



British  
Orthopaedic  
Association

*Caring for Patients; Supporting Surgeons*

## **GETTING IT RIGHT FIRST TIME**

**National Professional Pilot**

***South Tees Hospitals NHS Foundation Trust***

***Constituent Hospitals:  
Friarage Hospital and  
The James Cook University Hospital***

**Final Draft Provider Profile Report and Dashboard**

***June 2014***

**Draft Version Reviewed and Discussed in**

***January 2014***



**I. Key Performance Indicators (KPI's)**  
**NEQOS dashboard and NJR Annual Report (for definitions see Appendix I, section 3 and 4)**

<b>Fixation method for Hip Replacements (% of total)</b> Timeframe: 1 Jan 2012 to 31 Dec 2012 (Patients aged 65 and over)	<b>% 10A Rated Hip Procedures</b>																								
<table border="1"> <caption>Fixation method for Hip Replacements (% of total)</caption> <thead> <tr> <th>Entity</th> <th>Cemented</th> <th>Hybrid</th> <th>Un-cemented</th> <th>Unspecified</th> </tr> </thead> <tbody> <tr> <td>South Tees Hospitals NHS Foundation Trust</td> <td>~90%</td> <td>~10%</td> <td>0%</td> <td>0%</td> </tr> <tr> <td>England</td> <td>~42%</td> <td>~15%</td> <td>~38%</td> <td>~5%</td> </tr> </tbody> </table>	Entity	Cemented	Hybrid	Un-cemented	Unspecified	South Tees Hospitals NHS Foundation Trust	~90%	~10%	0%	0%	England	~42%	~15%	~38%	~5%	<table border="1"> <caption>% 10A Rated Hip Procedures</caption> <thead> <tr> <th>Procedure</th> <th>South Tees Hospitals NHS Foundation Trust</th> <th>National Average</th> </tr> </thead> <tbody> <tr> <td>% 10A Rated Acetabular Implant Hip Primary Procs</td> <td>~10%</td> <td>~20%</td> </tr> <tr> <td>% 10A Rated Femoral Implant Hip Primary Procs</td> <td>~90%</td> <td>~80%</td> </tr> </tbody> </table>	Procedure	South Tees Hospitals NHS Foundation Trust	National Average	% 10A Rated Acetabular Implant Hip Primary Procs	~10%	~20%	% 10A Rated Femoral Implant Hip Primary Procs	~90%	~80%
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<p>© Copyright</p>	<p>2013-14, North East Quality Observatory System, neqos.nhs.net</p>	<p>Data from NJR, as in 2013 Annual Report</p>																							



## 2. Activity and key statistics

### 2.1 Headline figures

Metric	Trust			Area Team	National	Scoring****				
	Trust	% of Area Team	% of National							
Total orthopaedic and spinal activity*	6,119	39.59%	0.91%	15,455	673,473	Not applicable				
<b>Significant hip data</b>										
• Primary hip replacements*	630	44.12%	0.99%	1,428	63,367	Not applicable				
• Hip revisions*	68	33.01%	0.95%	206	7,155	Not applicable				
• Hip revision rate (1 year)**	0.61%	---	---	0.76%	0.72%			✓		
• Hip revision rate (5 years)**	2.33%	---	---	2.85%	2.14%			✓		
• Hip Standardised Mortality Ratio (90 days)***	0.90	---	---	1.01	1.00			✓		
<b>Significant knee data</b>										
• Primary knee replacements*	697	37.09%	0.98%	1,879	71,422	Not applicable				
• Knee revisions*	50	40.98%	0.98%	122	5,086	Not applicable				
• Knee revision rate (1 year)**	0.46%	---	---	0.35%	0.46%			✓		
• Knee revision rate (5 years)**	2.18%	---	---	1.98%	2.37%			✓		
• Knee Standardised Mortality Ratio (90 days)***	1.00	---	---	0.91	1.00			✓		

\* Source: 2011/12 HES data (Elective activity for adults only; Total activity selected using the HES online procedure group method and other measures calculated as described in methods). \*\* Source: NJR Provider reports (generated August 2012, Appendix 3) - values are case-linked revision rate at 1yr and 5yr (note: compare these values with the standardised revision rates in Table 4.2); \*\*\* Source: NJR - provided direct from NJR, from data reported in the 2013 Annual Report; \*\*\*\* Scoring system: for explanation see Methods.



## 2.2 National Joint Registry (NJR)

Metric	Trust			Area Team	National	Scoring				
	Trust	% of Area Team	% of National							
<b>Hip replacement and revision</b>										
Primary hip replacements (5 years)	2,321	39.40%	1.04%	5,891	224,106	Not applicable				
Primary replacements experiencing a hip revision (5 years)	23	26.74%	0.71%	86	3,225	Not applicable				
Hip standardised revision rate (5 years)	0.80	---	---	0.86	1.00			✓		
<b>Knee replacement and revision</b>										
Primary knee replacements (5 years)	2,579	33.95%	1.02%	7,596	252,239	Not applicable				
Primary replacements experiencing a knee revision (5 years)	35	36.08%	1.04%	97	3,355	Not applicable				
Knee standardised revision rate (5 years)	1.04	---	---	0.85	1.00			✓		
<b>ODEP 10A rating</b>										
% 10A Rated Acetabular Implant Hip Primary Procedures	8.3%	---	---	13.5%	20.2%			✓		
% 10A Rated Femoral Implant Hip Primary Procedures	90.8%	---	---	87.4%	79.8%			✓		
<b>Data quality</b>										
Compliance rate - 2011 ( <i>proportion of HES episodes</i> )	0.89	---	---	0.92	0.79			✓		
Consent rate - 2012 ( <i>proportion sent to NJR</i> )	0.91	---	---	0.93	0.89			✓		
Linkage rate - 2012 ( <i>proportion sent to NJR</i> )	0.99	---	---	0.99	0.97			✓		

Source: NJR - provided direct from NJR, from data reported in the 2013 Annual Report.

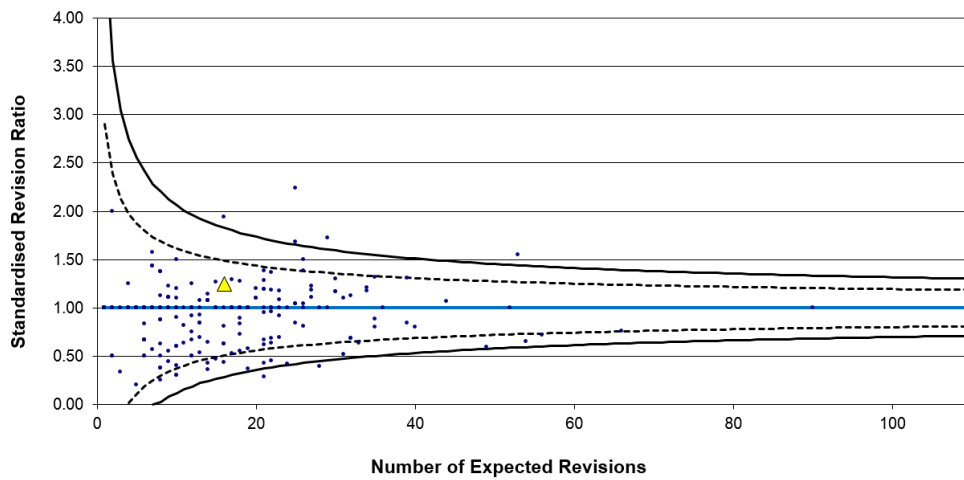


**NJR - Standardised revision rate (5 years) - Friarage**

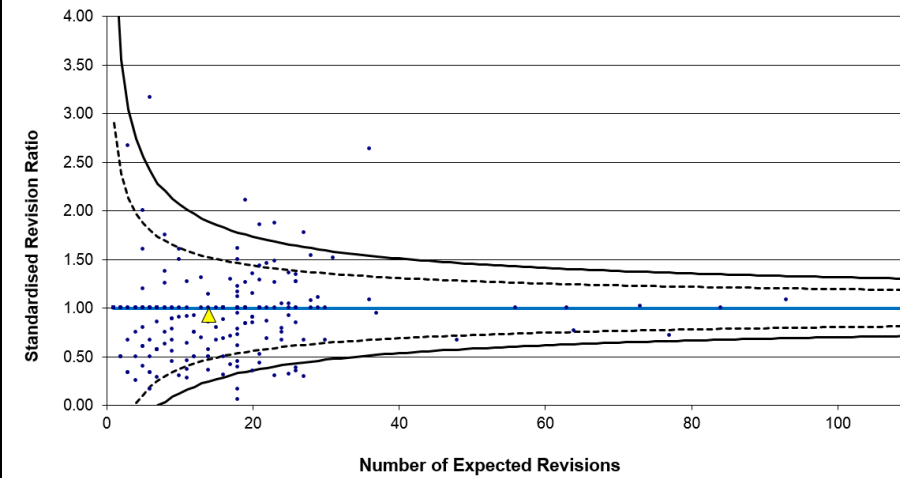
**Hip revisions**

**Knee revisions**

**Knee Unit Revisions**



**Hip Unit Revisions**



Source: NJR - provided direct from NJR, from data reported in the 2013 Annual Report.



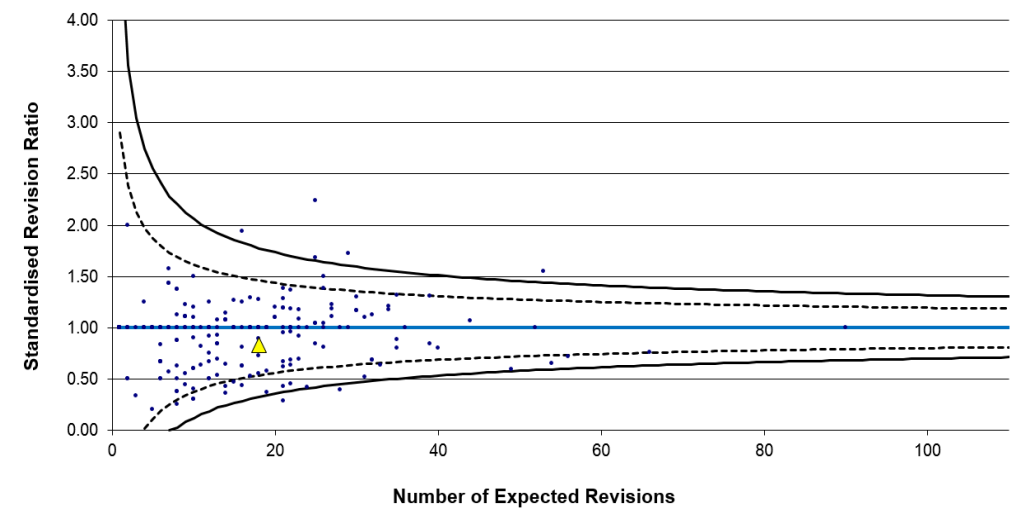
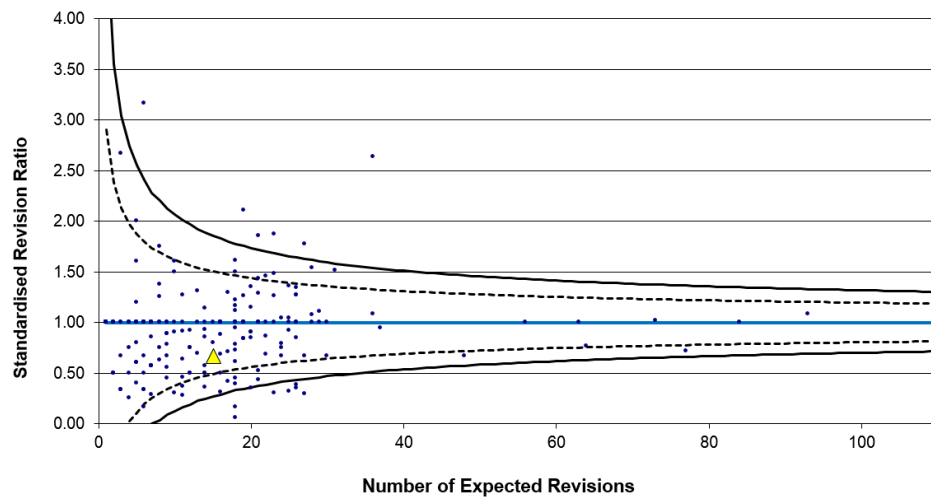
**NJR - Standardised revision rate (5 years) – James Cook**

**Hip revisions**

**Knee revisions**

**Hip Unit Revisions**

**Knee Unit Revisions**



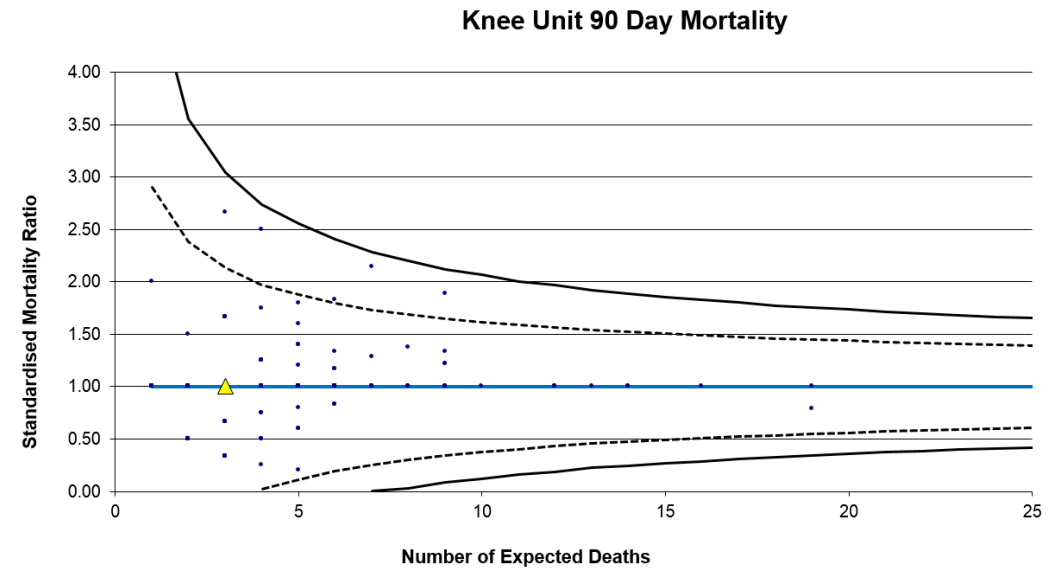
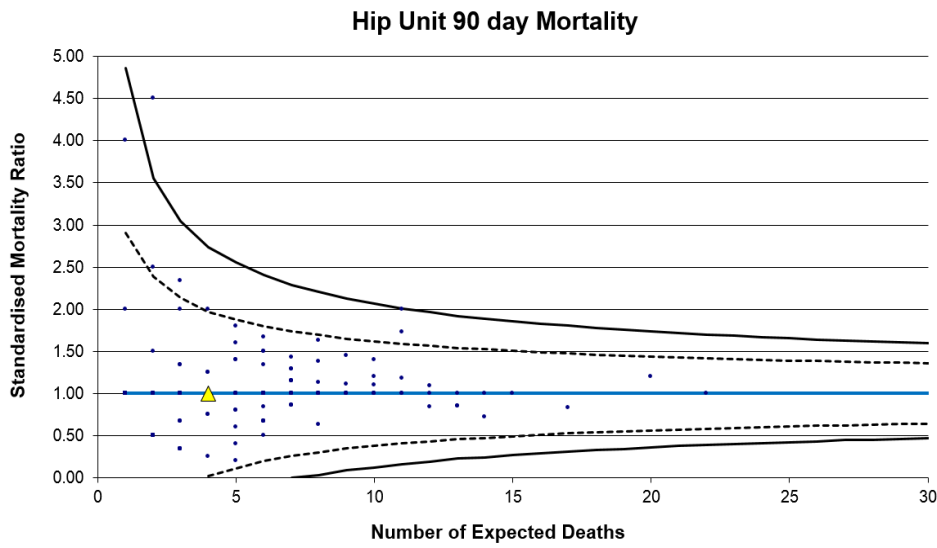
Source: NJR - provided direct from NJR, from data reported in the 2013 Annual Report.



**NJR - Standardised mortality rate (90 days) - Friarage**

**Hip mortality**

**Knee mortality**



Source: NJR - provided direct from NJR, from data reported in the 2013 Annual Report.

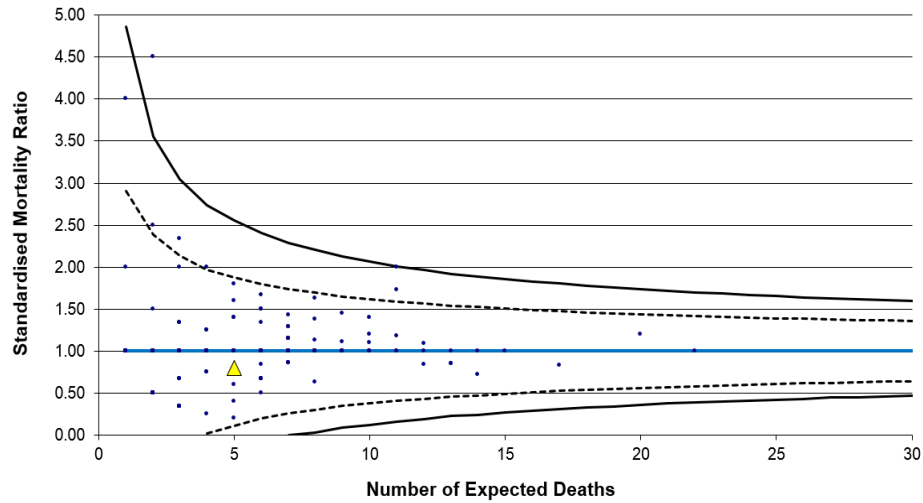


**NJR - Standardised mortality rate (90 days) – James Cook**

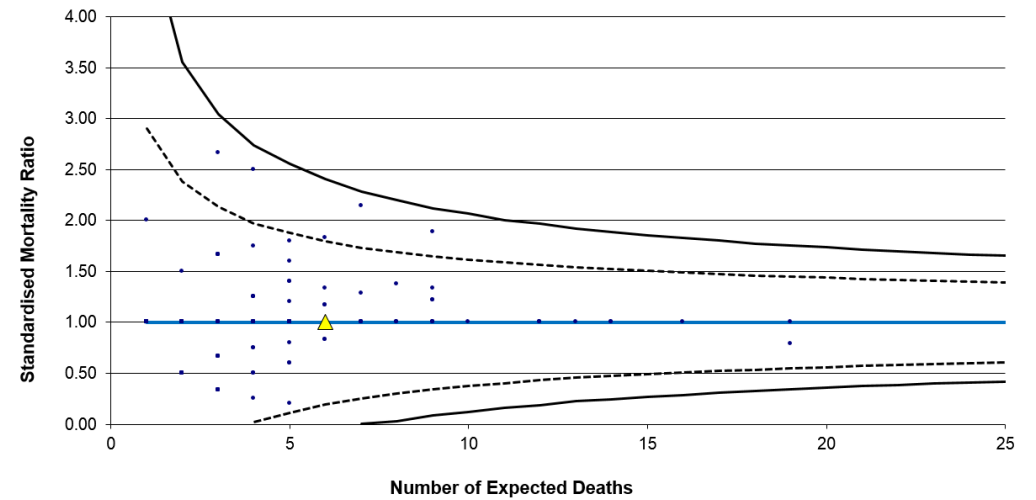
**Hip mortality**

**Knee mortality**

**Hip Unit 90 day Mortality**



**Knee Unit 90 Day Mortality**



Source: NJR - provided direct from NJR, from data reported in the 2013 Annual Report.





### 2.3 Estimates of orthopaedic case-mix complexity

Metric	Trust	Area Team	National	Scoring				
Percentage of total inpatient activity selected as specialist*	6.81%	6.53%	5.81%	Not applicable				
Percentage of total activity delivered to patients within the host PCT of the Provider**	21.38%	46.88%	62.61%	Not applicable				
Average ASA rating***	2.10	2.12	2.13	Not applicable				
Average Charlson score****	0.55	0.48	0.46	Not applicable				

\* Source: HES data for 2011/12; specialist activity identified using NHS England CRG selection rules for adult orthopaedic and complex spinal surgery services (see methods); Note: Lower percentage than national suggests that the services delivered by the Provider are generally less complex than the national average.

\*\* Source: HES data for 2011/12; Total orthopaedic and spinal activity selected using the HES online procedure group method based on 3-digit main procedure code (see methods); Note: Lower percentage than the national average suggests that the Provider draws in patients from further afield than the national average.

\*\*\* Source: NJR provided data for 2012; Value for all reported joints; Note: Higher value than the national average suggests patient's needs admitted to the Provider are more complex than national average.

\*\*\*\* Source: HES data for 2011/12; Calculated using all orthopaedic and spinal activity; Note: Higher value than the national average suggests patient's needs admitted to the Provider are more complex than national average. This may indicate that more complex patients are brought into the Trust for treatment, or that the Trust is within a health economy with patients with more complex needs (e.g. more elderly or more deprived than national average).



## 2.4 Patient Reported Outcome Measures (PROMS)

Metric	Trust	Area Team	National	Scoring					
<b>Pre-operation linked returns*</b>									
• All procedures	0.86	0.83	0.78			✓			
• Hip procedures	0.90	0.86	0.83			✓			
• Knee procedures	0.87	0.82	0.75				✓		
<b>Post-operation responses*</b>									
• All procedures	0.80	0.80	0.77			✓			
• Hip procedures	0.84	0.83	0.81			✓			
• Knee procedures	0.82	0.81	0.78			✓			
<b>Oxford hip score case-mix adjusted - average health gain</b>									
• Overall hip replacement*	20.70	19.53	20.09			✓			
• Primary hip replacement**	21.34	20.53	20.64			✓			
<b>Oxford knee score case-mix adjusted - average health gain</b>									
• Overall knee replacement*	15.58	15.24	15.15			✓			
• Primary knee replacement**	15.89	15.46	15.32			✓			

Source: \*PROMs data from HES online website (2010/11 data, August 2012 release). Source: \*\*NEQOS dashboard (PROMs 2011/12 data, May 2013 release) (see Appendix 1).



**2.5 Average length of stay (days)**

Metric	Trust	Area Team	National	Scoring				
Hip replacement or revision	3.97	5.45	6.15				✓	
Knee replacement or revision	4.04	5.12	5.83				✓	
Other replacement and revision	2.82	3.50	3.91			✓		
Complex spinal surgery	4.62	3.72	4.39			✓		

Source: HES data for 2011/12.