



National Joint Registry

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Working for patients, driving forward quality



HIPS



KNEES



ANKLES



ELBOWS



SHOULDERS



PROMs

Unit-level activity and outcomes

15th Annual Report
2018

**National Joint Registry
for England, Wales,
Northern Ireland and
the Isle of Man**

Part 4

4.1 Unit
performance

This section shows indicators for hip and knee joint replacement procedures by Trust, Local Health Board and unit (hospital). This was first included in 2012 and is part of the Government's transparency agenda. It is based on procedures carried out during the 2017 calendar year and submitted to the NJR by 28 February 2018.

Note: Part Four information (excluding outlier analysis) is based on the actual operation date (1 January 2017 to 31 December 2017) whereas data in Part One is based on the date the procedure was submitted (1 April 2017 to 31 March 2018).

Part 4

4.2 Unit
outlier analysis
methodology

Unit outlier analysis covers all primary procedures performed from 1 April 2003 to 1 March 2018.

The outlier analyses make use of funnel plots from statistical process control methodology. These aim to distinguish normal variation between units (which is to be expected) from unusual differences (termed 'special cause' variation), which may indicate the need for further investigation. Funnel plots enable units of different sizes to be compared; performance indicators based on smaller numbers of patients will have greater variability and this in turn is reflected by wider control limits.

Summary of the methodology for unit revision rates:

- The standardised revision ratio (SRR) is plotted against the number of expected revisions. The SRR is the total number of revisions divided by the number of expected revisions for that unit's caseload in respect of the age group, gender and the diagnosis of the patients. If the SRR is 1, the number of revisions is compatible with the number expected for that unit
- Control limits for funnel plots are normally set at 95% and 99.8% (approximates to 2 or 3 standard deviations). Our normal six-monthly review process focuses on those above the upper limit of the latter. One might expect, however, that one in 500 would be outside the 99.8% limits (above or below) just by chance. In the following table we have highlighted in red (1) units above the upper of the 99.8% control limits. Previously we have reported on those units above the 99.99% control limits but this has been removed from this year's report

Please note for the data in following table:

Compliance, Consent and Linkability are:

- Red if lower than 80%
- Amber if equal to or greater than 80% and lower than 95%
- Green if 95% or more

- Linkability for some hospitals will be lower than expected if they have private patients from outside England and Wales
- Part Four data covers procedures carried out between 1 January 2017 and 31 December 2017

Outlier analyses are:

- Red if units are above the upper of the 99.8% control limits (approximates to 3 standard deviations (SDs))

The table uses the following footnotes:

- 1 Compliance (NHS Trust/Local Health Board Only) – the percentage of cases submitted to the NJR compared to HES/PEDW.
- 2 Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.
- 3 Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.
- 4 Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).
- 5 Outliers with respect to revisions (at any time) following primary operations performed from 2003 onwards [from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).
- 6 Outliers with respect to revisions (at any time) following primary operations performed from 2013 onwards [from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).
- 7 Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.
- 8 Compliance figures were unavailable.

Summary of the methodology for unit 90-day mortality rates:

- The standardised mortality ratio (SMR) is plotted against the number of expected deaths. The SMR is the number of actual deaths within 90 days of primary joint replacement divided by the number of expected deaths in this period. The number of expected deaths has been calculated after adjustment for patient characteristics (age, gender and ASA grade of patients). Analysis for hips has excluded operations undertaken for trauma, failed hemi-arthroplasty and, since November 2014 (when recording of this began), hips implanted for metastatic cancer
- Control limits are as for revisions

Any units identified as potential outliers in Part Four have been notified. All units are provided with an Annual Clinical Report and additionally have access to an online NJR Management Feedback system which is updated annually.

In earlier Annual Reports, the NJR have reported outlying hospitals based on all cases submitted to the NJR since April 2003. To reflect changes in hospital practices and component use, the NJR now also reports outlying hospitals based on only the last five years of primary operation data. This five-year cut of data excludes the majority of withdrawn outlier implants and metal on metal total hip replacements from analysis, and thus better represents contemporary practice.

Trust/Local Health Board/Company	Outliers: Knees						Outliers: Hips			Outliers: Knees		
	Outliers: Hips			Outliers: Knees			Outliers: Hips			Outliers: Knees		
Hospital	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2013 ⁵	Revision rate since 2003 ⁶	Revision rate since 2013 ⁶	
Abertawe Bro Morgannwg University Health Board	76%											
Morriston Hospital	457	12	88%	98%	2.2	46%	69.7					
Neath Port Talbot Hospital	29	5	100%	100%	1.8	48%	68.3					
Princess of Wales Hospital	593	10	93%	95%	2.1	45%	70.4					
Aintree University Hospitals NHS Foundation Trust	92%											
Aintree University Hospital Sefton Suite	26	3	50%	96%	2.2	48%	65.8					
University Hospital Aintree	623	15	97%	100%	2.3	41%	67.5					
Airedale NHS Foundation Trust	96%											
Airedale General Hospital	580	7	91%	99%	2.3	37%	72.0					
Aneurin Bevan Health Board	136%											
Nevill Hall Hospital	700	10	96%	100%	2.3	40%	70.3					
Royal Gwent Hospital	278	11	100%	100%	2.5	39%	71.7					
St Woolos Hospital	926	19	98%	99%	2.0	42%	68.1					
Ysbyty Ystrad Fawr	4	1	100%	100%	1.8	75%	67.3					
Ashford and St Peter's Hospitals NHS Foundation Trust	99%											
Ashford Hospital	733	16	95%	100%	2.0	38%	69.8					
St Peter's Hospital	126	14	97%	96%	2.4	44%	73.3					

Compliance, consent and linkability are red if lower than 80%, green if 95% or more and amber in between

¹ Compliance (NHS Trust/Local Health Board Only) - the percentage of cases submitted to the NJR compared to HES/PEDW.

² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.

³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.

⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁵ Outliers with respect to revisions (at any time) following primary operations performed from 2003 onwards [from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁶ Outliers with respect to revisions (at any time) following primary operations performed from 2013 onwards [from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.

⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company	Compliance						Outliers: Knees						
	Compliance (NHS Trust/Local Health Board Only) ¹		Consent Rate (%) 2017		Linkability (%) 2017 ³		Percentage Male Patients 2017		Average Age At Operation 2017		Revision rate since 2013 ⁶		
Hospital	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Average ASA Grade 2017	Linkability (%) 2017 ³	Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2013 ⁶
Barking Havering and Redbridge University Hospitals NHS Trust	94%												
King George Hospital	628	16	91%	98%	2.3	41%	71.5						
Queens Hospital	80	15	36%	96%	2.5	31%	75.4						
Barnsley Hospital NHS Foundation Trust	98%												
Barnsley District General Hospital	800	9	87%	99%	2.2	44%	68.3						
Barts Health NHS Trust	86%												
Gateway Surgical Centre	559	21	100%	100%	2.1	37%	67.0						
Newham General Hospital	4	2	100%	100%	2.5	25%	73.5						
The Royal London Hospital	308	18	99%	99%	2.4	44%	66.2	1					
Whipps Cross University Hospital	215	9	97%	97%	2.2	37%	70.5						
Basildon and Thurrock University Hospitals NHS Foundation Trust	100%												
Basildon University Hospital	611	12	96%	99%	2.3	44%	70.0						
Bedford Hospital NHS Trust	94%												
Bedford Hospital South Wing	287	8	97%	100%	2.3	37%	71.8						
Belfast HSC Trust	N/A ⁷												
Musgrave Park Hospital	2553	33	100%	N/A ⁷	2.1	N/A ⁷	N/A ⁷						
Royal Victoria Hospital	168	14	88%	N/A ⁷	2.5	N/A ⁷	N/A ⁷						
Betsi Cadwaladr University Health Board	100%												
Abergele Hospital	478	9	89%	99%	2.0	36%	70.0						

Compliance, consent and linkability are red if lower than 80%, green if 95% or more and amber in between¹ Compliance (NHS Trust/Local Health Board Only) - the percentage of cases submitted to the NJR compared to HES/PEDW.² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).⁵ Outliers with respect to revisions (at any time) following primary operations performed from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).⁶ Outliers with respect to revisions (at any time) following primary operations performed from 1 March 2013 onwards [from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
Glan Clwyd General Hospital	127	9	98%	100%	2.6	41%	73.7					
Wrexham Maelor Hospital	440	11	100%	97%	2.3	45%	71.2					
Ysbyty Gwynedd	431	10	95%	99%	2.2	40%	70.5					
Blackpool Teaching Hospitals NHS Foundation Trust	72%											
Blackpool Victoria Hospital	522	11	79%	99%	2.1	41%	70.7					
Bradford Teaching Hospitals NHS Foundation Trust	107%											
Bradford Royal Infirmary	527	9	98%	99%	2.3	40%	68.2					
Brighton and Sussex University Hospitals NHS Trust	98%											
Princess Royal Hospital	191	15	52%	99%	2.6	41%	71.5					
Royal Sussex County Hospital	13	5	0%	100%	2.5	46%	72.4					
Sussex Orthopaedic NHS Treatment Centre	788	21	92%	98%	2.2	41%	70.0					
Buckinghamshire Healthcare NHS Trust	93%											
Stroke Mandeville Hospital	44	8	68%	89%	2.2	31%	73.7					
Wycombe Hospital	649	12	97%	99%	2.2	40%	70.6					
Burton Hospitals NHS Foundation Trust	96%											
Queens Hospital Burton Upon Trent	763	12	95%	99%	2.3	45%	70.4					
Calderdale and Huddersfield NHS Foundation Trust	97%											
Calderdale Royal Hospital	983	16	96%	99%	2.2	43%	69.9					

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Trust/Local Health Board/Company	Outliers: Knees									
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Average Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2013 ⁵	Revision rate since 2003 ⁶
Huddersfield Royal Infirmary	45	12	71%	98%	2.2	41%	69.9			
Cambridge University Hospitals NHS Foundation Trust			77%							
Addenbrooke's Hospital	872	20	85%	98%	2.3	44%	70.8			
Cardiff and Vale University Health Board			84%							
Llandough Hospital	1416	17	96%	97%	2.1	44%	69.5			
University Hospital of Wales	11	5	9%	27%	2.5	67%	55.2			
Chelsea and Westminster Hospital NHS Foundation Trust			91%							
Chelsea & Westminster Hospital	337	14	88%	98%	2.0	39%	69.5			
West Middlesex University Hospital	360	8	100%	100%	2.1	39%	70.6			
Chesterfield Royal Hospital NHS Foundation Trust			101%							
Chesterfield Royal Hospital	786	12	95%	98%	2.1	42%	70.4			
City Hospitals Sunderland NHS Foundation Trust			96%							
Sunderland Royal Hospital	1025	13	96%	99%	2.3	41%	68.4			
Colchester Hospital University NHS Foundation Trust			101%							
Colchester General Hospital	1045	12	91%	100%	2.1	42%	71.6			
Countess of Chester Hospital NHS Foundation Trust			83%							
Countess of Chester Hospital	283	7	100%	100%	2.1	37%	73.1			

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Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
County Durham and Darlington NHS Foundation Trust	95%											
Bishop Auckland Hospital	613	20	90%	100%	2.0	46%	67.5					
Darlington Memorial Hospital	218	10	57%	92%	2.4	44%	69.4					
University Hospital of North Durham	289	11	89%	96%	2.5	47%	72.2					
Croydon Health Services NHS Trust	62%											
Croydon University Hospital	27	6	67%	93%	2.2	28%	72.9					
Cwm Taf Health Board	100%											
Prince Charles Hospital	264	5	100%	100%	2.2	47%	68.8					
The Royal Glamorgan Hospital	500	10	100%	99%	2.2	43%	68.7					
Dartford and Gravesham NHS Trust	101%											
Darent Valley Hospital	639	9	99%	99%	2.3	42%	71.1					
Queen Mary's Hospital Sidcup	353	8	99%	99%	2.0	40%	67.3					
Derby Hospitals NHS Foundation Trust	101%											
Royal Derby Hospital	2036	21	91%	95%	2.1	40%	69.2					
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	34%											
Bassetlaw Hospital	216	6	91%	100%	2.4	38%	69.9					
Doncaster Royal Infirmary	287	10	100%	100%	2.5	48%	69.4					

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⁶ Outliers with respect to revisions (at any time) following primary operations performed from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

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⁸ Compliance figures were unavailable.

Hospital	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
Dorset County Hospital NHS Foundation Trust	99%	10	97%	99%	2.2	42%	71.4					
Dorset County Hospital	792	10	97%	99%	2.2	42%	71.4					
East and North Hertfordshire NHS Trust	98%											
Lister Hospital	882	16	94%	98%	2.3	39%	71.6					
East Cheshire NHS Trust	87%											
Macclesfield District General Hospital	482	8	98%	100%	2.1	44%	71.5					
East Kent Hospitals University NHS Foundation Trust	84%											
Kent and Canterbury Hospital	1	1	100%	100%	3.0	100%	81.3					
Queen Elizabeth The Queen Mother Hospital	526	11	91%	98%	2.3	41%	72.6					
William Harvey Hospital (Ashford)	1045	13	92%	95%	2.3	41%	70.8					
East Lancashire Hospitals NHS Trust	93%											
Burnley General Hospital	817	17	95%	98%	2.1	40%	70.6					
Royal Blackburn Hospital	70	16	90%	96%	2.7	43%	72.5					
East Sussex Healthcare NHS Trust	161%											
Conquest Hospital	630	15	100%	100%	2.2	37%	72.4					
Eastbourne District General Hospital	399	5	97%	97%	2.4	40%	71.6					
Epsom and St Helier University Hospitals NHS Trust	100%											
Epsom Hospital	22	1	95%	95%	2.6	14%	78.3					

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Hospital	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
St Helier Hospital	23	3	96%	100%	2.4	30%	70.9					
The Elective Orthopaedic Centre	3287	36	96%	97%	2.1	38%	69.9					
Frimley Park Hospital	1208	16	98%	99%	2.1	40%	69.3					
Heatherwood Hospital	781	12	97%	98%	2.1	38%	69.5					
Wexham Park Hospital	206	13	89%	99%	2.5	35%	73.6					
Gateshead Health NHS Foundation Trust	107%											
The North East NHS Surgery Centre	1122	19	92%	99%	2.2	45%	68.6					
George Eliot Hospital NHS Trust	99%											
George Eliot Hospital - Acute Services	665	8	92%	98%	2.2	45%	69.3					
Gloucestershire Hospitals NHS Foundation Trust	101%											
Cheltenham General Hospital	1204	28	87%	99%	2.1	40%	70.9					
Gloucestershire Royal Hospital	699	18	83%	96%	2.2	40%	71.5					
Great Western Hospitals NHS Foundation Trust	90%											
The Great Western Hospital	1056	15	92%	98%	2.2	42%	69.4					
Guy's and St Thomas' NHS Foundation Trust	95%											
Guy's Hospital	861	15	87%	96%	2.1	39%	63.1					
St Thomas' Hospital	28	11	36%	79%	2.0	50%	60.3					

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Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
Hampshire Hospitals NHS Foundation Trust	82%											
Basingstoke and North Hampshire Hospital	919	13	95%	98%	2.1	40%	70.2					
Royal Hampshire County Hospital	283	6	88%	99%	2.2	44%	70.8					
Harrogate and District NHS Foundation Trust	101%											
Harrogate District Hospital	896	10	90%	97%	2.1	40%	70.3					
Heart of England NHS Foundation Trust	74%											
Good Hope Hospital	221	15	92%	97%	2.3	40%	70.7					
Heartlands Hospital	32	5	28%	63%	2.7	25%	72.0					
Solihull Hospital	905	20	40%	98%	2.1	41%	68.8					
Homerton University Hospital NHS Foundation Trust	97%											
Homerton University Hospital	211	7	43%	99%	2.3	29%	68.0					
Hull and East Yorkshire Hospitals NHS Trust	103%											
Castle Hill Hospital	1178	21	92%	96%	2.2	42%	68.7					
Hull Royal Infirmary	40	15	50%	100%	2.2	33%	74.3					
Hywel Dda Health Board	92%											
Bronglais General Hospital	171	4	70%	99%	2.4	41%	69.9					
Prince Philip Hospital	435	9	99%	100%	2.1	38%	69.4					
West Wales General Hospital	2	2	100%	100%	2.0		76.8					

Compliance, consent and linkability are red if lower than 80%, green if 95% or more and amber in between

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⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.

⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company Hospital	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
Withybush General Hospital	439	8	97%	99%	2.2	39%	70.1					
Imperial College Healthcare NHS Trust	90%											
Charing Cross Hospital	597	16	98%	100%	2.1	37%	67.6					
St Mary's Hospital	29	7	21%	86%	2.2	36%	71.0					
Ipswich Hospital NHS Trust	96%											
Ipswich Hospital	784	13	99%	99%	2.2	41%	71.6					
Isle of Man Secondary Healthcare Directorate	N/A ⁸											
Noble's Hospital	278	4	98%	97%	1.8	41%	71.5					
Isle of Wight NHS Trust	97%											
St Mary's Hospital	502	7	100%	100%	2.2	40%	72.0					
James Paget University Hospitals NHS Foundation Trust	81%											
James Paget University Hospital	574	6	82%	98%	2.3	47%	71.7					
Kettering General Hospital NHS Foundation Trust	92%											
Kettering General Hospital	425	10	87%	100%	2.3	39%	70.4					
King's College Hospital NHS Foundation Trust	85%											
King's College Hospital (Denmark Hill)	107	18	79%	98%	2.3	32%	69.7					
Orpington Hospital	1103	25	86%	95%	2.1	39%	70.0					
Princess Royal University Hospital	56	10	38%	84%	2.7	49%	76.0					

Compliance, consent and linkability are red if lower than 80%, green if 95% or more and amber in between¹ Compliance (NHS Trust/Local Health Board Only) - the percentage of cases submitted to the NJR compared to HES/PEDW.² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).⁵ Outliers with respect to revisions (at any time) following primary operations performed from 2003 onwards [from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).⁶ Outliers with respect to revisions (at any time) following primary operations performed from 2013 onwards [from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
Kingston Hospital NHS Foundation Trust	86%	9	71%	86%	2.2	29%	73.5					
Kingston Hospital	49	9										
Lancashire Teaching Hospitals NHS Foundation Trust	99%											
Chorley and South Ribble Hospital	558	10	99%	100%	2.4	42%	70.3					
Royal Preston Hospital	65	11	100%	98%	2.3	27%	73.5					
Leeds Teaching Hospitals NHS Trust	80%											
Chapel Allerton Hospital	1077	16	94%	99%	2.2	44%	69.0					
Leeds General Infirmary	7	1	100%	100%	2.3	57%	75.6					
Lewisham and Greenwich NHS Trust	88%											
Queen Elizabeth Hospital Woolwich	56	10	100%	100%	2.4	38%	72.5					
Riverside Treatment Centre	478	16	76%	90%	2.2	40%	69.4					
University Hospital Lewisham	78	6	72%	92%	2.2	31%	70.0					
London North West Healthcare NHS Trust	96%											
Central Middlesex Hospital	692	20	96%	99%	2.1	37%	69.4					
Ealing Hospital	4	4	100%	100%	1.8	50%	61.8					
Northwick Park Hospital	25	6	60%	92%	2.2	43%	72.3					
Luton and Dunstable Hospital NHS Foundation Trust	98%											
Luton & Dunstable Hospital	580	13	99%	100%	2.3	37%	71.6					

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¹ Compliance (NHS Trust/Local Health Board Only) - the percentage of cases submitted to the NJR compared to HES/PEDW.

² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.

³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.

⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁵ Outliers with respect to revisions (at any time) following primary operations performed from 2003 onwards [from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁶ Outliers with respect to revisions (at any time) following primary operations performed from 2013 onwards [from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.

⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
Maidstone and Tunbridge Wells NHS Trust	102%											
Maidstone District General Hospital	400	9	99%	99%	2.2	45%	69.5					
The Tunbridge Wells Hospital	260	15	95%	99%	2.4	30%	75.4					
Manchester University NHS Foundation Trust	226%											
Manchester Royal Infirmary	102	12	77%	90%	2.7	37%	67.8					
Trafford General Hospital	976	32	90%	93%	2.1	41%	69.1					
Wythenshawe Hospital	494	10	100%	100%	2.3	40%	70.5					
Medway NHS Foundation Trust	58%											
Medway Maritime Hospital	349	10	62%	98%	2.5	33%	71.6					
Mid Cheshire Hospitals NHS Foundation Trust	102%											
Leighton Hospital	822	10	100%	100%	2.0	43%	70.1					
Mid Essex Hospital Services NHS Trust	91%											
Broomfield Hospital	733	10	89%	97%	2.3	42%	71.7					
Mid Yorkshire Hospitals NHS Trust	101%											
Dewsbury and District Hospital	432	10	97%	97%	2.2	43%	68.8					
Pinderfields General Hospital	310	11	93%	96%	2.4	44%	70.2					
Pontefract Elective Unit (Treatment Centre)	668	10	97%	98%	2.2	43%	67.6					

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¹ Compliance (NHS Trust/Local Health Board Only) - the percentage of cases submitted to the NJR compared to HES/PEDW.

² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.

³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.

⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁵ Outliers with respect to revisions (at any time) following primary operations performed from 2003 onwards [from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁶ Outliers with respect to revisions (at any time) following primary operations performed from 2013 onwards [from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.

⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
Milton Keynes Hospital NHS Foundation Trust	92%	10	79%	97%	2.2	36%	68.8					
Norfolk and Norwich University Hospitals NHS Foundation Trust	101%											
Norfolk & Norwich Hospital	480	19	99%	99%	2.4	43%	71.6					
Northampton General Hospital NHS Trust	86%											
Northampton General Hospital (Acute)	591	13	98%	99%	2.4	38%	71.4	1				
North Bristol NHS Trust	100%											
Southmead Hospital	1603	29	91%	98%	2.3	39%	69.4					
North Cumbria University Hospitals NHS Trust	101%											
Cumberland Infirmary	407	13	86%	94%	2.3	47%	72.7					
West Cumberland Hospital	436	13	94%	100%	2.1	46%	69.9					
Northern Devon Healthcare NHS Trust	100%											
North Devon District Hospital	619	10	89%	99%	2.1	42%	71.1					
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	88%											
Diana Princess of Wales Hospital	397	8	91%	98%	2.4	44%	71.0					
Goole and District Hospital (Acute)	260	8	91%	100%	2.1	42%	68.3					
Scunthorpe General Hospital	147	6	95%	99%	2.6	40%	70.8					

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¹ Compliance (NHS Trust/Local Health Board Only) - the percentage of cases submitted to the NJR compared to HES/PEDW.

² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.

³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.

⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁵ Outliers with respect to primary operations performed from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁶ Outliers with respect to revisions (at any time) following primary operations performed from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.

⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company Hospital	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
North Middlesex University Hospital NHS Trust	96%	10	100%	98%	2.3	35%	68.8					
North Middlesex Hospital	318	10	100%	98%	2.3	35%	68.8					
North Tees and Hartlepool NHS Foundation Trust	94%											
University Hospital of Hartlepool	733	8	100%	100%	2.1	44%	68.7					
University Hospital of North Tees	137	12	76%	92%	2.5	38%	71.5					
Northumbria Healthcare NHS Foundation Trust	100%											
Hexham General Hospital	951	18	99%	99%	1.9	45%	67.9					
North Tyneside General Hospital	813	16	100%	100%	2.0	42%	68.2					
Northumbria Specialist Emergency Care Hospital	258	21	53%	97%	2.6	36%	72.6					
Wansbeck Hospital	1051	21	100%	100%	2.0	45%	68.9					
North West Anglia NHS Foundation Trust	100%											
Hinchingbrooke Hospital	854	7	99%	99%	2.2	42%	70.9					
Peterborough City Hospital	948	16	94%	98%	2.3	42%	71.3					
Nottingham University Hospitals NHS Trust	102%											
Nottingham City Hospital	1952	18	98%	99%	2.2	40%	68.2					
Queens Medical Centre Nottingham University Hospital	73	8	93%	97%	2.4	35%	66.0					

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² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.

³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.

⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁵ Outliers with respect to primary operations performed from 2003 onwards [from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁶ Outliers with respect to revisions (at any time) following primary operations performed from 2013 onwards [from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.

⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company	Compliance						Outliers: Hips						Outliers: Knees					
	Compliance (NHS Trust/Local Health Board Only) ¹	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2013 ⁶	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
Oxford University Hospitals NHS Trust	98%	20	4	90%	100%	2.4	40%	72.5										
Horton General Hospital		45	8	93%	96%	2.2	35%	69.8										
John Radcliffe Hospital		2092	22	90%	94%	2.1	43%	69.1										
Nuffield Orthopaedic Centre																		
Pennine Acute Hospitals NHS Trust	98%	1039	25	95%	100%	2.2	41%	69.1										
Fairfield General Hospital		352	13	99%	100%	2.2	45%	69.3										
North Manchester General Hospital		68	8	97%	94%	2.4	31%	72.4										
Royal Oldham Hospital																		
Plymouth Hospitals NHS Trust	79%	661	14	90%	97%	2.3	39%	70.1										
Derriford Hospital																		
Poole Hospital NHS Foundation Trust	131%	146	12	75%	78%	2.5	39%	75.2										
Poole Hospital																		
Portsmouth Hospitals NHS Trust	80%	1306	22	100%	100%	2.2	38%	70.6										
Queen Alexandra Hospital																		
Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust																		
Robert Jones & Agnes Hunt Orthopaedic Hospital		3346	29	94%	99%	2.1	44%	69.0										

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⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company	Outliers: Knees						Outliers: Hips				
	Compliance (NHS Trust/Local Health Board Only) ¹	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2013 ⁵	Revision rate since 2013 ⁶
Royal Berkshire NHS Foundation Trust	98%	1119	22	91%	96%	2.2	38%	70.4			
Royal Bolton Hospital NHS Foundation Trust	86%	343	11	91%	91%	2.4	39%	69.2			
Royal Bolton Hospital											
Royal Cornwall Hospitals NHS Trust	96%	369	17	76%	98%	2.6	44%	73.0	1		
Royal Cornwall Hospital (Treliske)		622	15	92%	99%	2.0	40%	68.0		1	
St Michael's Hospital											
Royal Devon and Exeter NHS Foundation Trust	102%	1728	19	98%	98%	2.1	41%	70.3			
Royal Devon & Exeter Hospital (Wonford)											
Royal Free London NHS Foundation Trust	94%	37	11	59%	100%	2.3	38%	74.9			
Barnet Hospital		601	16	82%	96%	2.2	34%	69.8			
Chase Farm Hospital											
The Royal Free Hospital		384	7	98%	99%	2.2	33%	70.9			
Royal Liverpool and Broadgreen University Hospitals NHS Trust	101%	731	18	89%	100%	2.3	42%	67.7			
Broadgreen Hospital											
The Royal Liverpool University Hospital		107	13	55%	100%	2.8	41%	72.8			
Royal National Orthopaedic Hospital NHS Trust	86%									1	
The Royal National Orthopaedic Hospital (Stanmore)		1153	25	87%	98%	2.1	39%	64.3			

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Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
Royal Surrey County Hospital NHS Foundation Trust	85%											
Royal Surrey County Hospital	657	13	98%	99%	2.1	43%	70.8					
Royal United Hospital Bath NHS Trust	96%											
Royal United Hospital	667	18	96%	97%	2.4	41%	71.8					
Salford Royal NHS Foundation Trust	38%											
Salford Royal	188	14	91%	94%	2.7	45%	69.4					
Salisbury NHS Foundation Trust	103%											
Salisbury District Hospital	594	12	95%	95%	2.1	40%	72.6	1	1			
Sandwell and West Birmingham Hospitals NHS Trust	99%											
City Hospital												
Sandwell General Hospital	620	12	94%	96%	2.1	41%	69.0					
Sheffield Teaching Hospitals NHS Foundation Trust	54%											
Northern General Hospital	528	20	86%	98%	2.4	44%	69.8					
Royal Hallamshire Hospital	800	16	93%	100%	2.4	40%	68.8					
Sherwood Forest Hospitals NHS Foundation Trust	101%											
Kings Mill Hospital	856	15	98%	99%	2.2	43%	68.7					
Shrewsbury and Telford Hospital NHS Trust	90%											
Royal Shrewsbury Hospital	28	6	93%	93%	2.3	31%	68.9					

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Trust/Local Health Board/Company Hospital	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
The Princess Royal Hospital	343	8	100%	99%	2.2	44%	71.3					
South Devon Healthcare NHS Foundation Trust		101%										
Torbay Hospital	691	15	75%	97%	2.3	41%	71.8					
South Eastern HSC Trust		N/A ⁷										
Ulster Hospital Dundonald	69	8	77%	N/A ⁷	2.7	N/A ⁷	N/A ⁷					
Southend University Hospital NHS Foundation Trust		87%										
Southend Hospital	674	14	79%	99%	2.4	43%	71.0					
Southern HSC Trust		N/A ⁷										
Craigavon Area Hospital	420	9	89%	N/A ⁷	2.2	N/A ⁷	N/A ⁷					
Southport and Ormskirk Hospital NHS Trust		96%										
Ormskirk & District General Hospital	300	11	79%	99%	2.1	42%	70.8					
Southport and Formby District General Hospital	42	8	71%	95%	2.5	33%	74.7					
South Tees Hospitals NHS Foundation Trust		99%										
Friarage Hospital	837	13	100%	100%	2.1	41%	69.9					
The James Cook University Hospital	1061	18	100%	100%	2.2	44%	69.2					
South Tyneside NHS Foundation Trust		100%										
South Tyneside District Hospital	236	4	98%	100%	2.3	38%	70.5					

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Hospital	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
South Warwickshire NHS Foundation Trust	97%											
Warwick Hospital	1042	12	94%	98%	2.1	37%	70.1					
St George's Healthcare NHS Trust	106%											
St George's Hospital (Tooting)	123	9	99%	98%	2.7	38%	71.9					
St Helens and Knowsley Hospitals NHS Trust	98%											
Whiston Hospital	877	15	78%	99%	2.3	42%	68.8					
Stockport NHS Foundation Trust	97%											
Stepping Hill Hospital	853	11	98%	98%	2.2	39%	70.5					
Surrey and Sussex Healthcare NHS Trust	64%											
East Surrey Hospital	386	13	72%	98%	2.4	39%	73.2					
Tameside Hospital NHS Foundation Trust	89%											
Tameside General Hospital	370	12	100%	100%	2.3	45%	69.7					
Taunton and Somerset NHS Foundation Trust	81%											
Musgrove Park Hospital	721	10	92%	97%	2.5	41%	71.7					
The Dudley Group of Hospitals NHS Foundation Trust	98%											
Russells Hall Hospital	919	9	92%	100%	2.3	42%	70.7					
The Hillingdon Hospital NHS Foundation Trust	99%											
Hillingdon Hospital	270	12	57%	96%	2.4	32%	73.6					

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Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
Mount Vernon Treatment Centre	555	10	86%	86%	2.0	38%	67.8					
The Newcastle Upon Tyne Hospitals NHS Foundation Trust			76%									
Freeman Hospital	1094	13	98%	99%	2.3	42%	68.4					
The Royal Victoria Infirmary	65	6	72%	100%	2.5	25%	73.0					
The Princess Alexandra Hospital NHS Trust	101%											
Princess Alexandra Hospital	586	9	87%	97%	2.1	39%	70.9					
The Queen Elizabeth Hospital King's Lynn NHS Foundation Trust			101%									
The Queen Elizabeth Hospital	679	9	97%	98%	2.5	38%	72.3					
The Rotherham NHS Foundation Trust			85%									
Rotherham District General Hospital	679	11	98%	99%	2.1	43%	69.3					
The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust			100%									
Royal Bournemouth Hospital	1925	12	89%	99%	2.0	40%	71.7					
The Royal Orthopaedic Hospital NHS Foundation Trust			99%									
Royal Orthopaedic Hospital	2396	24	91%	96%	2.0	43%	67.1					
The Royal Wolverhampton Hospitals NHS Trust			100%									
Cannock Chase Hospital	1069	17	94%	98%	2.1	42%	68.9					
New Cross Hospital	202	18	71%	96%	2.7	44%	74.8					

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Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
The Whittington Hospital NHS Trust	97%	313	7	94%	99%	2.1	42%	67.3				
United Lincolnshire Hospitals NHS Trust	94%	188	11	99%	99%	1.8	43%	68.6				
County Hospital Louth		361	7	94%	99%	2.0	43%	70.4				1
Grantham and District Hospital		379	12	88%	99%	2.2	42%	71.1				
Lincoln County Hospital		447	14	91%	97%	2.3	37%	71.0				1
Pilgrim Hospital												
University College London Hospitals NHS Foundation Trust	100%	712	12	69%	92%	2.2	39%	65.4				
University College Hospital												1
University Hospital Birmingham NHS Trust	75%											
Queen Elizabeth Hospital Birmingham		60	7	72%	98%	2.3	36%	69.6				
University Hospitals Bristol NHS Foundation Trust	60%											
Bristol Royal Hospital for Children												
Bristol Royal Infirmary		33	9	64%	73%	2.3	21%	68.7				
University Hospitals Coventry and Warwickshire NHS Trust	96%											
Hospital of St Cross		1161	24	99%	99%	2.0	40%	67.8				1
University Hospital (Coventry)		363	24	98%	98%	2.6	38%	70.6				1

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³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.

⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

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⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.

⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company		Outliers: Knees						Outliers: Hips				
Hospital	Compliance (NHS Trust/Local Health Board Only) ¹	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2013 ⁵	Revision rate since 2003 ⁶	Revision rate since 2013 ⁶
University Hospitals of Leicester NHS Trust	97%	1920	27	94%	100%		2.3	41%	69.1			
Leicester General Hospital												
Leicester Royal Infirmary												
University Hospitals of Morecambe Bay NHS Foundation Trust	85%											
Furness General Hospital	381	8	99%	99%	2.2	44%	71.6					
Royal Lancaster Infirmary	371	14	98%	100%	2.4	36%	72.6					
Westmorland General Hospital	574	16	100%	100%	2.0	44%	69.5					
University Hospitals of North Midlands NHS Trust	91%											
County Hospital	634	18	64%	98%	2.3	44%	68.9					
Royal Stoke University Hospital	719	18	91%	100%	2.4	40%	70.6					
University Hospital Southampton NHS Foundation Trust	101%											
Southampton General Hospital	803	24	96%	98%	2.2	40%	69.9					
Walsall Healthcare NHS Trust	86%											
Manor Hospital	355	10	95%	96%	2.1	45%	70.8					
Warrington and Halton Hospitals NHS Foundation Trust	92%											
The Cheshire and Merseyside Treatment Centre	749	11	97%	98%	2.1	39%	69.3					
Warrington Hospital	43	6	88%	100%	2.6	44%	74.5					

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Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
Western HSC Trust	N/A ⁷	463	11	97%	N/A ⁷	2.2	N/A ⁷	N/A ⁷				
Altnagelvin Area Hospital	96%											
Western Sussex Hospitals NHS Trust	1369	24	92%	98%	2.4	41%	72.2					
St Richard's Hospital	28	7	61%	89%	2.3	36%	78.2					
Worthing Hospital	90%											
West Hertfordshire Hospitals NHS Trust	726	12	88%	97%	2.0	44%	68.1					
St Albans City Hospital	199	8	70%	95%	2.7	35%	73.5					
Watford General Hospital	1111%											
Weston Area Health NHS Trust	528	10	97%	98%	2.3	43%	71.0					
Weston General Hospital	104%											
West Suffolk Hospitals NHS Trust	861	14	98%	100%	2.2	41%	71.9					
West Suffolk Hospital	105%											
Wirral University Teaching Hospital NHS Foundation Trust	550	12	94%	99%	2.5	41%	72.3					
Arrowe Park Hospital	654	14	99%	99%	2.0	40%	68.4					
Clatterbridge Hospital	100%											
Worcestershire Acute Hospitals NHS Trust	1044	18	99%	100%	2.2	37%	71.4					
Alexandra Hospital	66	6	100%	100%	1.9	44%	69.4					
Kidderminster Treatment Centre	59	9	61%	93%	2.2	27%	76.0					
Worcestershire Royal Hospital												

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Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶	
Hospital												
Wrightington Wigan and Leigh NHS Foundation Trust	102%											
Royal Albert Edward Infirmary	78	17	94%	94%	2.7	42%	72.8					
Wrightington Hospital	3395	35	99%	99%	2.1	45%	67.7					
Wye Valley NHS Trust	65%											
Hereford County Hospital	582	11	100%	100%	2.1	40%	72.0					
Yeovil District Hospital NHS Foundation Trust	100%											
Yeovil District Hospital	707	9	84%	100%	2.1	40%	70.2					
York Teaching Hospital NHS Foundation Trust	93%											
Bridlington and District Hospital	750	9	91%	99%	2.3	41%	70.2					
Scarborough General Hospital	59	7	100%	100%	2.5	42%	76.5					
York Hospital	548	12	93%	99%	2.5	44%	72.0					
3fivetwo Group												
Kingsbridge Private Hospital (Belfast)	264	6	83%	N/A ⁷	1.8	N/A ⁷	N/A ⁷					
Aspen Healthcare Limited												
Claremont Hospital (South Yorkshire)	845	24	91%	97%	1.8	45%	68.1					
Highgate Hospital (London)	68	11	82%	93%	1.9	41%	66.2					
Parkside Hospital (Greater London)	245	14	91%	87%	1.9	42%	66.6					
The Holly Private Hospital (Essex)	297	16	94%	95%	1.9	44%	67.3					

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Hospital	Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
		No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
Benenden Healthcare Society	Benenden Hospital (Kent)	784	15	93%	97%	1.9	42%	70.4					
BMI Healthcare													
BMI Alexandra Hospital Cheadle (Cheshire)	930	37	100%	92%	2.1	43%	68.5						
BMI Bath Clinic (Avon)	345	12	99%	98%	2.0	42%	69.5						
BMI Beardwood Private Hospital (Lancashire)	313	12	96%	97%	2.1	46%	68.5						
BMI Bishops Wood Hospital (Middlesex)	249	9	96%	95%	1.8	39%	70.6						
BMI Blackheath Hospital (Greater London)	166	19	43%	96%	2.0	40%	69.2						
BMI Bury St Edmunds (Suffolk)	430	6	99%	99%	2.0	42%	69.4						
BMI Chaucer Hospital (Kent)	182	11	98%	98%	2.0	39%	71.1						
BMI Chelmsfield Park Hospital (Kent)	175	6	90%	95%	2.0	38%	70.5						
BMI Clementine Churchill Hospital (Middlesex)	421	21	83%	96%	2.0	31%	69.8						
BMI Coombe Wing (Surrey)	7	2	0%	100%	1.9	43%	67.2						
BMI Esperance (East Sussex)	205	5	96%	98%	1.9	42%	70.7						
BMI Fawkham Manor Hospital (Kent)	102	4	100%	98%	2.0	39%	68.3						
BMI Gisburne Park Hospital (Lancashire)	129	10	96%	98%	2.3	55%	71.0						
BMI Goring Hall Hospital (West Sussex)	875	9	95%	100%	2.0	36%	70.0						
BMI Hampshire Clinic (Hampshire)	299	10	94%	98%	2.0	41%	67.3						

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		No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
BMI Harrogate (North Yorkshire)		414	6	95%	96%	2.0	47%	69.7					
BMI Hendon Hospital (Greater London)		42	5	100%	98%	2.2	44%	68.0					
BMI Highfield Hospital (Lancashire)		611	25	97%	89%	2.1	42%	67.7					
BMI Huddersfield (West Yorkshire)		420	6	100%	100%	2.1	40%	67.8					
BMI Kings Oak Hospital (Middlesex)		190	14	93%	95%	1.9	45%	70.0					
BMI Lancaster (Lancashire)		212	7	100%	96%	1.8	36%	69.1					
BMI Lincoln (Lincolnshire)		441	9	89%	99%	2.1	40%	69.6					
BMI Manor Hospital (Bedfordshire)		248	6	100%	97%	1.9	42%	69.0					
BMI Mount Alvernia Hospital (Surrey)		224	8	80%	92%	1.9	43%	69.2					
BMI Princess Margaret (Berkshire)		272	11	99%	92%	1.9	42%	67.5					
BMI Priory Hospital (West Midlands)		356	15	100%	93%	1.8	47%	66.6					
BMI Ridgeway Hospital (Wiltshire)		454	10	100%	98%	1.8	39%	66.9					
BMI Runnymede Hospital (Surrey)		237	12	99%	88%	1.9	37%	68.7					
BMI Sandringham Hospital (Norfolk)		285	5	100%	100%	2.4	49%	70.5					
BMI Sarum Road Hospital (Hampshire)		232	8	99%	98%	2.1	36%	70.4					
BMI Saxon Clinic (Buckinghamshire)		364	7	82%	91%	1.9	45%	67.4					
BMI Shelburne Hospital (Buckinghamshire)		65	3	98%	95%	1.9	34%	68.0					
BMI Shirley Oaks Hospital (Surrey)		69	8	70%	94%	2.1	48%	69.3					
BMI The Beaumont Hospital (Lancashire)		287	9	100%	99%	2.1	49%	66.5					
BMI The Cavell Hospital (Middlesex)		266	13	100%	95%	2.5	43%	68.4					

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BMI The Chiltern (Buckinghamshire)	Compliance (NHS Trust/Local Health Board Only) ¹	546	9	99%	95%	2.0	39%	68.6					
BMI The Droitwich Spa Hospital (Worcestershire)		488	14	96%	99%	1.9	46%	68.8					
BMI The Edgbaston Hospital (West Midlands)		414	20	80%	73%	1.7	56%	63.3					
BMI The Harbour Hospital (Dorset)		228	7	93%	95%	2.0	46%	70.3					
BMI The London Independent Hospital (Greater London)		116	14	66%	91%	2.1	41%	65.8					
BMI The Meriden Hospital (West Midlands)		416	14	100%	97%	1.9	45%	65.1					
BMI The Park Hospital (Nottinghamshire)		596	18	92%	97%	2.0	44%	67.9					
BMI The Sloane Hospital (Kent)		92	7	50%	97%	2.2	47%	72.2					
BMI The Somerfield Hospital (Kent)		287	8	96%	98%	2.1	39%	68.7					
BMI The South Cheshire Private Hospital (Cheshire)		157	10	100%	100%	1.7	45%	68.3					
BMI Thornbury Hospital (South Yorkshire)		791	22	99%	99%	2.0	45%	67.9					
BMI Three Shires Hospital (Northamptonshire)		733	13	99%	99%	2.1	40%	68.0					
BMI Wrendale Hospital (Carmarthenshire)		195	11	100%	98%	1.9	43%	72.0					
BMI Winterbourne Hospital (Dorset)		517	11	81%	81%	2.0	35%	70.2					
BMI Woodlands Hospital (County Durham)		786	12	95%	95%	1.9	45%	66.9					
Bupa Group													
Bupa Cromwell Hospital (Greater London)		156	16	87%	63%	1.8	55%	67.1					

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Hospital	Trust/Local Health Board/Company	Outliers: Knees								
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Care UK	Compliance (NHS Trust/Local Health Board Only) ¹									
Barlborough NHS Treatment Centre (Derbyshire)	2029	14	100%	100%	2.0	44%	69.0			
Emersons Green NHS Treatment Centre (Avon)	907	10	99%	99%	1.9	43%	68.6			
North East London NHS Treatment Centre (Essex)	507	8	100%	100%	2.2	43%	69.6			
Peninsula NHS Treatment Centre (Devon)	1143	8	98%	99%	1.9	44%	68.7			
Shepton Mallet Treatment Centre (Somerset)	1047	8	100%	100%	1.9	43%	70.2	1		
Southampton NHS Treatment Centre (Hampshire)	454	9	100%	99%	2.0	41%	68.8			
Circle										
Circle Bath Hospital (Avon)	1057	14	92%	98%	1.9	40%	68.0			
Circle Reading (Berkshire)	571	17	89%	99%	1.8	39%	66.7			
Nottingham NHS Treatment Centre (Nottinghamshire)	544	10	97%	99%	2.4	37%	68.4			
East Kent Medical Services Ltd										
Spencer Private Hospitals - Margate (Kent)	547	5	93%	98%	2.0	43%	67.9			
Fairfield Hospital										
Fairfield Hospital (Merseyside)	375	11	95%	96%	2.1	43%	67.3			
Foscote Court (Banbury) Trust Limited										
Foscote Private Hospital (Oxfordshire)	129	3	96%	96%	2.0	47%	69.7			

Compliance, consent and linkability are red if lower than 80%, green if 95% or more and amber in between¹ Compliance (NHS Trust/Local Health Board Only) - the percentage of cases submitted to the NJR compared to HES/PEDW.² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).⁵ Outliers with respect to revisions (at any time) following primary operations performed from 2003 onwards [from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).⁶ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.⁷ Compliance figures were unavailable.

Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
HCA International Ltd												
London Bridge Hospital (London)	294	22	90%	77%	1.8	49%	63.2					
The Lister Hospital (London)	183	14	95%	69%	1.9	46%	67.7					
The Princess Grace Hospital (London)	406	17	80%	71%	1.9	50%	65.8					
The Wellington Hospital (London)	135	16	99%	87%	1.9	50%	65.9					
Healthcare Management Trust												
Sancta Maria Hospital (West Glamorgan)	245	7	98%	98%	2.0	41%	70.8					
St Hugh's Hospital (North East Lincolnshire)	613	14	99%	100%	2.1	42%	70.2					
Horder Healthcare												
The Horder Centre (East Sussex)	2211	17	99%	99%	1.9	41%	70.7					
The McIndoe Centre (West Sussex)	182	4	94%	96%	1.9	46%	68.9					
Hospital of St John and St Elizabeth												
Hospital of St John and St Elizabeth (Greater London)	138	16	89%	67%	2.0	47%	69.0					
KIMS Hospital												
KIMS Hospital (Kent)	686	29	41%	98%	2.1	47%	69.8					
King Edward VII Hospital Sister Agnes												
King Edward VII Hospital Sister Agnes (Greater London)	619	18	83%	71%	1.8	50%	68.2					
												1

Compliance, consent and linkability are red if lower than 80%, green if 95% or more and amber in between

¹ Compliance (NHS Trust/Local Health Board Only) - the percentage of cases submitted to the NJR compared to HES/PEDW.

² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.

³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.

⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁵ Outliers with respect to revisions (at any time) following primary operations performed from 2003 onwards [from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁶ Outliers with respect to revisions (at any time) following primary operations performed from 2013 onwards [from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.

⁸ Compliance figures were unavailable.

Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
North West Independent Hospital (County Londonderry)	182	4	98%	N/A ⁷	1.9	N/A ⁷	N/A ⁷					
Nuffield Health												
Nuffield Health Bournemouth Hospital (Dorset)	331	9	76%	96%	2.0	41%	73.1					
Nuffield Health Brentwood Hospital (Essex)	321	12	100%	98%	1.9	44%	68.0					
Nuffield Health Brighton Hospital (East Sussex)	86	5	62%	97%	2.0	41%	67.9					
Nuffield Health Bristol Hospital (Avon)	176	10	100%	99%	1.9	51%	68.4					
Nuffield Health Cambridge Hospital (Cambridgeshire)	508	14	99%	98%	1.9	38%	68.3					
Nuffield Health Cheltenham Hospital (Gloucestershire)	285	11	97%	97%	1.9	45%	70.8					
Nuffield Health Chichester Hospital (West Sussex)	463	9	69%	93%	1.9	43%	71.5					
Nuffield Health Derby Hospital (Derbyshire)	1020	18	97%	96%	1.9	47%	67.2					
Nuffield Health Exeter Hospital (Devon)	444	11	95%	94%	1.9	44%	71.5					
Nuffield Health Guildford Hospital (Surrey)	146	10	99%	99%	1.9	42%	70.2					
Nuffield Health Haywards Heath Hospital (West Sussex)	218	7	93%	98%	1.9	45%	69.7					
Nuffield Health Hereford Hospital (Herefordshire)	504	8	91%	99%	1.9	47%	71.2					
Nuffield Health Ipswich Hospital (Suffolk)	272	7	100%	98%	2.0	45%	71.3					

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Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
	Hospital	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2013 ⁶
Nuffield Health Leeds Hospital (West Yorkshire)	758	19	89%	97%	2.0	46%	67.4					
Nuffield Health Leicester Hospital (Leicestershire)	405	14	95%	98%	2.0	44%	67.5					
Nuffield Health Newcastle-upon-Tyne Hospital (Tyne & Wear)	673	16	98%	98%	1.7	50%	65.5					
Nuffield Health North Staffordshire Hospital (Staffordshire)	717	12	99%	97%	1.9	46%	68.0					
Nuffield Health Plymouth Hospital (Devon)	463	9	100%	99%	2.0	49%	69.5					
Nuffield Health Shrewsbury Hospital (Shropshire)	222	10	100%	99%	1.9	52%	68.7					
Nuffield Health Taunton Hospital (Somerset)	294	9	98%	97%	2.2	46%	70.6					
Nuffield Health Tees Hospital (County Durham)	822	13	100%	100%	1.9	48%	66.7					
Nuffield Health The Grosvenor Hospital (Cheshire)	340	10	99%	99%	1.8	49%	69.2					
Nuffield Health The Manor Hospital (Oxfordshire)	727	13	96%	92%	1.9	41%	69.0					
Nuffield Health Tunbridge Wells Hospital (Kent)	168	4	54%	95%	2.0	38%	69.9					
Nuffield Health Warwickshire Hospital (Warwickshire)	585	19	95%	94%	1.9	41%	67.9					
Nuffield Health Wessex Hospital (Hampshire)	653	17	100%	98%	1.8	41%	68.7					
Nuffield Health Working Hospital (Surrey)	158	11	91%	96%	1.8	43%	68.1					

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Trust/Local Health Board/Company Hospital	Compliance (NHS Trust/Local Health Board Only) ¹					Outliers: Knees				
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
Nuffield Health Wolverhampton Hospital (West Midlands)	416	8	100%	98%	1.9	46%	68.9			
Nuffield Health York Hospital (North Yorkshire)	467	10	99%	96%	1.9	43%	70.3			
Vale Hospital (Glamorgan)	328	14	98%	98%	1.8	43%	68.3			
One Ashford Healthcare Ltd										
One Ashford Willesborough (Kent)	443	14	98%	99%	2.0	46%	69.3			
One Hatfield Hospital (Hertfordshire)	3	2	0%	0%	1.0					
Orthopaedic Spine and Specialist Hospital										
Orthopaedics and Spine Specialist Hospital (Cambridgeshire)	61	1	98%	100%	2.1	39%	68.2			
Ramsay Health Care										
Ashtead Hospital (Surrey)	251	7	99%	99%	1.8	45%	71.3			
Duchy Hospital (Cornwall)	888	12	81%	93%	2.0	42%	69.5			
Euxton Hall Hospital (Lancashire)	378	12	100%	99%	2.0	43%	68.0			
Fitzwilliam Hospital (Cambridgeshire)	884	16	99%	99%	2.0	41%	68.2			
Fulwood Hall Hospital (Lancashire)	740	9	100%	100%	2.0	41%	68.1			
Mount Stuart Hospital (Devon)	540	13	100%	99%	1.9	40%	69.2			
New Hall Hospital (Wiltshire)	598	7	96%	97%	1.7	42%	69.9			
North Downs Hospital (Surrey)	372	8	100%	98%	1.9	39%	68.9			
Nottingham Woodthorpe Hospital (Nottinghamshire)	509	15	99%	99%	2.2	43%	68.8			

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Hospital	Compliance (NHS Trust/Local Health Board Only) ¹	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Percentage Average ASA Grade 2017	Average Age At Operation 2017	Outliers: Hips			Outliers: Knees		
								Male Patients 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Male Patients 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵
Oaklands Hospital (Lancashire)	507	16	100%	100%	1.9	41%	67.4						
Oaks Hospital (Essex)	565	10	83%	96%	1.9	39%	70.6						
Park Hill Hospital (South Yorkshire)	617	9	100%	100%	2.1	40%	68.3						
Pinehill Hospital (Hertfordshire)	458	9	95%	100%	1.9	40%	70.0						
Renacles Hall Hospital (Lancashire)	382	9	100%	95%	1.9	43%	68.5						
Rivers Hospital (Hertfordshire)	575	9	97%	95%	1.8	44%	68.2						
Rowley Hall Hospital (Staffordshire)	391	7	100%	100%	2.0	39%	68.5						
Springfield Hospital (Essex)	957	10	89%	97%	2.0	46%	68.4						
The Berkshire Independent Hospital (Berkshire)	159	7	91%	95%	1.8	38%	68.6						
The Yorkshire Clinic (West Yorkshire)	1043	14	91%	97%	2.0	43%	68.6						
West Midlands Hospital (West Midlands)	385	8	99%	99%	2.1	42%	69.7						
Winfield Hospital (Gloucestershire)	529	9	99%	99%	1.9	42%	68.0						
Woodland Hospital (Northamptonshire)	796	9	70%	99%	2.0	44%	68.7						
Clifton Park Hospital (North Yorkshire)	605	9	99%	99%	1.9	43%	69.2						
Horton NHS Treatment Centre (Oxfordshire)	1170	9	100%	100%	2.2	44%	68.9						
Spire Healthcare													
Spire Alexandra Hospital (Kent)	398	11	95%	98%	2.2	42%	68.0						
Spire Bristol Hospital (Avon)	1109	22	100%	98%	1.9	43%	67.0						
Spire Bushey Hospital (Hertfordshire)	694	23	96%	94%	1.9	40%	66.6						

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Hospital	Compliance (NHS Trust/Local Health Board Only) ¹		Outliers: Hips		Outliers: Knees			
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Average Age At Operation 2017	Revision rate since 2013 ⁴	Revision rate since 2003 ⁵
Spire Cambridge Lea Hospital (Cambridgeshire)	760	20	100%	100%	1.9	47%	68.5	
Spire Cardiff Hospital (Glamorgan)	216	14	90%	95%	2.0	40%	68.8	1
Spire Cheshire Hospital (Cheshire)	544	15	100%	99%	2.0	47%	67.1	
Spire Clare Park Hospital (Surrey)	367	8	72%	95%	1.9	35%	67.7	
Spire Dunedin Hospital (Berkshire)	130	8	100%	97%	1.8	44%	68.8	1
Spire Elland Hospital (West Yorkshire)	480	14	99%	100%	2.1	46%	68.4	
Spire Fylde Coast Hospital (Lancashire)	413	12	87%	93%	1.9	40%	68.9	
Spire Gatwick Park Hospital (Surrey)	533	10	98%	100%	2.0	36%	69.4	
Spire Harpenden Hospital (Hertfordshire)	654	19	100%	97%	2.0	46%	68.6	
Spire Hartswood Hospital (Essex)	334	15	99%	97%	2.0	46%	68.4	
Spire Hull and East Riding Hospital (East Yorkshire)	1113	20	90%	98%	2.0	43%	68.3	
Spire Leeds Hospital (West Yorkshire)	614	18	100%	99%	2.0	39%	68.1	
Spire Leicester Hospital (Leicestershire)	675	15	98%	99%	2.1	41%	68.7	
Spire Little Aston Hospital (West Midlands)	634	22	100%	99%	1.9	41%	70.2	
Spire Liverpool Hospital (Merseyside)	476	9	97%	98%	2.1	46%	67.0	
Spire Manchester Hospital (Lancashire)	288	20	84%	91%	1.9	45%	65.2	
Spire Methley Park Hospital (West Yorkshire)	458	9	100%	98%	2.1	44%	67.6	
Spire Montefiore Hospital (East Sussex)	574	10	92%	97%	1.9	39%	68.5	

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Hospital	Trust/Local Health Board/Company	Compliance (NHS Trust/Local Health Board Only) ¹						Outliers: Knees					
		No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶
Spire Murrayfield Hospital (Merseyside)		441	10	99%	98%	2.0	39%	68.3					
Spire Norwich Hospital (Norfolk)		1245	14	94%	96%	2.0	44%	69.9					
Spire Nottingham Hospital (Nottinghamshire)		26	4	96%	92%	2.0	54%	68.0					
Spire Parkway Hospital (West Midlands)		571	15	99%	98%	1.8	40%	68.6					
Spire Portsmouth Hospital (Hampshire)		1133	15	100%	99%	1.9	39%	68.8					
Spire Regency Hospital (Cheshire)		391	9	87%	98%	1.9	46%	70.4					
Spire Roding Hospital (Essex)		250	11	95%	98%	2.0	33%	69.1					
Spire Southampton Hospital (Hampshire)		1211	18	96%	92%	1.8	43%	67.5					
Spire South Bank Hospital (Worcestershire)		532	9	96%	97%	1.9	42%	70.0					
Spire St Anthony's (Surrey)		331	14	95%	89%	2.0	43%	68.5					
Spire Sussex Hospital (East Sussex)		479	8	100%	99%	2.0	37%	70.2					
Spire Thames Valley (Berkshire)		122	10	100%	96%	1.9	37%	72.7					
Spire Tunbridge Wells Hospital (Kent)		140	9	100%	100%	1.8	46%	69.7					
Spire Washington Hospital (Tyne & Wear)		638	17	98%	99%	1.8	48%	67.6					
Spire Wellesley Hospital (Essex)		571	10	94%	95%	2.1	40%	69.4					
Spire Yale Hospital (Wrexham)		427	15	96%	94%	2.0	42%	70.4					
St Josephs Hospital													
St Josephs Hospital (Gwent)		490	10	96%	97%	2.0	47%	69.0					

Compliance, consent and linkability are red if lower than 80%, green if 95% or more and amber in between

¹ Compliance (NHS Trust/Local Health Board Only) - the percentage of cases submitted to the NJR compared to HES/PEDW.

² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.

³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.

⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁵ Outliers with respect to revisions (at any time) following primary operations performed from 2003 onwards [from 1 April 2003 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁶ Outliers with respect to revisions (at any time) following primary operations performed from 2013 onwards [from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.

⁸ Compliance figures were unavailable.

Hospital	Compliance (NHS Trust/Local Health Board Only) ¹					Outliers: Hips					Outliers: Knees		
	No. of Procedures 2017	No. of Consultants 2017	Consent Rate (%) 2017 ²	Linkability (%) 2017 ³	Average ASA Grade 2017	Percentage Male Patients 2017	Average Age At Operation 2017	90-day Mortality ⁴	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	Revision rate since 2003 ⁵	Revision rate since 2013 ⁶	
The London Clinic	249	13	98%	68%	1.6	40%	58.2						
The New Victoria Hospital Limited													
The New Victoria Hospital (Surrey)	122	8	95%	99%	2.0	41%	71.2						
The Ulster Independent Clinic													
Ulster Independent Clinic (Belfast)	740	20	100%	N/A ⁷	1.9	N/A ⁷	N/A ⁷						

Please note for the data in following table:

Compliance, Consent and Linkability are:

 Red if lower than 80%

 Amber if equal to or greater than 80% and lower than 95%

 Green if 95% or more

- Linkability for some hospitals will be lower than expected if they have private patients from outside England and Wales
- Part Four data covers procedures carried out between 1 January 2017 and 31 December 2017

Outlier analyses are:

 Red if units are above the upper of the 99.8% control limits (approximates to 3 standard deviations (SDs))

Compliance, consent and linkability are red if lower than 80%, green if 95% or more and amber in between

¹ Compliance (NHS Trust/Local Health Board Only) - the percentage of cases submitted to the NJR compared to HES/PEDW.

² Consent Rate - percentage of cases submitted to the NJR with patient consent confirmed.

³ Linkability - the proportion of records which include a valid patient's NHS number compared with the number of procedures recorded on the NJR.

⁴ Outliers with respect to 90-day mortality following primary operations performed from 2013 onwards. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

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⁶ Outliers with respect to revisions (at any time) following primary operations performed from 2013 onwards [from 1 March 2013 to 1 March 2018 inclusive]. Units above the upper of the 99.8% control limits (approx 3 SDs) are flagged in red (1).

⁷ Data for hospitals are excluded as there is no tracing service for units in Northern Ireland.

⁸ Compliance figures were unavailable.