL	England	NHS Adult	100	99.9	Yes	1	687	2.33	222	6.76
Gloucestershire Royal Hospital	GLO	England	NHS Adult	100	100	Yes	1	<3	0	0	0
Golden Jubilee Hospital	GJH	Scotland	NHS Adult	5.1	89.9	No	2	37	8.11	230	2.61
Good Hope Hospital	GHS	England	NHS Adult	99.6	99.8	Yes	1	40	15	63	15.87

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Grange University Hospital	GUH	Wales	NHS Adult	NaN	100	NA	NA	0	0	0	0
Grantham And District Hospital	GRA	England	NHS Adult	100	100	Yes	1	0	0	0	0
Great Ormond Street Hospital	GOS	England	Children's	93.7	94	Yes	1	8	25	18	0
Gwynedd Hospital	GWY	Wales	NHS Adult	97.2	91.1	Yes	1	118	11.86	28	25
Hammersmith Hospital	HAM	England	NHS Adult	98.1	95	Yes	1	414	4.35	177	2.26
Harefield Hospital	HH	England	NHS Adult	99.2	100	Yes	1	221	5.43	201	2.49
Harley Street Clinic	HSC	England	Private	0	0.7	No	2	113	5.31	31	3.23
Harrogate District Hospital	HAR	England	NHS Adult	100	99.4	Yes	1	101	2.97	6	0
John Radcliffe Hospital	RAD	England	NHS Adult	96.6	98.5	Yes	1	465	5.59	230	8.26
Kent Institute of Medicine And Surgery	KIM	England	Private	0	0	No	2	49	0	16	0
Kettering General Hospital	KGH	England	NHS Adult	99.2	99.4	Yes	1	<3	0	0	0
King George Hospital Goodmayes	KGG	England	NHS Adult	100	100	Yes	1	171	1.75	0	0
Kings College Hospital	KCH	England	NHS Adult	98.9	100	Yes	1	219	1.37	103	3.88
Kings Mill Hospital	KMH	England	NHS Adult	100	100	Yes	1	185	2.7	87	6.9
Kingston Hospital	KTH	England	NHS Adult	100	100	Yes	1	113	0	0	0
Leeds General Infirmary	LGI	England	NHS Adult	99.9	99.5	Yes	1	443	2.93	212	5.66
Lincoln County Hospital	LIN	England	NHS Adult	100	100	Yes	1	231	7.36	88	7.95
Liverpool Heart & Chest Hospital	BHL	England	NHS Adult	99.8	100	Yes	1	409	4.65	567	5.29
London Bridge Hospital	LBH	England	Private	0.6	1.7	No	2	68	4.41	17	5.88
London Independent Hospital	IND	England	Private	56.5	50	No	2	8	0	<3	0
Luton & Dunstable Hospital	LDH	England	NHS Adult	100	100	Yes	1	0	0	0	0
Maelor Hospital Wrexham	WRX	Wales	NHS Adult	96.6	96.3	Yes	1	113	1.77	72	11.11
Maidstone Hospital	MAI	England	NHS Adult	99.7	100	Yes	1	151	10.6	51	7.84
Manchester Royal Infirmary	MRI	England	NHS Adult	99.2	99.3	Yes	1	226	3.1	166	9.04
Medway Maritime Hospital	MDW	England	NHS Adult	86.6	98.8	No	2	213	9.39	59	6.78
Milton Keynes Hospital	MKH	England	NHS Adult	94.5	95.7	Yes	1	99	5.05	48	2.08
Morrison Hospital	MOR	Wales	NHS Adult	98.9	99.3	Yes	1	347	3.75	212	6.13
Musgrove Park Hospital	MPH	England	NHS Adult	95.3	100	Yes	1	343	4.08	82	1.22
New Cross Hospital (Wolverhampton Heart Centre)	NCR	England	NHS Adult	100	100	Yes	1	366	6.83	113	4.42
Ninewells Hospital	NIN	Scotland	NHS Adult	100	100	Yes	1	51	3.92	13	7.69
Norfolk & Norwich University Hospital	NOR	England	NHS Adult	99.7	99.9	Yes	1	740	5.14	161	7.45
North Devon District Hospital	NDD	England	NHS Adult	90.1	100	Yes	1	27	0	10	0
North Middlesex University Hospital	NMH	England	NHS Adult	64.5	100	No	2	51	0	0	0
Northampton General Hospital	NTH	England	NHS Adult	100	99.8	Yes	1	45	22.22	7	0
Northern General Hospital Sheffield	NGS	England	NHS Adult	100	99.9	Yes	1	533	5.25	164	7.93
Northumbria Emergency Hospital Cramlington	NEH	England	NHS Adult	NaN	100	NA	NA	0	0	0	0
Northwick Park Hospital	NPH	England	NHS Adult	94.3	95.6	Yes	1	168	2.38	9	0
Nottingham City Hospital	CHN	England	NHS Adult	99.7	100	Yes	1	426	3.52	123	4.88
Papworth Hospital	PAP	England	NHS Adult	100	100	Yes	1	655	5.04	143	4.2
Peterborough City Hospital	PET	England	NHS Adult	97.3	100	Yes	1	250	3.2	0	0
Pinderfields General Hospital	PIN	England	NHS Adult	99.5	99.6	Yes	1	245	4.9	108	3.7

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Poole Hospital	PGH	England	NHS Adult	100	100	Yes	1	98	4.08	0	0
Prince Charles Hospital	PCH	Wales	NHS Adult	96	100	Yes	1	118	0	<3	0
Princess Alexandra Hospital Harlow	PAH	England	NHS Adult	100	100	Yes	1	126	3.17	0	0
Princess of Wales Hospital	POW	Wales	NHS Adult	100	100	Yes	1	84	2.38	22	0
Princess Royal Hospital Telford	TLF	England	NHS Adult	96	98	Yes	1	222	0	71	4.23
Queen Alexandra Hospital	QAP	England	NHS Adult	99.9	99.9	Yes	1	309	6.8	150	4.67
Queen Elizabeth Hospital Birmingham	QEB	England	NHS Adult	99.5	99.8	Yes	1	282	6.38	170	8.82
Queen Elizabeth Hospital Gateshead	QEG	England	NHS Adult	88.4	100	No	2	115	3.48	0	0
Queen Elizabeth Hospital Greenwich	GWH	England	NHS Adult	99.2	99.6	Yes	1	178	2.25	33	6.06
Queen Elizabeth The Queen Mother Hospital	QEQ	England	NHS Adult	90.7	98.6	Yes	1	267	3	53	3.77
Queens Hospital Burton	BRT	England	NHS Adult	97.8	97.7	Yes	1	44	0	0	0
Rotherham Hospital	ROT	England	NHS Adult	100	100	Yes	1	209	4.78	89	6.74
Royal Albert Edward Infirmary	AEI	England	NHS Adult	95.4	100	Yes	1	100	8	0	0
Royal Berkshire Hospital	BHR	England	NHS Adult	99.6	99.8	Yes	1	257	6.61	71	1.41
Royal Blackburn Hospital	BLA	England	NHS Adult	99.1	100	Yes	1	251	4.38	66	4.55
Royal Bolton Hospital	BOL	England	NHS Adult	100	100	Yes	1	108	1.85	135	8.89
Royal Bournemouth Hospital	BOU	England	NHS Adult	100	100	Yes	1	286	4.9	118	3.39
Royal Brompton Hospital	NHB	England	NHS Adult	93	99.5	Yes	1	312	4.49	197	7.61
Royal Cornwall Hospital	RCH	England	NHS Adult	99.6	99.8	Yes	1	243	6.58	110	11.82
Royal Derby Hospital	DER	England	NHS Adult	100	99.8	Yes	1	207	2.42	128	3.91
Royal Devon & Exeter Hospital	RDE	England	NHS Adult	98.9	100	Yes	1	458	10.7	131	18.32
Royal Glamorgan Hospital	RGH	Wales	NHS Adult	96.9	100	Yes	1	125	0	39	0
Royal Gwent Hospital	GWE	Wales	NHS Adult	100	100	Yes	1	259	5.02	<3	0
Royal Liverpool University Hospital	RLU	England	NHS Adult	96.4	100	Yes	1	123	3.25	0	0
Royal Preston Hospital	RPH	England	NHS Adult	99.4	100	Yes	1	172	3.49	0	0
Royal Surrey County Hospital	RSU	England	NHS Adult	97.6	99.7	Yes	1	158	5.06	40	2.5
Royal Sussex County Hospital	RSC	England	NHS Adult	99.8	99.9	Yes	1	259	0.39	151	3.97
Russells Hall Hospital	RUS	England	NHS Adult	88.6	83.3	No	2	131	2.29	98	5.1
Salford Royal Hospital	SLF	England	NHS Adult	99.2	100	Yes	1	138	0	0	0
Salisbury District Hospital	SAL	England	NHS Adult	99.6	100	Yes	1	144	3.47	51	9.8
Scarborough Hospital	SCA	England	NHS Adult	94.8	96.8	Yes	1	103	1.94	0	0
Scunthorpe General Hospital	SCU	England	NHS Adult	100	100	Yes	1	92	3.26	0	0
Solihull Hospital	SOL	England	NHS Adult	100	100	Yes	1	0	0	0	0
South Tyneside District Hospital	STD	England	NHS Adult	88.8	100	No	2	71	4.23	0	0
Southampton General Hospital	SGH	England	NHS Adult	98.3	99.8	Yes	1	403	3.47	239	7.53
Southend University Hospital	SEH	England	NHS Adult	100	100	Yes	1	171	7.02	0	0
Southmead Hospital	BSM	England	NHS Adult	100	99.6	Yes	1	<3	0	0	0
Spire Bristol	GHB	England	Private	2.6	17.6	No	2	38	0	12	0
Spire Hospital Cardiff	SPC	Wales	Private	50	42.6	No	2	<3	0	<3	0
Spire Hull And East Riding Hospital	HBP	England	Private	58.3	92.9	No	2	3	0	0	0
Spire Manchester Hospital	SMH	England	Private	NaN	0	No	2	0	0	0	0

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Spire Nottingham Hospital	SPN	England	Private	2.9	100	No	2	15	6.67	3	0
Spire Southampton Hospital	CBS	England	Private	76.2	75	No	2	5	0	3	0
St Antonys Hospital	ANT	England	Private	0	7.1	No	2	54	3.7	7	0
St Georges Hospital	GEO	England	NHS Adult	98.7	100	Yes	1	394	5.58	232	3.88
St Marys Hospital Isle of Wight	IOW	England	NHS Adult	92.4	100	Yes	1	45	0	0	0
St Peters Hospital	SPH	England	NHS Adult	99.2	100	Yes	1	180	3.33	69	4.35
St Richards Hospital	STR	England	NHS Adult	96.5	85.6	No	2	172	2.91	31	6.45
St Thomas Hospital	STH	England	NHS Adult	97.3	99.9	Yes	1	323	9.91	176	9.09
Stepping Hill Hospital	SHH	England	NHS Adult	100	100	Yes	1	139	2.16	0	0
Sunderland Royal Hospital	SUN	England	NHS Adult	98.9	100	Yes	1	135	2.22	0	0
Tameside Hospital	TGA	England	NHS Adult	92.4	97.1	Yes	1	146	2.05	0	0
The Alexandra Hospital	RED	England	Private	100	100	Yes	1	0	0	0	0
The Great Western Hospital	PMS	England	NHS Adult	99.1	100	Yes	1	199	7.04	110	8.18
The Ipswich Hospital	IPS	England	NHS Adult	100	100	Yes	1	355	4.51	0	0
The James Cook University Hospital	SCM	England	NHS Adult	99.8	100	Yes	1	314	5.1	165	3.03
The Princess Royal University Hospital Bromley	BRO	England	NHS Adult	99.4	100	Yes	1	50	2	0	0
The York Hospital	YDH	England	NHS Adult	97.9	97.2	Yes	1	217	3.23	95	7.37
Torbay Hospital	TOR	England	NHS Adult	99.8	100	Yes	1	203	3.45	50	4
University Hospital Coventry	WAL	England	NHS Adult	99.4	99.8	Yes	1	274	6.57	113	7.96
University Hospital of Hartlepool	HGH	England	NHS Adult	100	100	Yes	1	153	3.92	13	0
University Hospital of North Staffs	STO	England	NHS Adult	96.6	99.1	Yes	1	648	4.32	272	5.15
University Hospital of North Tees	NTG	England	NHS Adult	100	100	Yes	1	35	2.86	0	0
University Hospital of Wales	UHW	Wales	NHS Adult	79.2	84.2	No	2	383	4.7	254	2.76
Victoria Hospital Kirkcaldy	KIR	Scotland	NHS Adult	97.6	100	Yes	1	113	1.77	19	0
Walsall Manor Hospital	WMH	England	NHS Adult	97.5	100	Yes	1	122	4.1	37	10.81
Wansbeck General Hospital	ASH	England	NHS Adult	97.5	100	Yes	1	310	3.55	67	5.97
Warrington Hospital	WDG	England	NHS Adult	99.1	99	Yes	1	121	2.48	0	0
Warwick Hospital	WAR	England	NHS Adult	95.6	93.1	Yes	1	158	2.53	50	6
Watford General Hospital	WAT	England	NHS Adult	96.9	98	Yes	1	321	3.43	53	3.77
Wellington Hospital North	HHW	England	Private	1.8	0.4	No	2	103	8.74	23	0
West Suffolk Hospital	WSH	England	NHS Adult	100	98.4	Yes	1	213	1.88	0	0
Western General Hospital	WGE	Scotland	NHS Adult	NaN	100	NA	NA	0	0	0	0
Westmoreland General Hospital	WGK	England	NHS Adult	95.2	98.8	Yes	1	172	2.91	49	4.08
Weston General Hospital	WGH	England	NHS Adult	100	100	Yes	1	17	0	0	0
Wexham Park Hospital	WEX	England	NHS Adult	93	93.5	Yes	1	210	2.86	55	5.45
William Harvey Hospital	WHH	England	NHS Adult	91.1	99.3	Yes	1	234	4.7	66	9.09
Wishaw General Hospital	WIS	Scotland	NHS Adult	100	100	Yes	1	56	3.57	0	0
Worcestershire Royal Hospital	WRC	England	NHS Adult	99.4	100	Yes	1	310	2.58	106	5.66
Worthing Hospital	WRG	England	NHS Adult	100	100	Yes	1	220	5	125	4.8
Wycombe Hospital	AMG	England	NHS Adult	99.7	99.1	Yes	1	216	4.17	55	1.82
Wythenshawe Hospital	WYT	England	NHS Adult	100	100	Yes	1	267	4.49	250	5.6

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Yeovil District Hospital	YEO	England	NHS Adult	97	92.9	Yes	1	173	2.89	<3	0
Yorkshire Clinic	YKC	England	Private	40	33.3	No	2	<3	0	3	0