

CRM Devices 2017/18: Data completeness and validity

Completeness (expressed as %) has been calculated for aggregates of a number of fields: demographics (NHS No, Postcode); clinical (basic – indication for pacing, other cardiac disease, etc); clinical (complex – additional clinical data only required for ICD/CRT devices such as QRS width); GMC No (first operator + consultant); procedure details (device and procedure type, etc); generator details (make, model, serial no). Validity checks whether “maximum system capacity” (the type of system implanted) concurs with the generator model.* All data are given as percentages, and colour-coded with red <90%, amber 90-95%, and green ≥95%.

*occasionally, an “invalid” entry may be correct, e.g. a CRT generator implanted without a left ventricular lead will be a dual chamber system.

Hospital	Hospital code	Region	Category	Demographics	Clinical (basic)	Clinical (complex)	GMC	Procedure details	Generator details	Validity (generator)
Addenbrookes Hospital	ADD	England	NHS Adult hospitals	99.7	95.2	100	100	99.8	100	99.5
Aintree University Hospital	FAZ	England	NHS Adult hospitals	100	95.3	-	100	99.4	100	100
Airedale General Hospital	AIR	England	NHS Adult hospitals	100	96.8	100	100	99.8	100	98.4
Alder Hey Hospital	ACH	England	Children's	100	72.7	100	92.8	97.6	100	81
Arrowe Park Hospital	WIR	England	NHS Adult hospitals	100	71	-	100	100	100	100
Barnet General Hospital	BNT	England	NHS Adult hospitals	99.3	90.6	80	90.8	99.1	99.3	93.4
Barnsley Hospital	BAR	England	NHS Adult hospitals	100	86	-	41.9	99.7	99.3	96.5
Barts And The London	BAL	England	NHS Adult hospitals	99.8	91.7	74.5	99.9	100	99.7	98.2
Basildon Hospital	BAS	England	NHS Adult hospitals	99.8	92.5	94.9	98.8	99.2	99.6	90.7
Basingstoke & North Hampshire Hospital	NHH	England	NHS Adult hospitals	100	69	95	99.2	99.2	83.3	96.5
Bedford Hospital	BED	England	NHS Adult hospitals	99	87.2	-	100	100	100	100
Belfast City Hospital	BFT	N Ireland	NHS Adult hospitals	50	94.7	98.8	100	100	100	98.1
Birmingham Children's Hospital	BCH	England	Children's	98.3	85.2	73.3	75	94	98.1	86.1
Birmingham City Hospital	DUD	England	NHS Adult hospitals	99.2	83	99	98.5	99.3	100	96
Blackpool Victoria Hospital	VIC	England	NHS Adult hospitals	97.5	87	75.1	80.5	90.2	97.5	83.8
BMI The Alexandra Hospital	AHM	England	Private/Children's Hospitals	50	26.6	60	15.3	92.8	90.2	85.3
BMI The Meriden Hospital	BMI	England	Private/Children's Hospitals	51.9	89.6	100	57.1	100	100	100
Bradford Royal Infirmary	BRD	England	NHS Adult hospitals	100	91.3	100	98.4	99.8	100	100
Bristol Royal Hospital For Children	BRC	England	Children's	99.1	54.2	75	48.5	97.3	100	85.3
Bristol Royal Infirmary	BRI	England	NHS Adult hospitals	99.8	93	96.9	74.7	100	100	96.7
Broomfield Hospital	BFH	England	NHS Adult hospitals	100	68	-	88	96.2	100	97.5
Calderdale Royal Hospital	RHI	England	NHS Adult hospitals	99.7	89.8	94.5	49.6	99.2	99.2	97.2
Castle Hill Hospital	CHH	England	NHS Adult hospitals	100	92	97.3	85.2	91.6	98.4	91
Central Middlesex Hospital	CMH	England	NHS Adult hospitals	97.2	91.1	93.8	61.9	96.7	98.9	96.6
Chelsea & Westminster Hospital	WES	England	NHS Adult hospitals	100	96.6	-	87.5	100	100	100
Cheltenham General Hospital	CHG	England	NHS Adult hospitals	99.7	93.7	98.1	99.3	96.4	99.6	97.7
Chesterfield Royal Hospital	CHE	England	NHS Adult hospitals	100	53	-	92.8	84	98.7	68.4
Colchester General Hospital	COL	England	NHS Adult hospitals	99	65.2	0	78.5	92	99.2	97.2
Conquest Hospital	CGH	England	NHS Adult hospitals	100	45.9	61.9	78.5	98.2	98.3	81
Countess Of Chester Hospital	COC	England	NHS Adult hospitals	100	95.7	-	100	100	100	100
County Hospital Hereford	HCH	England	NHS Adult hospitals	99.7	92	100	100	100	100	99.4
Cromwell Hospital	CRO	England	Private/Children's Hospitals	50	96.3	97.5	71.7	100	100	97.3
Croydon University Hospital	MAY	England	NHS Adult hospitals	50	86.1	100	95.9	99.5	100	98.3
Cumberland Infirmary	CMI	England	NHS Adult hospitals	99.2	81.2	-	85.2	93.8	99.6	88.1
Darent Valley Hospital	DVH	England	NHS Adult hospitals	99	88	88.7	42.2	99.1	99.5	76.8
Darlington Memorial Hospital	DAR	England	NHS Adult hospitals	99.5	90.7	-	46.5	85.1	99.9	76.3

Hospital	Hospital code	Region	Category	Demographics	Clinical (basic)	Clinical (complex)	GMC	Procedure details	Generator details	Validity (generator)
Diana, Princess Of Wales Hospital Grimsby	GGH	England	NHS Adult hospitals	100	92.5	100	44.3	99.6	100	81
Doncaster Royal Infirmary	DID	England	NHS Adult hospitals	99.8	57.3	-	99.8	97.7	100	99.2
Dorset County Hospital	WDH	England	NHS Adult hospitals	100	91.7	93.1	95.3	99.8	99.2	95.9
Duchy Hospital, Truro	DUC	England	Private/Children's Hospitals	100	94.4	85.1	96.4	100	98.2	98.2
Ealing Hospital	EAL	England	NHS Adult hospitals	100	95.2	-	96.1	98.4	98.7	94.8
East Surrey Hospital	ESU	England	NHS Adult hospitals	99.2	57	0	95.2	97.8	84.3	87
Eastbourne District General Hospital	DGE	England	NHS Adult hospitals	99.8	95.1	98.7	66.5	100	99.9	87.9
Edinburgh Royal Infirmary	ERI	Scotland	NHS Adult hospitals	50	89.8	64.8	100	98.7	95.9	71.4
Epsom Hospital	EPS	England	NHS Adult hospitals	99.7	75	-	52.2	77.7	96.7	90
Exeter Heart	EXH	England	Private/Children's Hospitals	50	97.5	100	45	100	100	100
Fairfield General Hospital	BRY	England	NHS Adult hospitals	100	85.8	99.7	96.8	98.8	97.6	94.4
Forth Valley Royal	FVH	Scotland	NHS Adult hospitals	100	66.7	86.7	1.6	91.8	100	82.8
Freeman Hospital Newcastle	FRE	England	NHS Adult hospitals	99.8	92	90.5	100	100	100	98.9
Frenchay Hospital	FRY	England	NHS Adult hospitals	97.8	77.8	71.4	70.5	85.3	99.2	67.1
Frimley Park Hospital	FRM	England	NHS Adult hospitals	100	95.4	98.9	58.2	97.9	99.8	84.9
George Eliot Hospital	NUN	England	NHS Adult hospitals	97.2	84.2	-	1.8	95.3	97.3	95.6
Glan Clwyd District General Hospital	CLW	Wales	NHS Adult hospitals	98.7	79.4	-	88	92.8	100	91.5
Glangwili General Hospital	WWG	Wales	NHS Adult hospitals	98	66.5	-	0.2	83.1	100	68.8
Glenfield Hospital	GRL	England	NHS Adult hospitals	99.9	92.2	99.6	100	100	99.9	95.4
Gloucestershire Royal Hospital	GLO	England	NHS Adult hospitals	86.8	91.7	75	100	100	100	94.1
Golden Jubilee Hospital	GJH	Scotland	NHS Adult hospitals	50.9	51.1	54.4	0	70.6	99	43.4
Good Hope Hospital	GHS	England	NHS Adult hospitals	97.2	92	84.2	99.5	99.7	97.9	95.5
Grantham and District Hospital	GRA	England	NHS Adult hospitals	100	-	-	0	100	0	-
Great Ormond Street Hospital	GOS	England	Children's	100	80.8	-	42.8	50	0	0
Gwynedd Hospital	GWY	Wales	NHS Adult hospitals	98.5	89.2	-	93	98.8	99.6	77.3
Hammersmith Hospital	HAM	England	NHS Adult hospitals	99.4	76.5	99.4	87	99.9	99.8	95.4
Harefield Hospital	HH	England	NHS Adult hospitals	99.7	84.7	99	89.8	99.4	100	97.8
Harley Street Clinic	HSC	England	Private/Children's Hospitals	50	90.5	79.6	97.1	97.3	99.8	96.5
Harrogate District Hospital	HAR	England	NHS Adult hospitals	99.3	77.3	0	16.5	91.6	99.5	86.2
Huddersfield Royal Infirmary	HUD	England	NHS Adult hospitals	98.5	87.2	93.3	47.8	98.4	98.8	95.9
John Radcliffe Hospital	RAD	England	NHS Adult hospitals	98.9	76.5	84.5	99.2	99.2	99.4	93.9
Kent Institute Of Medicine And Surgery	KIM	England	Private/Children's Hospitals	50	96.4	86	55.6	93.6	97.2	86.1
Kettering General Hospital	KGH	England	NHS Adult hospitals	99.8	84.4	99.3	95.9	98.1	99.1	95.7
King George Hospital Goodmayes	KGG	England	NHS Adult hospitals	99.8	80.1	-	96.5	99.1	99.4	94.3
Kings College Hospital	KCH	England	NHS Adult hospitals	99.6	92.1	99	99.4	99.9	99.9	98.7
Kings Mill Hospital	KMH	England	NHS Adult hospitals	100	87.8	55.9	79.8	98.9	100	97.3
Kingston Hospital	KTH	England	NHS Adult hospitals	99.6	97.5	-	99.2	100	100	99.2
Leeds General Infirmary	LGI	England	NHS Adult hospitals	99.9	90.9	91.4	92	89	100	99.6
Lewisham Hospital	LEW	England	NHS Adult hospitals	87.5	100	-	0	100	100	100
Lincoln County Hospital	LIN	England	NHS Adult hospitals	100	89.9	-	100	99.9	100	100
Lister Hospital	LIS	England	NHS Adult hospitals	99.3	87.2	-	86.6	99.6	99.8	93.6
Liverpool Heart & Chest Hospital	BHL	England	NHS Adult hospitals	99.8	90.5	96.3	98.8	99.2	99.8	95.7
London Bridge Hospital	LBH	England	Private/Children's Hospitals	50	71.5	61.2	44.9	82.8	99.5	77.7
London Independent Hospital	IND	England	Private/Children's Hospitals	50	-	-	0	75	0	-
Luton & Dunstable Hospital	LDH	England	NHS Adult hospitals	100	87.4	-	98	99	99.8	98

Hospital	Hospital code	Region	Category	Demographics	Clinical (basic)	Clinical (complex)	GMC	Procedure details	Generator details	Validity (generator)
Maelor Hospital Wrexham	WRX	Wales	NHS Adult hospitals	97.5	63	0	1	42.3	99.6	30
Maidstone Hospital	MAI	England	NHS Adult hospitals	99.8	89.8	84	100	100	98.8	98.5
Manchester Royal Infirmary	MRI	England	NHS Adult hospitals	99.8	95.2	99.7	94	92.8	99.5	92.5
Medway Maritime Hospital	MDW	England	NHS Adult hospitals	96	92.2	87.8	86.3	97.3	100	90.9
Milton Keynes Hospital	MKH	England	NHS Adult hospitals	100	94.7	93.5	93.3	99.7	100	99.6
Monklands District General Hospital	MDG	Scotland	NHS Adult hospitals	50	63.7	-	95.3	99	100	98.8
Morrison Hospital	MOR	Wales	NHS Adult hospitals	98.5	86.7	97.9	17.1	95.6	97.8	94.9
Musgrove Park Hospital	MPH	England	NHS Adult hospitals	99.8	85.5	83.7	63.1	98.9	98.9	88.1
New Cross Hospital (Wolverhampton Heart Centre)	NCR	England	NHS Adult hospitals	99.3	89.3	91.1	95.2	97.1	99.5	90.5
Norfolk & Norwich University Hospital	NOR	England	NHS Adult hospitals	100	95.8	98.1	100	99.7	99.8	98.6
North Devon District Hospital	NDD	England	NHS Adult hospitals	97.3	69.3	73.3	0	46.8	100	28.7
North Middlesex University Hospital	NMH	England	NHS Adult hospitals	96.3	87.1	25	61.6	99	99.6	96.5
Northampton General Hospital	NTH	England	NHS Adult hospitals	95.2	91.6	98.8	93.1	97.4	99.9	93
Northern General Hospital Sheffield	NGS	England	NHS Adult hospitals	100	84.7	82.3	100	89.7	96.3	88
Northwick Park Hospital	NPH	England	NHS Adult hospitals	99.2	94.6	92.9	97.3	98.2	99.3	94.7
Nottingham City Hospital	CHN	England	NHS Adult hospitals	99.8	77	85.3	90.6	96.7	99.5	91.9
Papworth Hospital	PAP	England	NHS Adult hospitals	100	87.7	57.1	80.2	98.2	99.6	69.4
Peterborough City Hospital	PET	England	NHS Adult hospitals	99.7	70	-	51.1	100	99.8	98.7
Pilgrim Hospital	PIL	England	NHS Adult hospitals	98.5	54	-	0	96.9	93.8	87.5
Pinderfields General Hospital	PIN	England	NHS Adult hospitals	99.8	97	100	98.2	98.8	99.8	98.7
Poole Hospital	PGH	England	NHS Adult hospitals	100	91.2	-	96.8	99.4	100	99.5
Prince Charles Hospital	PCH	Wales	NHS Adult hospitals	100	48.5	0	90.2	89.4	99.4	77.7
Princess Alexandra Hospital Harlow	PAH	England	NHS Adult hospitals	100	72.6	-	100	100	100	99.5
Princess Of Wales Hospital	POW	Wales	NHS Adult hospitals	57	66.7	76.7	98.7	97.8	98.2	89
Princess Royal Hospital Telford	TLF	England	NHS Adult hospitals	99.6	65.7	59.3	75.3	97.7	98.5	94.6
Queen Alexandra Hospital	QAP	England	NHS Adult hospitals	100	93.5	99.9	96	98.7	100	99.3
Queen Elizabeth Hospital Birmingham	QEB	England	NHS Adult hospitals	99.6	56.1	91.4	91.2	84.5	99.4	65.1
Queen Elizabeth Hospital Gateshead	QEG	England	NHS Adult hospitals	95.2	66.7	-	46.8	98.9	99.3	99.3
Queen Elizabeth Hospital Greenwich	GWH	England	NHS Adult hospitals	100	93	81.8	93	97.9	99.4	90.8
Queen Elizabeth The Queen Mother Hospital	QEQ	England	NHS Adult hospitals	92.7	87.2	69	51	95	98.8	86.4
Queens Hospital Burton	BRT	England	NHS Adult hospitals	99	91.9	-	0	99.3	100	92.9
Rotherham Hospital	ROT	England	NHS Adult hospitals	100	92.5	100	83.1	99.2	100	100
Royal Albert Edward Infirmary	AEI	England	NHS Adult hospitals	97.7	80.6	-	0	84.2	99.8	77.9
Royal Berkshire Hospital	BHR	England	NHS Adult hospitals	100	90	99.8	95.8	99.8	99.8	99.8
Royal Blackburn Hospital	BLA	England	NHS Adult hospitals	99.9	90.5	65.9	93.2	97.2	99.7	96.9
Royal Bolton Hospital	BOL	England	NHS Adult hospitals	98.7	93.5	88.2	95.7	97	98.5	96.1
Royal Bournemouth Hospital	BOU	England	NHS Adult hospitals	99.9	94	88.5	99.9	99	99.9	96.5
Royal Brompton Hospital	NHB	England	NHS Adult hospitals	97.6	83.5	98.9	54.6	99.4	100	98.7
Royal Cornwall Hospital	RCH	England	NHS Adult hospitals	100	89.7	89.5	99.6	98.6	98.9	95.8
Royal Derby Hospital	DER	England	NHS Adult hospitals	100	77.5	4.1	63.1	93.7	97.2	85.8
Royal Devon & Exeter Hospital	RDE	England	NHS Adult hospitals	99.5	88.2	92.6	89.1	97.3	99	95.3
Royal Free Hospital	RFH	England	NHS Adult hospitals	97.3	95.5	-	96.2	76.3	69.7	63.6
Royal Glamorgan Hospital	RGH	Wales	NHS Adult hospitals	100	69.8	83.5	96.8	89.8	100	81.5
Royal Hospitals Belfast	RVB	N Ireland	NHS Adult hospitals	50	93.5	95.7	100	99.2	98.9	97.9
Royal Infirmary Aberdeen	RIA	Scotland	NHS Adult hospitals	52.1	51.9	26.6	1	97.9	99.7	95.7

Hospital	Hospital code	Region	Category	Demographics	Clinical (basic)	Clinical (complex)	GMC	Procedure details	Generator details	Validity (generator)
Royal Liverpool University Hospital	RLU	England	NHS Adult hospitals	99.2	92.9	-	99.2	100	100	100
Royal Preston Hospital	RPH	England	NHS Adult hospitals	99.5	91.2	-	52.2	84.7	98.5	68.9
Royal Surrey County Hospital	RSU	England	NHS Adult hospitals	98.6	40.9	74.8	19.9	68.3	99.2	36
Royal Sussex County Hospital	RSC	England	NHS Adult hospitals	99.8	86.2	93.8	99.8	97.8	99	91.1
Royal United Hospital Bath	BAT	England	NHS Adult hospitals	99.3	86.6	-	77.7	99.3	100	92.2
Russells Hall Hospital	RUS	England	NHS Adult hospitals	99.2	88.1	91.8	95.5	95.6	98.8	81.1
Salford Royal Hospital	SLF	England	NHS Adult hospitals	100	95	-	100	100	100	100
Salisbury District Hospital	SAL	England	NHS Adult hospitals	99.8	94.3	99.7	98.2	99.8	99.5	98
Scarborough Hospital	SCA	England	NHS Adult hospitals	98.5	78.6	-	40	99.2	98.8	98
Scunthorpe General Hospital	SCU	England	NHS Adult hospitals	100	56.7	-	46.1	94.6	98.3	94.9
Solihull Hospital	SOL	England	NHS Adult hospitals	99.5	93	-	99.5	100	99.3	98.9
South Tyneside District Hospital	STD	England	NHS Adult hospitals	97.7	91.9	-	0	94.7	100	98.9
Southampton General Hospital	SGH	England	NHS Adult hospitals	100	93.4	85.5	100	99.9	99.3	97.4
Southend University Hospital	SEH	England	NHS Adult hospitals	99.8	86.4	-	96.1	94	98	85.9
Spire Bristol	GHB	England	Private/Children's Hospitals	51	90.5	100	67.9	86.8	100	84.6
Spire Hospital Cardiff	SPC	Wales	Private/Children's Hospitals	50	75	-	0	75	100	50
Spire Hull And East Riding Hospital	HBP	England	Private/Children's Hospitals	54.5	90.6	-	100	100	100	90
Spire Nottingham Hospital	SPN	England	Private/Children's Hospitals	50	100	100	83.3	100	100	100
Spire Southampton Hospital	CBS	England	Private/Children's Hospitals	51.4	88.1	67.8	51.9	97.3	95.7	95.7
St Anthony's Hospital	ANT	England	Private/Children's Hospitals	50	90.9	83.3	0	95.8	99.5	93.2
St George's Hospital	GEO	England	NHS Adult hospitals	97.6	82.1	91.6	82.2	97.5	99.6	98.3
St Mary's Hospital Isle Of Wight	IOW	England	NHS Adult hospitals	97.6	91.1	-	0	99.4	100	100
St Peter's Hospital	SPH	England	NHS Adult hospitals	100	96.1	97.1	100	100	100	99.8
St Richard's Hospital	STR	England	NHS Adult hospitals	98.3	91.3	89.2	43.5	95.5	99.5	89.7
St Thomas' Hospital	STH	England	NHS Adult hospitals	98.5	92	85.8	90.2	99.7	99.9	97.8
Sunderland Royal Hospital	SUN	England	NHS Adult hospitals	100	100	-	0	100	100	100
Tameside Hospital	TGA	England	NHS Adult hospitals	98.3	89.7	-	46.5	91.8	99	91.6
The Great Western Hospital	PMS	England	NHS Adult hospitals	99.8	90.5	98.4	99.3	99.8	99.8	96
The Ipswich Hospital	IPS	England	NHS Adult hospitals	100	96.3	0	100	100	100	99
The James Cook University Hospital	SCM	England	NHS Adult hospitals	100	92.4	100	99.8	95.1	100	98
The Princess Royal University Hospital Bromley	BRO	England	NHS Adult hospitals	96.2	87.6	-	39.5	66.8	99	53.1
The York Hospital	YDH	England	NHS Adult hospitals	99.1	94.5	97.5	87.8	98.8	99.6	96.9
Torbay Hospital	TOR	England	NHS Adult hospitals	98	88.2	87.8	90.8	95.9	90.6	92.5
Trafford General Hospital	TRA	England	NHS Adult hospitals	100	16.6	-	61.5	57.7	80.6	25
University Hospital Coventry	WAL	England	NHS Adult hospitals	100	78.3	98.2	99.6	99.4	95.8	90.3
University Hospital Of Hartlepool	HGH	England	NHS Adult hospitals	100	92.7	94.3	74	100	100	98.5
University Hospital Of North Durham	DRY	England	NHS Adult hospitals	100	-	-	50	84.6	0	-
University Hospital Of North Staffs	STO	England	NHS Adult hospitals	99.5	94.9	96.3	89.7	99.9	99.5	97.8
University Hospital Of Wales	UHW	Wales	NHS Adult hospitals	92.7	81.6	83.3	92.4	99.1	99.6	92.7
Victoria Hospital Kirkcaldy	KIR	Scotland	NHS Adult hospitals	98.8	88.7	70.6	43.5	99.3	100	95.2
Walsall Manor Hospital	WMH	England	NHS Adult hospitals	98.2	94.8	90.1	97.8	99.2	99.7	92.2
Wansbeck General Hospital	ASH	England	NHS Adult hospitals	98.5	93.3	90.8	48.2	99.2	99.3	95.5
Warrington Hospital	WDG	England	NHS Adult hospitals	100	95	-	93.8	100	100	100
Warwick Hospital	WAR	England	NHS Adult hospitals	99.1	85.5	92.9	22.1	86.8	100	88.7
Watford General Hospital	WAT	England	NHS Adult hospitals	99.5	91.3	98.4	91.9	99.4	100	99.3

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Wellington Hospital North	HHW	England	Private/Children's Hospitals	50.2	95.6	92.5	99	100	100	100
Westmoreland General Hospital	WGK	England	NHS Adult hospitals	97.6	83	94.3	85.4	86.2	99.7	70.7
Wexham Park Hospital	WEX	England	NHS Adult hospitals	99.9	81.7	94.3	99.3	99.7	99.8	96.1
Whipps Cross University Hospital	WHC	England	NHS Adult hospitals	100	96.3	-	50	100	98.6	97.2
Whiston Hospital	WHI	England	NHS Adult hospitals	98.5	67.6	100	53	97.1	100	94.4
William Harvey Hospital	WHH	England	NHS Adult hospitals	99.2	94.3	96.5	96	99.8	99.9	96.2
Wishaw General Hospital	WIS	England	NHS Adult hospitals	99	61.9	-	74.7	98.4	100	98.7
Worcestershire Royal Hospital	WRC	England	NHS Adult hospitals	99.8	94.5	97.7	98.6	100	100	91.3
Worthing Hospital	WRG	England	NHS Adult hospitals	100	91.5	97.3	95.5	99.7	99.9	97.3
Wycombe Hospital	AMG	England	NHS Adult hospitals	100	91.1	96.8	97.8	97.8	100	97.5
Wythenshawe Hospital	WYT	England	NHS Adult hospitals	100	76.1	74.1	99.9	99.8	99.9	97.2
Yeovil District Hospital	YEO	England	NHS Adult hospitals	89.8	51.3	-	0.3	91.8	98.5	87.9
Yorkshire Clinic	YKC	England	Private/Children's Hospitals	65	91.7	100	77.8	100	100	100