

## CRM Device Procedures 2017/18: 1-Year Reintervention Rates

Only first implants during 2017/18 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.

NHS No. completeness for each centre in 2016/17 and 2017/18 is given: if either figure is <90%, data for that centre are considered inadequate for analysis: that centre has been shaded in the table and excluded from the funnel chart in the main report. This is because low NHS No. completeness may result in underestimation of true reintervention rates.

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	Hospital code	Region	Category2	NHS No Completeness %		New Pacemaker Implants		New ICD/CRT Implants	
				2017-8	2018-9	Index Cases	% Reinterv. 1 yr FU	Index Cases	% Reinterv. 1 yr FU
Addenbrookes Hospital	ADD	England	NHS Adult hospitals	99.4	99.5	231	2.6	93	2.15
Aintree University Hospital	FAZ	England	NHS Adult hospitals	100	98.1	225	3.56	0	
Airedale General Hospital	AIR	England	NHS Adult hospitals	100	99.7	160	5	42	4.76
Alder Hey Hospital	ACH	England	Private/Children's Hospitals	100	95.1	8	0	<3	50
Arrowe Park Hospital	WIR	England	NHS Adult hospitals	100	100	224	4.91	0	
Barnet General Hospital	BNT	England	NHS Adult hospitals	98.7	99.3	291	5.84	150	7.33
Barnsley Hospital	BAR	England	NHS Adult hospitals	100	100	117	3.42	0	
Barts And The London	BAL	England	NHS Adult hospitals	99.5	99.5	860	7.09	479	5.22
Basildon Hospital	BAS	England	NHS Adult hospitals	99.6	99.8	369	5.42	277	4.33
Basingstoke & North Hampshire Hospital	NHH	England	NHS Adult hospitals	100	100	257	5.84	94	9.57
Bedford Hospital	BED	England	NHS Adult hospitals	98	100	106	1.89	0	
Birmingham Children's Hospital	BCH	England	Private/Children's Hospitals	96.6	97.7	15	0	<3	0
Birmingham City Hospital	DUD	England	NHS Adult hospitals	98.5	95.8	196	5.61	86	9.3
Blackpool Victoria Hospital	VIC	England	NHS Adult hospitals	95	96.4	263	7.6	250	6.4
BMI The Alexandra Hospital	AHM	England	Private/Children's Hospitals	0	1.6	<3	0	<3	0
BMI The Meriden Hospital	BMI	England	Private/Children's Hospitals	3.8	NA	<3	0	0	
Bradford Royal Infirmary	BRD	England	NHS Adult hospitals	100	99.7	133	3.76	50	6
Bristol Royal Hospital For Children	BRC	England	Private/Children's Hospitals	98.2	100	12	8.33	4	25
Bristol Royal Infirmary	BRI	England	NHS Adult hospitals	99.6	96.6	415	3.37	167	2.4
Bronglais General Hospital	BRG	Wales	NHS Adult hospitals	NA	88.9	0		0	
Broomfield Hospital	BFH	England	NHS Adult hospitals	100	100	82	2.44	0	
Calderdale Royal Hospital	RHI	England	NHS Adult hospitals	99.4	99.5	151	5.96	49	0

Hospital	Hospital code	Region	Category2	NHS No Completeness %		New Pacemaker Implants % Reinterv.		New ICD/CRT Implants % Reinterv.	
				2017-8	2018-9	Index Cases	1 yr FU	Index Cases	1 yr FU
Castle Hill Hospital	CHH	England	NHS Adult hospitals	100	98.3	301	4.65	92	4.35
Central Middlesex Hospital	CMH	England	NHS Adult hospitals	94.3	99	39	2.56	<3	0
Chelsea & Westminster Hospital	WES	England	NHS Adult hospitals	100	97.4	22	4.55	0	
Cheltenham General Hospital	CHG	England	NHS Adult hospitals	99.4	99.7	349	2.87	68	5.88
Chesterfield Royal Hospital	CHE	England	NHS Adult hospitals	100	100	88	2.27	0	
Colchester General Hospital	COL	England	NHS Adult hospitals	98.1	97.9	304	2.63	<3	0
Conquest Hospital	CGH	England	NHS Adult hospitals	100	98.9	157	3.82	16	6.25
Countess Of Chester Hospital	COC	England	NHS Adult hospitals	100	100	196	2.04	0	
County Hospital Hereford	HCH	England	NHS Adult hospitals	99.4	100	83	0	27	0
Craigavon Area Hospital	CRG	N Ireland	NHS Adult hospitals	NA	100	0		0	
Cromwell Hospital	CRO	England	Private/Children's Hospitals	0	NA	<3	0	5	0
Croydon University Hospital	MAY	England	NHS Adult hospitals	0	0	95	1.05	56	10.71
Cumberland Infirmary	CMI	England	NHS Adult hospitals	98.5	100	153	5.23	0	
Darent Valley Hospital	DVH	England	NHS Adult hospitals	97.9	98.9	200	4	14	7.14
Darlington Memorial Hospital	DAR	England	NHS Adult hospitals	99.1	99.8	145	3.45	0	
Diana, Princess Of Wales Hospital Grimsby	GGH	England	NHS Adult hospitals	100	100	148	4.73	10	0
Doncaster Royal Infirmary	DID	England	NHS Adult hospitals	99.7	100	216	4.17	0	
Dorset County Hospital	WDH	England	NHS Adult hospitals	100	99.8	221	3.62	48	2.08
Duchy Hospital, Truro	DUC	England	Private/Children's Hospitals	100	100	69	5.8	32	18.75
Ealing Hospital	EAL	England	NHS Adult hospitals	100	99	59	1.69	0	
East Surrey Hospital	ESU	England	NHS Adult hospitals	98.5	99.5	294	3.06	24	8.33
Eastbourne District General Hospital	DGE	England	NHS Adult hospitals	99.7	98.9	237	4.64	24	0
Epsom Hospital	EPS	England	NHS Adult hospitals	99.4	99.1	3	0	0	
Evelina Children's Hospital	GUY	England	Private/Children's Hospitals	NA	81.8	0		0	
Exeter Heart	EXH	England	Private/Children's Hospitals	0	7.7	<3	0	<3	0
Fairfield General Hospital	BRY	England	NHS Adult hospitals	100	100	263	2.66	159	6.29
Forth Valley Royal	FVH	Scotland	NHS Adult hospitals	100	96.5	9	0	5	0
Freeman Hospital Newcastle	FRE	England	NHS Adult hospitals	99.6	99.3	312	5.13	320	5.94
Frenchay Hospital	FRY	England	NHS Adult hospitals	95.5	97.1	90	3.33	7	0
Frimley Park Hospital	FRM	England	NHS Adult hospitals	100	99.6	222	6.76	46	17.39
George Eliot Hospital	NUN	England	NHS Adult hospitals	94.4	98.3	82	1.22	0	
Glan Clwyd District General Hospital	CLW	Wales	NHS Adult hospitals	97.4	98.4	64	4.69	0	
Glangwili General Hospital	WWG	Wales	NHS Adult hospitals	95.9	88.7	147	3.4	0	
Glenfield Hospital	GRL	England	NHS Adult hospitals	99.8	100	696	3.45	302	6.95
Gloucestershire Royal Hospital	GLO	England	NHS Adult hospitals	73.7	100	<3	0	<3	0
Golden Jubilee Hospital	GJH	Scotland	NHS Adult hospitals	1.7	0.7	21	0	101	5.94
Good Hope Hospital	GHS	England	NHS Adult hospitals	94.5	99.9	245	6.94	182	13.74

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Grantham and District Hospital	GRA	England	NHS Adult hospitals	100	100	0		0	
Great Ormond Street Hospital	GOS	England	Private/Children's Hospitals	100	92	0		0	
Gwynedd Hospital	GWY	Wales	NHS Adult hospitals	97	82.4	118	4.24	0	
Hammersmith Hospital	HAM	England	NHS Adult hospitals	98.8	96.7	412	5.1	200	3
Harefield Hospital	HH	England	NHS Adult hospitals	99.4	98.7	189	5.29	193	5.18
Harley Street Clinic	HSC	England	Private/Children's Hospitals	0	0	78	2.56	23	0
Harrogate District Hospital	HAR	England	NHS Adult hospitals	98.6	100	103	1.94	6	16.67
Huddersfield Royal Infirmary	HUD	England	NHS Adult hospitals	96.9	91.7	117	3.42	42	9.52
John Radcliffe Hospital	RAD	England	NHS Adult hospitals	97.8	94	442	6.11	209	7.66
Kent Institute Of Medicine And Surgery	KIM	England	Private/Children's Hospitals	0	0	20	0	5	0
Kettering General Hospital	KGH	England	NHS Adult hospitals	99.5	100	204	4.41	135	6.67
King George Hospital Goodmayes	KGG	England	NHS Adult hospitals	99.7	100	252	5.56	0	
Kings College Hospital	KCH	England	NHS Adult hospitals	99.2	99.2	301	5.32	150	6.67
Kings Mill Hospital	KMH	England	NHS Adult hospitals	100	100	164	3.05	107	5.61
Kingston Hospital	KTH	England	NHS Adult hospitals	99.2	100	113	0	0	
Leeds General Infirmary	LGI	England	NHS Adult hospitals	99.8	99.4	458	3.71	197	4.57
Lincoln County Hospital	LIN	England	NHS Adult hospitals	100	100	196	4.08	0	
Lister Hospital	LIS	England	NHS Adult hospitals	98.7	100	120	6.67	0	
Liverpool Heart & Chest Hospital	BHL	England	NHS Adult hospitals	99.7	99.7	357	5.6	524	4.01
London Bridge Hospital	LBH	England	Private/Children's Hospitals	0	0.7	63	6.35	23	4.35
London Independent Hospital	IND	England	Private/Children's Hospitals	0	0	0		0	
Luton & Dunstable Hospital	LDH	England	NHS Adult hospitals	100	100	143	3.5	0	
Maelor Hospital Wrexham	WRX	Wales	NHS Adult hospitals	94.9	96	25	0	8	0
Manchester Royal Infirmary	MRI	England	NHS Adult hospitals	99.6	97.5	271	6.27	206	9.71
Medway Maritime Hospital	MDW	England	NHS Adult hospitals	91.9	89.7	165	3.64	56	8.93
Milton Keynes Hospital	MKH	England	NHS Adult hospitals	100	99.1	114	5.26	32	0
Monklands District General Hospital	MDG	Scotland	NHS Adult hospitals	0	0	70	0	0	
Morrison Hospital	MOR	Wales	NHS Adult hospitals	96.9	99.9	330	8.79	153	6.54
Musgrove Park Hospital	MPH	England	NHS Adult hospitals	99.5	98.9	243	4.53	31	0
New Cross Hospital (Wolverhampton Heart Centre)	NCR	England	NHS Adult hospitals	98.7	99.7	306	6.54	114	14.91
Norfolk & Norwich University Hospital	NOR	England	NHS Adult hospitals	99.9	99.8	689	5.08	163	4.29
North Devon District Hospital	NDD	England	NHS Adult hospitals	94.7	91.3	20	0	6	0
North Middlesex University Hospital	NMH	England	NHS Adult hospitals	92.6	92.4	53	3.77	3	0
Northampton General Hospital	NTH	England	NHS Adult hospitals	90.5	81.1	244	4.51	54	1.85
Northern General Hospital Sheffield	NGS	England	NHS Adult hospitals	100	100	492	2.64	262	7.25
Northwick Park Hospital	NPH	England	NHS Adult hospitals	98.4	95.5	217	4.15	11	0
Nottingham City Hospital	CHN	England	NHS Adult hospitals	99.6	99.6	355	3.66	236	6.36

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Papworth Hospital	PAP	England	NHS Adult hospitals	100	100	872	3.44	51	1.96
Peterborough City Hospital	PET	England	NHS Adult hospitals	99.3	99.7	256	2.73	0	
Pinderfields General Hospital	PIN	England	NHS Adult hospitals	99.7	100	271	1.85	155	4.52
Poole Hospital	PGH	England	NHS Adult hospitals	100	100	122	8.2	0	
Prince Charles Hospital	PCH	Wales	NHS Adult hospitals	100	94.2	134	2.24	<3	0
Princess Alexandra Hospital Harlow	PAH	England	NHS Adult hospitals	100	100	145	4.14	0	
Princess Of Wales Hospital	POW	Wales	NHS Adult hospitals	14	100	12	0	<3	0
Princess Royal Hospital Telford	TLF	England	NHS Adult hospitals	99.2	97.9	234	3.85	79	2.53
Queen Alexandra Hospital	QAP	England	NHS Adult hospitals	100	99.6	345	4.06	119	7.56
Queen Elizabeth Hospital Birmingham	QEB	England	NHS Adult hospitals	99.2	98.7	230	5.22	110	7.27
Queen Elizabeth Hospital Gateshead	QEG	England	NHS Adult hospitals	90.3	88.7	125	4	0	
Queen Elizabeth Hospital Greenwich	GWH	England	NHS Adult hospitals	100	99.7	202	3.96	46	17.39
Queen Elizabeth The Queen Mother Hospital	QEQ	England	NHS Adult hospitals	85.4	95.3	179	4.47	36	8.33
Queens Hospital Burton	BRT	England	NHS Adult hospitals	98.1	99.5	82	0	0	
Rotherham Hospital	ROT	England	NHS Adult hospitals	100	100	76	5.26	8	0
Royal Albert Edward Infirmary	AEI	England	NHS Adult hospitals	95.3	97.4	124	3.23	0	
Royal Berkshire Hospital	BHR	England	NHS Adult hospitals	100	99.6	254	6.69	83	7.23
Royal Blackburn Hospital	BLA	England	NHS Adult hospitals	99.8	99.1	278	4.32	43	11.63
Royal Bolton Hospital	BOL	England	NHS Adult hospitals	97.4	98.2	111	2.7	125	4.8
Royal Bournemouth Hospital	BOU	England	NHS Adult hospitals	99.8	99.7	268	7.09	123	6.5
Royal Brompton Hospital	NHB	England	NHS Adult hospitals	95.2	94.7	273	4.4	245	8.98
Royal Cornwall Hospital	RCH	England	NHS Adult hospitals	100	100	231	5.19	104	5.77
Royal Derby Hospital	DER	England	NHS Adult hospitals	100	99.8	223	3.59	76	3.95
Royal Devon & Exeter Hospital	RDE	England	NHS Adult hospitals	99.1	98.9	392	4.85	101	5.94
Royal Glamorgan Hospital	RGH	Wales	NHS Adult hospitals	100	99.3	118	0.85	36	8.33
Royal Infirmary Aberdeen	RIA	Scotland	NHS Adult hospitals	4.2	0	162	0	15	0
Royal Liverpool University Hospital	RLU	England	NHS Adult hospitals	98.5	97.7	91	4.4	0	
Royal Preston Hospital	RPH	England	NHS Adult hospitals	98.9	99.7	162	7.41	0	
Royal Surrey County Hospital	RSU	England	NHS Adult hospitals	97.2	98.3	64	4.69	25	4
Royal Sussex County Hospital	RSC	England	NHS Adult hospitals	99.7	99.8	286	3.85	133	3.76
Russells Hall Hospital	RUS	England	NHS Adult hospitals	98.5	96.6	139	2.16	83	2.41
Salford Royal Hospital	SLF	England	NHS Adult hospitals	100	100	118	1.69	0	
Salisbury District Hospital	SAL	England	NHS Adult hospitals	99.6	100	138	3.62	51	3.92
Scarborough Hospital	SCA	England	NHS Adult hospitals	97.1	94.3	164	2.44	0	
Scunthorpe General Hospital	SCU	England	NHS Adult hospitals	100	100	28	0	0	
Solihull Hospital	SOL	England	NHS Adult hospitals	98.9	100	155	5.81	0	
South Tyneside District Hospital	STD	England	NHS Adult hospitals	95.4	95.4	74	1.35	0	

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Southampton General Hospital	SGH	England	NHS Adult hospitals	99.9	99.8	404	7.67	186	10.75
Southend University Hospital	SEH	England	NHS Adult hospitals	99.7	98.9	162	5.56	0	
Spire Bristol	GHB	England	Private/Children's Hospitals	2	2	17	5.88	0	
Spire Hospital Cardiff	SPC	Wales	Private/Children's Hospitals	0	0	<3	0	0	
Spire Hull And East Riding Hospital	HBP	England	Private/Children's Hospitals	9.1	41.7	7	0	0	
Spire Nottingham Hospital	SPN	England	Private/Children's Hospitals	0	0	<3	0	<3	0
Spire Southampton Hospital	CBS	England	Private/Children's Hospitals	2.7	50	11	9.09	5	0
St Anthony's Hospital	ANT	England	Private/Children's Hospitals	0	0	46	4.35	8	0
St George's Hospital	GEO	England	NHS Adult hospitals	95.2	99.9	378	1.85	209	0.96
St Mary's Hospital Isle Of Wight	IOW	England	NHS Adult hospitals	95.2	88.6	55	0	0	
St Peter's Hospital	SPH	England	NHS Adult hospitals	100	99.6	236	5.08	102	6.86
St Richard's Hospital	STR	England	NHS Adult hospitals	96.7	94.8	182	4.4	44	4.55
St Thomas' Hospital	STH	England	NHS Adult hospitals	97.1	99.5	263	11.41	207	14.01
Stepping Hill Hospital	SHH	England	NHS Adult hospitals	NA	99.5	0		0	
Sunderland Royal Hospital	SUN	England	NHS Adult hospitals	100	98.9	<3	0	0	
Tameside Hospital	TGA	England	NHS Adult hospitals	96.7	96	162	1.85	0	
The Alexandra Hospital	RED	England	Private/Children's Hospitals	NA	100	0		0	
The Great Western Hospital	PMS	England	NHS Adult hospitals	99.6	100	234	5.13	136	6.62
The Ipswich Hospital	IPS	England	NHS Adult hospitals	100	100	349	5.16	<3	0
The James Cook University Hospital	SCM	England	NHS Adult hospitals	100	99.8	345	3.19	196	5.61
The Princess Royal University Hospital Bromley	BRO	England	NHS Adult hospitals	92.4	100	45	6.67	0	
The York Hospital	YDH	England	NHS Adult hospitals	98.2	97.4	240	2.5	93	6.45
Torbay Hospital	TOR	England	NHS Adult hospitals	96	99.8	144	5.56	41	4.88
University Hospital Coventry	WAL	England	NHS Adult hospitals	100	99.9	285	2.81	114	7.89
University Hospital Of Hartlepool	HGH	England	NHS Adult hospitals	100	100	181	0	48	0
University Hospital Of North Durham	DRY	England	NHS Adult hospitals	100	100	0		0	
University Hospital Of North Staffs	STO	England	NHS Adult hospitals	99.1	99.5	426	2.82	228	3.95
University Hospital Of Wales	UHW	Wales	NHS Adult hospitals	85.4	91.1	274	5.11	164	7.93
Victoria Hospital Kirkcaldy	KIR	Scotland	NHS Adult hospitals	97.7	99.1	120	2.5	34	0
Walsall Manor Hospital	WMH	England	NHS Adult hospitals	96.5	99	156	2.56	43	4.65
Wansbeck General Hospital	ASH	England	NHS Adult hospitals	96.9	96.9	276	1.45	76	7.89
Warrington Hospital	WDG	England	NHS Adult hospitals	100	100	106	0	0	
Warwick Hospital	WAR	England	NHS Adult hospitals	98.2	96.5	177	1.69	52	3.85
Watford General Hospital	WAT	England	NHS Adult hospitals	98.9	98.2	257	3.11	58	5.17
Wellington Hospital North	HHW	England	Private/Children's Hospitals	0.5	3.8	86	4.65	17	0
West Suffolk Hospital	WSH	England	NHS Adult hospitals	NA	100	0		0	
Westmoreland General Hospital	WGK	England	NHS Adult hospitals	95.2	94.8	128	3.91	21	0

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Wexham Park Hospital	WEX	England	NHS Adult hospitals	99.8	99.4	230	3.48	56	3.57
Whipps Cross University Hospital	WHC	England	NHS Adult hospitals	100	95.2	45	0	0	
Whiston Hospital	WHI	England	NHS Adult hospitals	97.1	98.8	139	4.32	<3	0
William Harvey Hospital	WHH	England	NHS Adult hospitals	98.3	85.2	278	2.52	69	2.9
Wishaw General Hospital	WIS	England	NHS Adult hospitals	97.9	92.1	60	3.33	0	
Worcestershire Royal Hospital	WRC	England	NHS Adult hospitals	99.7	100	280	1.79	123	1.63
Worthing Hospital	WRG	England	NHS Adult hospitals	100	100	202	1.98	123	3.25
Wycombe Hospital	AMG	England	NHS Adult hospitals	100	100	267	7.49	46	0
Wythenshawe Hospital	WYT	England	NHS Adult hospitals	100	99.9	310	4.52	237	5.91
Yeovil District Hospital	YEO	England	NHS Adult hospitals	79.5	85.6	120	2.5	0	
Yorkshire Clinic	YKC	England	Private/Children's Hospitals	30	85.7	<3	0	0	