

- CQC have collaborated with the NJR and agreed to present these ‘key’ metrics about the quality of services.
- The measures presented are taken from the [NJR’s Hospital Profiles](#), not from the annual report.
- The audit report may also be reviewed if necessary [here](#).
- Outliers are generated from both the Hospital Profile data and the Annual Report data.

What this measures & rationale for inclusion	Interpretation	CQC prompts for follow-up
Case ascertainment (Well-led)		
<p>The amount of cases submitted to the NJR as a proportion of eligible cases recorded in HES.</p> <p>Complete data is required to be able to determine the performance of hospitals, surgeons and surgical implants and for hospitals to be able to recall patients in the event of concerns. Poor compliance rates are a sign of poor governance and record keeping.</p>	<p>A minimum compliance rate of 95% is expected for all hospitals. Compliance rates below 80% are considered inadequate. Hospitals’ performance against the target and relative performance to other hospitals are both important.</p>	<p>The NJR allows monitoring of the performance of hospitals, surgeons and surgical implants and allows the recall of patients in the event of concerns. Poor compliance is a symptom of poor governance processes and can mask poor outcomes.</p>
Proportion of patients consented to have personal details included (hips, knees, ankles and elbows) (Well-led)		
<p>The unadjusted percentage of patients who have given consent for their personal details to be recorded on the NJR.</p> <p>In order to link primary and revision procedures together and determine the outcomes of surgery, personal data is required so patients need to give their consent. Poor consent rates are a sign of poorly managed processes within the unit.</p>	<p>A minimum consent rate of 95% is expected for all hospitals. Consent rates below 80% are considered inadequate. Hospitals’ performance against the target and relative performance to other hospitals are both important.</p>	<p>The NJR allows monitoring of the performance of hospitals, surgeons and surgical implants and allows the recall of patients in the event of concerns. Poor consent rates are a symptom of poor governance processes and can mask poor outcomes.</p>
Risk-adjusted 5-year revision ratio (for hips excluding tumours and NOF#) (Effective)		
<p>The case-mix adjusted revision ratio for primary hip replacement surgery at 5 years post-surgery.</p> <p>Revision surgery is considered a good indicator for the success of joint replacement surgery and is used internationally to measure the outcomes of these procedures. This indicator is adjusted to take into account case-mix factors and is presented as a ratio to show the hospital's revision rate in the context of expected rates for a unit of that size with that case-mix.</p>	<p>Providers are compared against one-another and performance is z-scored.* Possible results are:</p> <p>Much better Better Within expected range Worse Much worse</p>	<p>Performance worse or much worse than expected needs to be carefully examined. There is no one single factor that explains higher or lower revision rates. However, case selection, implant selection, surgical technique and the revising surgeon’s revision threshold can all impact on a hospital's revision rates. Reaching either alert or alarm status is often multifactorial. Outlier hospitals are contacted by NJR and asked to provide an action plan. Where there are ongoing concerns, the NJR recommends the hospital has an Elective Practice Review visit by the BOA. CQC are informed if hospitals are outliers and that an action plan has been requested. CQC don't intervene unless the provider fails to engage.</p>

Risk-adjusted 90-day mortality ratio (for hips excluding tumours and NOF#) (Effective)		
<p>The case-mix adjusted mortality ratio for primary hip replacement surgery at 90 days post-surgery.</p> <p>Although rate, 90-day mortality is considered a good indicator for the short-term impact of joint replacement surgery and is used internationally to measure the outcomes of these procedures. This indicator is adjusted to take into account case-mix factors and is presented as a ratio to show the hospital's revision rate in the context of expected rates for a unit of that size with that case-mix.</p>	<p>Providers are compared against one-another and performance is z-scored.* Possible results are:</p> <p>Much better Better Within expected range Worse Much worse</p>	<p>Performance worse or much worse than expected needs to be carefully examined. There is no one single factor that explains higher or lower mortality rates. Reaching either alert or alarm status is often multifactorial. Outlier hospitals are contacted by NJR and asked to provide an action plan. Where there are ongoing concerns, the NJR recommends the hospital has an Elective Practice Review visit by the BOA.</p> <p>CQC are informed if hospitals are outliers and that an action plan has been requested. CQC don't intervene unless the provider fails to engage.</p>
Risk-adjusted 5-year revision ratio (for knees excluding tumours) (Effective)		
<p>The case-mix adjusted revision ratio for primary knee replacement surgery at 5 years post-surgery.</p> <p>Revision surgery is considered a good indicator for the success of joint replacement surgery and is used internationally to measure the outcomes of these procedures. This indicator is adjusted to take into account case-mix factors and is presented as a ratio to show the hospital's revision rate in the context of expected rates for a unit of that size with that case-mix.</p>	<p>Providers are compared against one-another and performance is z-scored.* Possible results are:</p> <p>Much better Better Within expected range Worse Much worse</p>	<p>Performance worse than expected or much worse than expected needs to be carefully examined. There is no one single factor that explains higher or lower revision rates. However, case selection, implant selection, surgical technique and the revising surgeon's revision threshold can all impact on a hospital's revision rates. Reaching either alert or alarm status is often multifactorial. Outlier hospitals are contacted by NJR and asked to provide an action plan. Where there are ongoing concerns, the NJR recommends the hospital has an Elective Practice Review visit by the British Orthopaedic Association.</p> <p>CQC are informed if hospitals are outliers and that an action plan has been requested. CQC don't intervene unless the provider fails to engage.</p>
Risk-adjusted 90-day mortality ratio (for knees excluding tumours) (Effective)		
<p>The case-mix adjusted mortality ratio for primary knee replacement surgery at 90 days post-surgery.</p> <p>Although rate, 90-day mortality is considered a good indicator for the short-term impact of joint replacement surgery and is used internationally to measure the outcomes of these procedures. This indicator is adjusted to take into account case-mix factors and is presented as a ratio to show the hospital's revision rate in the context of expected rates for a unit of that size with that case-mix.</p>	<p>Providers are compared against one-another and performance is z-scored.* Possible results are:</p> <p>Much better Better Within expected range Worse Much worse</p>	<p>Performance worse than expected or much worse than expected needs to be carefully examined. There is no one single factor that explains higher or lower mortality rates. Reaching either alert or alarm status is often multifactorial. Outlier hospitals are contacted by NJR and asked to provide an action plan. Where there are ongoing concerns, the NJR recommends the hospital has an Elective Practice Review visit by the British Orthopaedic Association.</p> <p>CQC are informed if hospitals are outliers and that an action plan has been requested. CQC don't intervene unless the provider fails to engage.</p>
<p>BOA: British Orthopaedic Association HES: Hospital Episode Statistics NOF#: Neck of femur fracture *Z-Score: a measure of how different an individual organisation's performance is from average. Performance which is very different to the average is classified as much better (z-score 3 or above) or much worse (z-score 3 or below). A z-score is the</p>		

number of standard deviations from the mean that the value lies. If a Z-score is 0, it indicates that performance is identical to the mean performance. Performance is Z-scored as follows
Greater than or equal to 3: Much better than expected
Greater than or equal to 2 and less than 3: better than expected
Between 2 and -2: within expected range
Less than or equal to -2 and greater than -3: worse than expected
Less than or equal to -3: Much worse than expected

Version	Live date	Author	Details
Draft	n/a	Content provided NJR	Reviewed by MZ and MR.
20221122	22/11/22	MR	Agreed by NJR