

# Intelligent Monitoring

## NHS acute hospitals

### Indicators and methodology guidance

This document provides a background to Intelligent Monitoring and defines the indicators and methods of calculating risk.

May 2015

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# Introduction

Intelligent Monitoring (IM) is a tool that assesses risk within care services. It has been developed to support CQC's regulatory function and purpose of ensuring that health and social care services provide people with safe, effective, compassionate, and high-quality care. IM highlights those areas of care to be followed up through inspections and other engagements.

Intelligent Monitoring uses a set of indicators for monitoring risks to the quality of care. These indicators measure outcomes that have a high impact on people who use services and relate to the five key questions that are asked during inspections: are services safe, effective, caring, responsive, and well-led?

Intelligent Monitoring is used to assign acute NHS trusts into six priority bands for inspection. It is intended to raise questions about various aspects of care which, alongside inspection findings and local information (from partners, the public, and trusts through their specialist knowledge), provides a basis upon which final judgements are made. It is therefore different from inspection judgements.

A risk report is produced for each provider, along with a list of all data items that were used within the report, grouped by the key questions. These Intelligent Monitoring reports are based on the most up-to-date and valid information available to CQC at the time of data compilation. Indicator data comes from a variety of sources including data held by CQC, provider information, publicly available data, as well as data and intelligence from CQC's stakeholders and partners. A full list of indicators included in the current version of Intelligent Monitoring and the methodology used for constructing each indicator are provided in the section: "Indicator descriptions".

In categorising each trust into one of six priority bands for inspection, Band 1 represents the highest risk and Band 6 the lowest risk. The methodology for this categorisation is described under "Methods".

Priority bands are not assigned to those trusts that have had inspection reports published in the last 12 months. For these trusts, the priority band is displayed as "Recently inspected". This reflects the fact that CQC's comprehensive inspections provide the definitive judgements for each organisation. It should be noted that while bands are not given, the results of the indicator analyses are shown in the reports for benchmarking purposes.

This is the fifth publication of NHS acute hospital trust Intelligent Monitoring. We have developed this current set of indicators through consultation and testing. Our initial proposals were included in our consultation [\*A new start: Consultation on changes to the way CQC regulates, inspects and monitors care\*](#) (June 2013).

# Updates

Each Intelligent Monitoring publication uses updated data where possible and reflects any changes made to the model. The data used to calculate indicators is updated in each publication, however, for some indicators there is no new data available. In these cases the indicators use the same data, with the same time periods, as the previous publication. Types of changes made to the model include introducing new indicators as well as modifying, reinstating and removing indicators that have been included previously. A new “indicator status” column is included in the reports that identifies which indicators are new, have modified constructions, whether data have been updated or not, where they have been reinstated with updated data or have not changed from the previous publication. The majority of the indicators use more recent data and their construction has not been modified.

The reports for each trust also now present the indicators categorised, where possible, by the key questions that are asked during inspections: are services safe, effective, caring, responsive, and well-led?

The table below details the main changes to indicators for this publication. The full list of indicators can be accessed in the [Indicator Description](#) section.

| Indicator Status                           | Indicator   | Notes   |
|--|---|---|
| <b>New Indicator</b>                       | Composite of two questions from the NHS Staff Survey relating to abuse from other staff (COM_ABUSESTA)  |   |
| <b>New Indicator</b>                       | Parliamentary and Health Service Ombudsman fully and partially upheld complaints (PHSO_COM)   |   |
| <b>Indicator modified and data updated</b> | NHS England Inpatient Friends and Family Test; percentage likely to recommend the trust (FFTLIKERECEIP) (previously FFTNHSESCORE)   | The Friends and Family Test indicator has been amended so that it aligns with changes introduced by NHS England in September 2014. NHS England is now calculating and presenting the FFT results as a percentage of respondents who would/would not recommend the service to their friends and family The indicator now uses the “percentage likely to recommend” results instead of the FFT score. |
| <b>Indicator modified and data updated</b> | Composite risk rating of ESR items relating to staff support/supervision (ESRSUP)<br><br>Composite risk rating of ESR items relating to the ratio of staff vs. bed occupancy (ESRSTAFF) | In cases where the ‘type of staff’ field is blank, the ‘occupation code’ will now be used to derive staff type for ESRSUP and ESRSTAFF.   |

| <b>Indicator Status</b>            | <b>Indicator</b>  | <b>Notes</b>  |
|------------------------------------|---|---|
| <b>Reinstated and data updated</b> | Proportion of patients who received all the secondary prevention medications for which they were eligible (MINAP22) | This indicator was removed from IM v4 due to the age of the data, but has now been reinstated as 2013/14 data has been published.   |
| <b>Removed</b>                     | Secondary Uses Service Data Quality indicator (COM_SUSDAQ)  | We are making a change to how this indicator is analysed; the data extraction period has been tightened up to ensure that all data is 'frozen' at the point when the indicator is calculated. The data required for this change has not been released in time for the analysis and has therefore been removed. We anticipate that this change will be introduced, and the indicator reinstated, in a future IM update.  |
| <b>Removed</b>                     | NHS Choices negative comments (NHS_CHOICES)   | Prior to the publication of IM v5, CQC became aware of a data issue within the NHS Choices indicator. The NHS Choices team confirmed that a number of the hospital comments on its website were missing from the data which had been supplied to CQC for trust validation. While this issue was quickly rectified by NHS Choices, there was not sufficient time to fully quality assure the final data prior to publication and both organisations agree that improvements can be made to the definition of the indicator. Therefore we have agreed to withdraw the indicator while we further develop its specification to give a more rounded view of the available data. |

## Methods

This section provides details of how risks are identified and how each NHS trust is assigned into one of the six priority bands. The definitions and construction of individual indicators are given in the following section.

For each of the indicators in the model, one of the following levels is assigned for each trust.

- 'no evidence of risk'
- 'risk'
- 'elevated risk'

A number of tests are used to determine the levels of risk for each indicator. The tests include Cumulative Sums (CUSUM) and z-scoring techniques which are applied based on the judgement of which is the most appropriate test for each indicator. Where an indicator has 'no evidence of risk' this refers to where the statistical analysis has not deemed the result to be outside the confidence limits or pre-determined threshold.

For some indicators the thresholds are determined by a rules-based approach, for example concerns raised by staff to CQC (and validated by CQC) are always flagged in the model. We have published a separate document that describes the statistical methods of data analysis in further detail. This is available on our [website](#).

From these analyses, each trust is assigned to one of six risk bands by producing a weighted sum of the indicators that have been identified as 'risk' or 'elevated risk', and comparing that score with all of the indicators which apply to that trust. In this process, the weighting refers to 'elevated risks' being scored as double the value of 'risks'.

For the trusts assigned a band based on the proportion of indicators, we apply the following thresholds to this weighted sum:

Band 1  $\geq 7.0\%$

Band 2  $\geq 5.5\%$

Band 3  $\geq 4.5\%$

Band 4  $\geq 3.5\%$

Band 5  $\geq 2.5\%$

Band 6  $< 2.5\%$

If we have serious concerns about a trust (e.g. it is in special measures) it will automatically be categorised as band 1, unless it has been recently inspected.

The following fields are calculated and displayed on the Intelligent Monitoring report for each NHS trust:

**Number of risks:** total number of indicators identified as 'risk' (thresholds and rules for identifying risk are provided in the individual indicator details below).

**Number of elevated risks:** total number of indicators identified as 'elevated risk' (thresholds and rules for identifying elevated risk are provided in the individual indicator details below).

**No evidence of risk:** refers to where our statistical analysis has not deemed there to be a risk or elevated risk.

**Number of applicable indicators:** a count of the number of indicators that apply to the individual trust.

**Overall risk score:** a weighted sum of (number of risks) + (number of elevated risks x 2).

**Maximum possible risk score:** the score a trust would receive if it had flagged as elevated risk for every single applied indicator in the model.

**Proportional Score:** calculated from (overall risk score) / (maximum possible risk score) converted to a percentage.

**Priority band:** CQC has categorised trusts into one of six priority bands, with band 1 representing highest risk and band 6 the lowest risk. These bands have been assigned based on the proportion of indicators that have been identified as 'risk' or 'elevated risk', or if there are known serious concerns (e.g. trusts in special measures) which will result in an automatic categorisation of band 1.



# Indicator descriptions

For each indicator we explain:

- the indicator ID and name
- the rationale
- how the numerator and denominator are constructed (for quantitative indicators)
- how 'risk' and 'elevated risk' have been determined
- the time period of the data source
- the data source and links to the original source (where this is available).

## Safe

### Never Events

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | STEISNE  |  |
| <b>Indicator</b>              | <b>Never Event incidence</b>   |  |
| <b>Rationale</b>              | Never Events are serious, largely preventable patient safety incidents that should not occur if the available preventative measures have been implemented, so any Never Event reported could indicate unsafe care  |  |
| <b>Indicator status</b>       | <b>Data updated</b>  |  |
| <b>Indicator construction</b> | The Observed value shown is the trust's numerator  |  |
|                               | <b>Numerator:</b><br>Count of Never Events   | <b>Denominator:</b><br>Estimated total person bed days   |
| <b>Indicator type</b>         | Ratio of observed to expected (converted to p-value)   |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Occurrence of at least 2 Never Events over the annual period where at least one event occurred in the most recent 3 months   | <b>Elevated risk:</b><br>p-value less than or equal to 0.025 (95% level)<br><br><b>OR</b><br><br>CUSUM signal for high reporting in the most recent 3 months |
| <b>Time period</b>            | 01/02/2014 to 31/01/2015   |  |
| <b>Data source</b>            | <b>Numerator:</b><br>Extract from Strategic Executive Information System (STEIS) system (password protected)   | <b>Denominator:</b><br>Hospital Episode Statistics (HES) data supplied by Health and Social Care Information Centre (HSCIC)                                  |
| <b>Notes</b>                  | All Never Events are serious incidents which should not occur, so even one Never Event could indicate unsafe care. Individual Never Events are followed up by the commissioners of care. The STEISNE indicator for Intelligent Monitoring is designed to identify where the potential risk to patient care is greatest.<br><br>Data used in this analysis was extracted from STEIS on 02/02/2015 |  |

|  |  |
|--|--|
|  | <p>and covers Never Events which occurred between 01/02/2014 and 31/01/2015 and were reported on or before 31/08/2014. Never event data is provisional and subject to change as providers investigate incidents.</p> <p>Note that Never Events during the data period were defined using the 2013/14 Never Events list: <a href="http://www.england.nhs.uk/wp-content/uploads/2013/12/nev-ev-list-1314-clar.pdf">http://www.england.nhs.uk/wp-content/uploads/2013/12/nev-ev-list-1314-clar.pdf</a>. NHS England has recently published a new Never Events list, effective from 1 April 2015, which can be found here: <a href="http://www.england.nhs.uk/wp-content/uploads/2015/03/never-evnts-list-15-16.pdf">http://www.england.nhs.uk/wp-content/uploads/2015/03/never-evnts-list-15-16.pdf</a>.</p> <p>The total person bed-days information from HES includes day cases, which are counted as half-days. For more recent months where HES data is not yet available, monthly estimates have been calculated using the average of the earlier months within the time-period of analysis.</p> <p>The statistical analysis excludes specialist trusts but the assessment of 'risk' is applied to all trusts.</p> |
|--|--|

## Avoidable infections

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | CDIFF   |   |
| <b>Indicator</b>              | <b>Incidence of Clostridium difficile (<i>C.difficile</i>)</b>  |   |
| <b>Rationale</b>              | The risk of healthcare acquired infections to patients should be reduced. While there are a number of factors that may increase the risk of acquiring an infection, high standards of hygiene and cleanliness can minimise the risk of occurrence. A high incidence of <i>C.difficile</i> compared to the national rate may indicate issues with the trust's infection control procedures |   |
| <b>Indicator status</b>       | <b>Data updated</b>   |   |
| <b>Indicator construction</b> | The Observed value shown is the trust's Numerator. The Expected value is calculated using the national rate and the trust's Denominator   |   |
|                               | <b>Numerator:</b><br>Count of trust-apportioned <i>C.difficile</i> infections in patients aged 2 years and over   | <b>Denominator:</b><br>Estimated total person bed days  |
| <b>Indicator type</b>         | Ratio of observed to expected (converted to z-score)  |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated risk:</b> <ul style="list-style-type: none"> <li>z-score greater than or equal to 3</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>CUSUM signal for high reporting in the most recent 3 months</li> </ul> |
|                               |   |   |
| <b>Time period</b>            | 01/01/2014 to 31/12/2014  |   |
| <b>Data source</b>            | <b>Numerator:</b> Public Health   | <b>Denominator:</b> NHS England,  |

|              |   |   |
|--------------|---|---|
|              | <p>England (PHE)</p> <p>Monthly tables:<br/> <a href="https://www.gov.uk/government/statistics/clostridium-difficile-infection-monthly-data-by-nhs-acute-trust">https://www.gov.uk/government/statistics/clostridium-difficile-infection-monthly-data-by-nhs-acute-trust</a> </p>   | <p>KH03 Bed availability and occupancy</p> <p><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/">http://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/</a></p> |
| <b>Notes</b> | <p>Quarterly KH03 data on average daily overnight bed occupancy are analysed to determine an estimated total number of bed days. For more recent months where KH03 data are not yet available, estimates have been calculated using the average of the earlier months within the time-period of analysis.</p> <p>KH03 Bed availability and occupancy data are subject to revisions. The data used in the analysis are taken at the point of original publication.</p> <p>As the primary aim of this measure is to indicate the relative risk of acquiring <i>C.difficile</i>, trust's locally agreed 'trajectories' have not been taken into account.</p> <p>Specialist trusts are not included in this analysis.</p> |   |

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | MRSA  |   |
| <b>Indicator</b>              | <b>Incidence of Methicillin-resistant Staphylococcus aureus (MRSA)</b>  |   |
| <b>Rationale</b>              | The risk of healthcare acquired infections to patients should be reduced. While there are a number of factors that may increase the risk of acquiring an infection, high standards of hygiene and cleanliness can minimise the risk of occurrence. A high incidence of MRSA compared to the national rate may indicate issues with the trust's infection control procedures |   |
| <b>Indicator status</b>       | <b>Data updated</b>   |   |
| <b>Indicator construction</b> | The Observed value shown is the trust's Numerator. The Expected value is calculated using the national rate and the trust's Denominator   |   |
|                               | <b>Numerator:</b><br>Count of trust-assigned MRSA bacteraemias  | <b>Denominator:</b><br>Estimated total person bed days  |
| <b>Indicator type</b>         | Ratio of observed to expected (converted to p-value)  |   |
| <b>Assessment of risk</b>     | <b>Risk:</b> <ul style="list-style-type: none"> <li>p-value less than or equal to 0.025 but greater than 0.001 (95% level)</li> </ul>   | <b>Elevated risk:</b> <ul style="list-style-type: none"> <li>p-value less than or equal to 0.001 (99% level)</li> </ul> |
|                               |   | <b>OR</b> <ul style="list-style-type: none"> <li>CUSUM signal for high reporting in the most recent 3 months</li> </ul> |
| <b>Time-period</b>            | 01/01/2014 to 31/12/2014  |   |
| <b>Data source</b>            | <b>Numerator:</b>   | <b>Denominator:</b>   |

|              |   |   |
|--------------|---|---|
|              | Public Health England (PHE)<br><br>Monthly tables:<br><a href="https://www.gov.uk/government/statistics/mrsa-bacteraemia-monthly-data-by-post-infection-review-assignment">https://www.gov.uk/government/statistics/mrsa-bacteraemia-monthly-data-by-post-infection-review-assignment</a>   | NHS England, KH03 Bed availability and occupancy<br><br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/">http://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/</a> |
| <b>Notes</b> | <p>As of 1 April 2013, all NHS organisations reporting positive cases of MRSA bacteraemia are required to complete a Post Infection Review (PIR). Monthly MRSA bacteraemia data are now published on the basis of the relevant PIR assignment (acute Trust or CCG) rather than on the basis of the previously utilised Trust apportionment algorithm.</p> <p>Quarterly KH03 data on average daily overnight bed occupancy are analysed to determine an estimated total number of bed days. For more recent months where KH03 data is not yet available, estimates have been calculated using the average of the earlier months within the time-period of analysis.</p> <p>KH03 Bed availability and occupancy data are subject to revision. The data used in the analysis are taken at the point of original publication.</p> <p>Specialist trusts are not included in this analysis.</p> |   |

## Deaths in low risk diagnosis groups

|                               |   |
|-------------------------------|---|
| <b>Indicator ID</b>           | MORTLOWR  |
| <b>Indicator</b>              | <b>Dr Foster: Deaths in low risk diagnosis groups</b>   |
| <b>Rationale</b>              | A high rate of deaths for conditions normally associated with a very low rate of mortality may indicate potential risks in the quality and safety of care   |
| <b>Indicator status</b>       | <b>Data updated</b>   |
| <b>Indicator construction</b> | Further details on the construction of this measure can be found in <a href="#">Appendix 1</a>  |
| <b>Indicator type</b>         | Ratio of counts   |
| <b>Assessment of risk</b>     | <b>Elevated risk:</b> "Higher than expected" banding<br><br>n.b. trusts can only be assigned as no evidence of risk or elevated risk for this indicator   |
| <b>Time-period</b>            | 01/07/2013 to 30/06/2014  |
| <b>Data source</b>            | Dr Foster Intelligence <a href="https://my.drfooster.co.uk">https://my.drfooster.co.uk</a><br><br>Please note that all NHS trusts can access these data, but login details are required. Requests for login details should be sent to: <a href="mailto:support@drfooster.co.uk">support@drfooster.co.uk</a> |

## Patient safety incidents

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | NRLSL03  |  |
| <b>Indicator</b>              | <b>Proportion of reported patient safety incidents that are harmful</b>  |  |
| <b>Rationale</b>              | A high proportion of harmful patient safety incidents may indicate potential safety risks in trusts whose patients are experiencing more harm. Alternatively, it may also highlight trusts with a poorly developed reporting culture, who may tend to report fewer 'no harm' incidents, driving up their proportion of harmful incidents |  |
| <b>Indicator status</b>       | <b>Data updated</b>  |  |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Count of low harm, moderate harm, severe harm and death incidents   | <b>Denominator:</b><br>All reported incidents  |
| <b>Indicator type</b>         | z-scored   |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3                              |
| <b>Time-period</b>            | 01/12/2013 to 30/11/2014   |  |
| <b>Data source</b>            | <b>Numerator:</b><br>CQC extract of National Reporting and Learning System (NRLS) data   | <b>Denominator:</b><br>CQC extract of National Reporting and Learning System (NRLS) data |
| <b>Notes</b>                  | This analysis is based on the date of incident. Data used for this analysis were extracted from NRLS on 19/02/2015.<br>Please note that this measure excludes specialist trusts.   |  |

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | NRLSL04   |  |
| <b>Indicator</b>              | <b>Potential under-reporting of patient safety incidents resulting in death or severe harm</b>  |  |
| <b>Rationale</b>              | <p>NHS trusts are required to notify CQC about certain events, including serious incidents such as unexpected deaths and serious injuries. These requirements are detailed in CQC's <a href="#">Essential Standards of Quality and Safety</a>. Most of these requirements are met by reporting via the National Reporting and Learning System (NRLS), who will forward relevant information to CQC.</p> <p>Under-reporting of patient safety incidents reduces a healthcare organisation's ability to quantify and accurately measure harm reduction. It may also indicate a more general lack of awareness and a poor safety culture</p> |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | The Observed value shown is the trust's Numerator. The Expected value is calculated using the national rate and the trust's Denominator   |  |
|                               | <b>Numerator:</b><br>Count of reported severe harm and death incidents  | <b>Denominator:</b><br>Estimated total person bed days |
| <b>Indicator</b>              | Ratio of observed to expected (converted to z-score)  |  |

|                           |   |   |
|---------------------------|---|---|
| <b>type</b>               |   |   |
| <b>Assessment of risk</b> | <b>Risk:</b><br>z-score less than or equal to -2 but greater than -3  | <b>Elevated risk:</b><br>z-score less than or equal to -3   |
| <b>Time-period</b>        | 01/12/2013 to 30/11/2014  |   |
| <b>Data source</b>        | <b>Numerator:</b><br>CQC extract of National Reporting and Learning System (NRLS) data  | <b>Denominator:</b><br>Hospital Episode Statistics (HES) data supplied by Health and Social Care Information Centre (HSCIC) |
| <b>Notes</b>              | <p>This analysis is based on the date of incident. Data used for this analysis were extracted from NRLS on 19/02/2015.</p> <p>The total person bed days information from HES includes day cases, which are counted as half days in our calculation. For more recent months where HES data is not yet available, monthly estimates have been calculated using the average of the earlier months within the time-period of analysis.</p> <p>Please note that this measure excludes specialist trusts.</p> |   |

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | NRLSL05  |   |
| <b>Indicator</b>              | <b>Potential under-reporting of patient safety incidents</b>   |   |
| <b>Rationale</b>              | Under-reporting of patient safety incidents may indicate a poor safety culture in an organisation, and it reduces healthcare organisation's ability to quantify and accurately measure harm reduction  |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | The Observed value shown is the trust's Numerator. The Expected value is calculated using the national rate and the trust's Denominator  |   |
|                               | <b>Numerator:</b><br>Count of reported incidents (no harm, low harm, moderate harm, severe harm, death)  | <b>Denominator:</b><br>Estimated total person bed days  |
| <b>Indicator type</b>         | Ratio of observed to expected (converted to z-score)   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score less than or equal to -2 but greater than -3   | <b>Elevated risk:</b><br>z-score less than or equal to -3   |
| <b>Time-period</b>            | 01/12/2013 to 30/11/2014   |   |
| <b>Data source</b>            | <b>Numerator:</b><br>CQC extract of National Reporting and Learning System (NRLS) data   | <b>Denominator:</b><br>Hospital Episode Statistics (HES) data supplied by Health and Social Care Information Centre (HSCIC) |
| <b>Notes</b>                  | <p>This analysis is based on the date of incident. Data used for this analysis were extracted from NRLS on 19/02/2015.</p> <p>The total person bed days information from HES includes day cases, which are counted as half days in our calculation. For more recent months where HES data is not yet available, monthly estimates have</p> |   |

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|  | <p>been calculated using the average of the earlier months within the time-period of analysis.</p> <p>Please note that this measure excludes specialist trusts.</p> |
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## Central Alerting System

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | COM_CASIM   |  |
| <b>Indicator</b>              | <b>Composite of Central Alerting System (CAS): Dealing with (CAS) safety alerts in a timely way</b>   |  |
| <b>Rationale</b>              | <p>The Central Alerting System (CAS) issues safety-critical information and guidance to the NHS and other providers of health and social care. NHS trusts are given a set amount of time to respond to each alert, and confirm that action has been taken (or that no action is required). Failure to sign off on alerts may represent a risk to patient safety.</p>  |  |
| <b>Indicator Status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | <p>This is a composite indicator comprising:</p> <p>CASIM01A01: Number of CAS alerts outstanding for up to 12 months after the closing date</p> <p>CASIM01B01: Number of CAS alerts outstanding for 12 or more months after the closing date</p> <p>CASIM01C01: Percentage of CAS alerts with closing dates during the preceding 12 months which the trust has closed late</p> <p>Detailed specifications of the underlying CAS indicators in <a href="#">Appendix 6</a>. The final risk assigned is the highest risk level from any of the three components.</p> |  |
| <b>Indicator type</b>         | Categorical rules based   |  |
| <b>Assessment of risk</b>     | <p><b>Risk:</b></p> <p>CASIM01A01. 1 to 4 CAS alerts still open after due date</p> <p>CASIM01B01. 1 CAS alerts still open after the due date</p> <p>CASIM01C01 25-50% alerts closed late</p>  | <p><b>Elevated risk:</b></p> <p>CASIM01A01. 5 or more CAS alerts still open after due date</p> <p>CASIM01B01. 2 or more CAS alerts still open after the due date</p> <p>CASIM01C01. 50% or more alerts closed late</p> |
| <b>Time-period</b>            | <p>Date of download: 23/02/2015</p> <p>CASIM01A01 and CASIM01C01: Alerts scheduled for completion between 01/02/2014 and 31/01/2015</p> <p>CASIM01B01: All alerts scheduled for completion up to and including 31/01/2014.</p>  |  |
| <b>Data source</b>            | <p>Central Alerting System</p> <p><a href="https://www.cas.dh.gov.uk/Home.aspx">https://www.cas.dh.gov.uk/Home.aspx</a></p>   |  |
| <b>Notes</b>                  | <p>This indicator includes the following types of alert issued through the Central Alerting System:</p> <ul style="list-style-type: none"> <li>• Patient safety alerts</li> </ul>   |  |

|  |  |
|--|--|
|  | <ul style="list-style-type: none"> <li>• Medical device alerts</li> <li>• Estates and Facilities notices</li> <li>• Other alerts issued by DH</li> </ul> <p>Four patient safety alerts have been excluded on the advice of NHS England. These are: Safer spinal (intrathecal), epidural and regional devices Parts A and B, Minimising risks of mismatching spinal, epidural and regional devices with incompatible connectors and Technical patient safety solutions for medicines reconciliation on admission of adults to hospital.</p> |
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## Venous Thromboembolism

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | VTERA03  |   |
| <b>Indicator description</b>  | <b>Proportion of admitted patients risk assessed for Venous Thromboembolism (VTE)</b>  |   |
| <b>Rationale</b>              | Venous Thromboembolism (VTE) is a significant patient safety issue. The first step in preventing death and disability from VTE is to identify those at risk so that preventative treatments can be used. There is a Commissioning for Quality and Innovation (CQUIN) goal for 2013/14 for 95% of admitted patients to be risk assessed for VTE |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of admitted patients risk assessed for VTE   | <b>Denominator:</b><br>Total number of admitted patients.   |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
| <b>Time period</b>            | 01/10/2014 to 31/12/2014   |   |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/vte/">www.england.nhs.uk/statistics/statistical-work-areas/vte/</a>  |   |

## A&E Survey (AESURWAIT)

|                         |   |  |
|-------------------------|---|--|
| <b>Indicator ID</b>     | AESURWAIT   |  |
| <b>Indicator</b>        | <b>A&amp;E Survey 2014 Q7 "From the time you first arrived at the A&amp;E Department, how long did you wait before being examined by a doctor or nurse?"</b>  |  |
| <b>Rationale</b>        | Access to emergency health may affect patient morbidity/mortality. Frail elderly attendees are at risk of developing pressure sores within two hours of lying on a trolley. The Department of Health's Operating Framework for the NHS in England 2012/13 maintains the requirement for at least 95% of patients to spend no more than four hours in any type of A&E from arrival to admission, transfer or discharge |  |
| <b>Indicator status</b> | <b>No change</b>  |  |



|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator construction</b> | Scores, as described in the Technical Document:<br><a href="http://www.nhssurveys.org/surveys/819">http://www.nhssurveys.org/surveys/819</a> |   |
| <b>Indicator type</b>         | Modified z-score   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b>   | <b>Elevated Risk:</b>   |
|                               | Trusts with scores that are statistically worse than the national average with 95% significance  | Trusts with scores that are statistically worse than the national average with 99% significance |
| <b>Time period</b>            | Patients attending A&E between 01/01/2014 to 31/03/2014  |   |
| <b>Data source</b>            | A&E Survey (CQC)<br><a href="http://www.nhssurveys.org/survey/1380">http://www.nhssurveys.org/survey/1380</a>                                |   |

## Ambulance handover delays

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | AMBTURN06  |   |
| <b>Indicator</b>              | <b>The proportion of ambulance journeys where the ambulance vehicle remained at hospital for more than 60 minutes</b>  |   |
| <b>Rationale</b>              | Long delays in ambulance handover and turnaround are detrimental to clinical quality and patient experience and are costly to the NHS. Ideally, ambulance turnaround should be complete within 30 minutes, allowing 15 minutes for patient handover to the emergency department (ED) and 15 minutes to clean and prepare the ambulance vehicle to be ready for the next call |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of ambulance vehicles remaining at hospital for more than 60 minutes   | <b>Denominator:</b><br>Total number of ambulance vehicle journeys |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3       |
| <b>Time period</b>            | 01/12/2014 to 31/12/2014   |   |
| <b>Data source</b>            | NHS Ambulance Service – Protected data which is sent directly to CQC   |   |

## Consistency of safety incident reporting

|                     |   |
|---------------------|---|
| <b>Indicator ID</b> | NRLS08  |
| <b>Indicator</b>    | <b>Consistency of reporting to the National Reporting and Learning System (NRLS)</b>  |
| <b>Rationale</b>    | The NRLS holds details of patient safety incidents reported by NHS organisations. The NRLS analyses data from the NRLS to identify emerging patient safety issues, and patterns and trends in safety. Information is fed back to NHS providers which they can use to make healthcare safer. High levels of reporting of incidents to the NRLS are |

|                               |   |  |
|-------------------------------|---|--|
|                               | essential to ensure that the NHS is aware of and can learn from patient safety risks. Trusts which do not report incidents to the NRLS on a regular basis are likely to have less well-developed systems for reporting and monitoring patient safety incidents. |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of months in which data has been reported to the NRLS   | <b>Denominator:</b><br>Total number of months  |
| <b>Indicator type</b>         | Rule based  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts with 2 or 3 months of non-reporting out of 6 months  | <b>Elevated risk:</b><br>Trusts with 4, 5 or 6 months of non-reporting out of 6 months |
| <b>Time period</b>            | 01/04/2014 to 30/09/2014  |  |
| <b>Data source</b>            | NHS Commissioning Board (National Reporting and Learning System)<br><a href="http://www.nrls.npsa.nhs.uk/resources/type/data-reports/">http://www.nrls.npsa.nhs.uk/resources/type/data-reports/</a>   |  |

## Staff survey (NHSSTAFF07; NHSSTAFF11)

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | NHSSTAFF07   |   |
| <b>Indicator</b>              | <b>NHS Staff Survey – KF10. The proportion of staff receiving health and safety training in last 12 months</b>   |   |
| <b>Rationale</b>              | <p>The staff pledges, part of the NHS Constitution, define what the NHS expects from staff and what staff can expect from NHS employers. The constitution also includes staff responsibilities. <i>Staff pledge 2: To provide all staff with personal development, access to appropriate training for their jobs, and line management support to succeed</i></p> <p>Staff who are appropriately supported will be more empowered to provide care to patients</p> |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of staff surveyed who reported receiving health and safety training in last 12 months  | <b>Denominator:</b><br>Number of respondents                |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
| <b>Time period</b>            | 01/09/2014 to 31/12/2014   |   |
| <b>Data source</b>            | Department of Health (NHS Staff Survey)<br><a href="http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/">http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/</a>   |   |

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | NHSSTAFF11   |   |
| <b>Indicator</b>              | <b>NHS Staff Survey – KF14. The proportion of staff who stated that the incident reporting procedure was fair and effective</b>  |   |
| <b>Rationale</b>              | <p>The staff pledges, part of the NHS Constitution, define what the NHS expects from staff and what staff can expect from NHS employers. The constitution also includes staff responsibilities. <i>Staff pledge 2: To provide all staff with personal development, access to appropriate training for their jobs, and line management support to succeed</i></p> <p>Staff who are appropriately supported will be more empowered to provide care to patients</p> |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of staff surveyed who reported that they felt the incident reporting procedures are fair and effective   | <b>Denominator:</b><br>Number of respondents                |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
| <b>Time period</b>            | 01/09/2014 to 31/12/2014   |   |
| <b>Data source</b>            | Department of Health (NHS Staff Survey)<br><a href="http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/">http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/</a>   |   |

## Staffing (ESRSUP; ESRSTAFF)

|                               |   |
|-------------------------------|---|
| <b>Indicator ID</b>           | ESRSUP  |
| <b>Indicator</b>              | <b>Composite risk rating of ESR items relating to staff support/ supervision</b>  |
| <b>Rationale</b>              | Inadequate support of junior staff has frequently been found to contribute to poor clinical outcomes. Ratios of senior to junior staff are a direct measure of trust training policy and practice, and an indirect measure of working environment and culture   |
| <b>Indicator status</b>       | <b>Modified and data updated</b> - In cases where the 'type of staff' field is blank, the 'occupation code' will now be used to derive staff type for ESRSUP and ESRSTAFF.  |
| <b>Indicator construction</b> | Separate ratios are calculated for the following five important supervisory relationships in acute hospital settings: <ul style="list-style-type: none"> <li>i) (Band 6 nurse) : (Band 5 nurse)</li> <li>ii) (Charge nurse/ ward sister) : (Band 5/6 nurse)</li> <li>iii) Proportion of all ward staff who are registered nurses</li> <li>iv) (Consultant doctors) : (Non-consultant doctors)</li> <li>v) (Midwife Supervisors) : (Midwives)</li> </ul> |

|                           |  |
|---------------------------|--|
|                           | A z-score is calculated for each of these four ratios and one proportion, comparing the trust's performance to other trusts. The final risk level takes all five z-scores into account using a rule-based system (see 'Assessment of risk' row below.) This approach prevents the large number of nursing staff compared to other staff types masking problematic ratios between senior and junior staff in other occupational groups  |
| <b>Indicator type</b>     | Final risk level derived using a rules-based system from z-scores for all five of the staff ratios or proportions listed above   |
| <b>Assessment of risk</b> | <p>i) z-scores calculated for each of the five supervisor: junior ratios listed above</p> <p>ii) A risk score for each of the items is assigned using the following criteria:</p> <p>iii) <b>No evidence of risk:</b> Z-score &lt;2.0</p> <p>iv) <b>Risk:</b> z-score ≥2.0 but &lt;3.0</p> <p>v) <b>Elevated risk:</b> z-score ≥3.0</p> <p>vi) Weighting applied to risk score for each of the items:</p> <ul style="list-style-type: none"> <li><b>No evidence of risk:</b> 0</li> <li><b>Risk:</b> 1</li> <li><b>Elevated risk:</b> 2</li> </ul> <p><i>Note: a count of the constituent risks (low alert) and constituent elevated risks (high alert) can be found in the data sheet published alongside this guidance on CQC's website.</i></p> <p>vii) The aggregate risk weighting is calculated for each of the professional groups listed using the following rules:</p> <p>[Sum of risk score for all professional groups per organisation]/<br/>[maximum possible risk score for all professional groups per organisation]</p> <ul style="list-style-type: none"> <li>Risk: Greater than 1 risk and less than 0.5 risk score</li> <li>Elevated risk: Greater than or equal to 0.5 risk score</li> </ul> |
| <b>Time period</b>        | 01/01/2014 to 31/12/2014   |
| <b>Data source</b>        | Electronic Staff Record Data Warehouse   |

|                               |   |
|-------------------------------|---|
| <b>Indicator ID</b>           | ESRSTAFF  |
| <b>Indicator</b>              | <b>Composite risk rating of ESR items relating to ratio: Staff vs. bed occupancy</b>  |
| <b>Rationale</b>              | Adequate staff: patient ratios across all occupational groups are essential to adequate patient care  |
| <b>Indicator status</b>       | <b>Modified and data updated</b> - In cases where the 'type of staff' field is blank, the 'occupation code' will now be used to derive staff type for ERSUP and ESRSTAFF. |
| <b>Indicator construction</b> | Four ratios covering different types of staff-patient relationship are calculated:  |

|  |   |  |   |
|--|---|--|---|
|  | <p>i) (All medical and dental staff) : (Occupied beds)</p> <p>ii) (All nursing staff) : (Occupied beds)</p> <p>iii) (Other clinical staff) : (Occupied beds)</p> <p>iv) (All midwifery staff) : (Births)</p> <p>A ratio z-score is calculated for each of the patient care situations. The final risk level takes all four z-scores into account using a rule-based system (see 'Assessment of risk' row below). This approach prevents the large number of nursing staff compared to other staff types masking problematic ratios between patients and these other types of staff. A rolling 1 year period is used for the bed occupancy (KH03) and for the staffing measure the average FTE is based on the start and end dates of the reporting period.</p> <table border="1" data-bbox="389 651 1430 1059"> <tr> <td data-bbox="389 651 911 1059"> <p><b>Ratio Count 1:</b></p> <p>Estimated patient contact hours in one week</p> <p>Calculation:</p> <p>Number of occupied overnight beds (KH03) * 24 (hours in a day) * 7 (days in a week) +</p> <p>Number of occupied day beds (KH03) * 8 (hours in a day) * 7 (days in a week)</p> </td><td data-bbox="911 651 1430 1059"> <p><b>Ratio Count 2:</b></p> <p>Estimated staff contract hours available in one week</p> <p>Calculation (for AFC staff): FTE of staff * 37.5 (weekly contract hours)</p> <p>Calculation (for Medical and dental staff): FTE of staff * 40 (weekly contract hours)</p> </td></tr> </table> | <p><b>Ratio Count 1:</b></p> <p>Estimated patient contact hours in one week</p> <p>Calculation:</p> <p>Number of occupied overnight beds (KH03) * 24 (hours in a day) * 7 (days in a week) +</p> <p>Number of occupied day beds (KH03) * 8 (hours in a day) * 7 (days in a week)</p> | <p><b>Ratio Count 2:</b></p> <p>Estimated staff contract hours available in one week</p> <p>Calculation (for AFC staff): FTE of staff * 37.5 (weekly contract hours)</p> <p>Calculation (for Medical and dental staff): FTE of staff * 40 (weekly contract hours)</p> |
| <p><b>Ratio Count 1:</b></p> <p>Estimated patient contact hours in one week</p> <p>Calculation:</p> <p>Number of occupied overnight beds (KH03) * 24 (hours in a day) * 7 (days in a week) +</p> <p>Number of occupied day beds (KH03) * 8 (hours in a day) * 7 (days in a week)</p> | <p><b>Ratio Count 2:</b></p> <p>Estimated staff contract hours available in one week</p> <p>Calculation (for AFC staff): FTE of staff * 37.5 (weekly contract hours)</p> <p>Calculation (for Medical and dental staff): FTE of staff * 40 (weekly contract hours)</p>   |  |   |
| <b>Indicator type</b>  | Final risk level derived using a rules-based system from ratio z-scores for all four ratios listed above in 'Rationale'   |  |   |
| <b>Assessment of risk</b>  | <p>i) Ratio z-scores calculated for each of the four broad categories of staff-patient relationship listed above</p> <p>ii) A risk score for each of the items is assigned using the following criteria:</p> <ul style="list-style-type: none"> <li>• <b>No evidence of risk:</b> Z-score &lt;2.0</li> <li>• <b>Risk:</b> z-score ≥2.0 but &lt;3.0</li> <li>• <b>Elevated risk:</b> z-score ≥3.0</li> </ul> <p>iii) Weighting applied to risk score for each of the items:</p> <ul style="list-style-type: none"> <li>• <b>No evidence of risk:</b> 0</li> <li>• <b>Risk:</b> 1</li> <li>• <b>Elevated risk:</b> 2</li> </ul> <p><i>Note: a count of the constituent risks (low alert) and constituent elevated risks (high alert) can be found in the data sheet published alongside this guidance on CQC's website.</i></p> <p>iv) The aggregate risk weighting is calculated for each of the professional groups listed using the following rules:</p> <p>[Sum of risk score for all professional groups per organisation]/<br/>[maximum possible risk score for all professional groups per organisation]</p> <ul style="list-style-type: none"> <li>• <b>Risk:</b> Greater than 1 risk and less than 0.5 risk score</li> </ul>   |  |   |

|                    |  |
|--------------------|--|
|                    | <ul style="list-style-type: none"> <li>Elevated risk: Greater than or equal to 0.5 risk score</li> </ul>   |
| <b>Time period</b> | ESR data time period: 01/01/2014 to 31/12/2014<br>Birth data time period: 01/11/2013 to 31/10/2014<br>Bed occupancy data time period: 01/01/2014 to 31/12/2014 |
| <b>Data source</b> | Electronic Staff Record Data Warehouse   |

## Safeguarding concerns

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | SAFEGUARDING   |  |
| <b>Indicator</b>              | <b>CQC's National Customer Service Centre (NCSC) safeguarding concerns</b>   |  |
| <b>Rationale</b>              | It's important to take safeguarding concerns received about a provider seriously as safeguarding is a very serious matter that needs to be monitored   |  |
| <b>Indicator status</b>       | <b>Data updated</b>  |  |
| <b>Indicator construction</b> | Counts of concerns adjusted by bed days using an iterative negative binomial regression model. Bed days may be partly estimated when their availability does not cover the full time period indicated below. |  |
| <b>Indicator type</b>         | p-value  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>P-value $\leq 0.01$ after Elevated Risk trusts omitted from analysis<br><br>See <a href="#">Appendix 7</a> for details.  | <b>Elevated Risk:</b><br>P-value $\leq 0.01$ and iterative global P-value $\leq 0.20$<br><br>See <a href="#">Appendix 7</a> for details. |
| <b>Time-period</b>            | 25/02/2014 to 24/02/2015   |  |
| <b>Data source</b>            | Care Quality Commission (internal data)  |  |

# Effective

## Mortality: Trust level

|                               |   |
|-------------------------------|---|
| <b>Indicator ID</b>           | SHMI01  |
| <b>Indicator</b>              | <b>Summary Hospital Mortality Indicator (SHMI)</b>  |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care   |
| <b>Indicator status</b>       | <b>Data updated</b>   |
| <b>Indicator construction</b> | Standardised mortality both in hospital and within 30 days of discharge<br><br>A full methodology is published by the Health and Social Care Information Centre (HSCIC)<br><a href="http://www.hscic.gov.uk/media/11151/Indicator-SpecificationSummary-Hospital-level-Mortality-Indicator-methodology/pdf/SHMI_Specification.pdf">www.hscic.gov.uk/media/11151/Indicator-SpecificationSummary-Hospital-level-Mortality-Indicator-methodology/pdf/SHMI_Specification.pdf</a> |
| <b>Indicator type</b>         | Standardised mortality ratio  |
| <b>Assessment of risk</b>     | A value identified by the HSCIC as significantly higher than expected is classified as an <b>elevated risk</b><br><br>n.b. trusts can only be assigned as no evidence of risk or elevated risk for this indicator   |
| <b>Time period</b>            | 01/07/2013 to 30/06/2014  |
| <b>Data source</b>            | Health and Social Care Information Centre (HSCIC) using Hospital Episode Statistics:<br><br><a href="http://www.hscic.gov.uk/SHMI">http://www.hscic.gov.uk/SHMI</a>   |

|                               |  |
|-------------------------------|--|
| <b>Indicator ID</b>           | COM_HSMR   |
| <b>Indicator</b>              | Composite of Hospital Standardised Mortality Ratio indicators :<br><br><b>HSMR - Hospital standardised mortality ratio (HSMR)</b><br><b>HSMRWKDAY - Hospital standardised mortality ratio (weekday)</b><br><b>HSMRWKEND - Hospital standardised mortality ratio (weekend)</b>  |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care  |
| <b>Indicator status</b>       | <b>Data updated</b>  |
| <b>Indicator construction</b> | This is a composite indicator consisting of:<br><br><ol style="list-style-type: none"><li>1. Overall trust-level HSMR</li><li>2. HSMR for patients admitted at weekends</li><li>3. HSMR for patients admitted on a weekday</li></ol><br>HSMR measures in-hospital mortality among patients admitted with one of a set of 56 conditions. The methodology is described in <a href="#">Appendix 1</a> |

|                           |   |
|---------------------------|---|
| <b>Indicator type</b>     | Standardised mortality ratio  |
| <b>Assessment of risk</b> | A value identified by Dr Foster as significantly higher than expected for any of the three measures is classified as an elevated risk   |
| <b>Time period</b>        | 01/07/2013 to 30/06/2014  |
| <b>Data source</b>        | Dr Foster Intelligence <a href="https://my.drfooster.co.uk">https://my.drfooster.co.uk</a><br><br>Please note that all NHS trusts can access these data, but login details are required. Requests for login details should be sent to: <a href="mailto:support@drfooster.co.uk">support@drfooster.co.uk</a> |

## Mortality

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | COM_CARDI  |   |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Cardiological conditions and procedures</b>  |   |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care  |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> <li><b>An aggregate measure</b><br/>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT24CU). See <a href="#">Appendix 4</a> for the indicator specification.</li> <li><b>Outlier alerts for individual diagnosis groups</b><br/>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to one of the following CCS categories: <ul style="list-style-type: none"> <li>Acute myocardial infarction (MORTAMI)</li> <li>Cardiac arrest and ventricular fibrillation (MORTARRES)</li> <li>Coronary atherosclerosis and other heart disease (MORTCATH)</li> <li>Congestive heart failure; non-hypertensive (MORTCHF)</li> <li>Cardiac dysrhythmias (MORTDYSRH)</li> <li>Heart valve disorders (MORTHVD)</li> <li>Pulmonary heart disease (MORTPHD)</li> </ul> </li> <li><b>Outlier alerts for procedure groups</b><br/>In-hospital mortality after the following procedures: <ul style="list-style-type: none"> <li>CABG (isolated first time) (MORTCABGI)</li> <li>CABG (other) (MORTCABGO)</li> <li>Adult cardiac surgery (MORTCASUR)</li> </ul> </li> </ol> |   |
| <b>Indicator type</b>         | Standardised mortality ratio (converted to z-score)  |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |



|                    |   |  |
|--------------------|---|--|
|                    | <p>but less than 3 on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert where action plans are being followed up by CQC (<a href="#">see Appendix 3</a>)</p>   | <p>on the aggregate measure</p> <p><b>or</b></p> <p>a CUSUM alert on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (<a href="#">see Appendix 3</a>)</p> |
| <b>Time period</b> | <ol style="list-style-type: none"> <li>1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014</li> <li>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)</li> <li>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert (<a href="#">see Appendix 3</a>)</li> </ol>   |  |
| <b>Data source</b> | <p>Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London; Outliers identified by the Society for Cardiothoracic Surgery in Great Britain &amp; Ireland, using data from the National Adult Cardiac Surgery Audit</p>  |  |
| <b>Notes</b>       | <p>Information on how CQC monitors mortality:<br/> <a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a></p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br/> <a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a></p> |  |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |   |
|-------------------------------|---|
| <b>Indicator ID</b>           | COM_CEREB   |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Cerebrovascular conditions</b>  |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care   |
| <b>Indicator status</b>       | <b>Data updated</b>   |
| <b>Indicator construction</b> | <p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> <li><b>1. An aggregate measure</b><br/> In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT21CU). See <a href="#">Appendix 4</a> for the indicator specification.</li> <li><b>2. Outlier alerts for individual diagnosis groups</b><br/> In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category:</li> </ol> |

|                           |   |   |
|---------------------------|---|---|
|                           | <ul style="list-style-type: none"> <li>Acute cerebrovascular disease (MORTACD)</li> </ul>   |   |
| <b>Indicator type</b>     | Standardised mortality ratio (converted to z-score)   |   |
| <b>Assessment of risk</b> | <p><b>Risk:</b><br/>z-score greater than or equal to 2 but less than 3 on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert where action plans are being followed up by CQC (<a href="#">see Appendix 3</a>)</p>   | <p><b>Elevated risk:</b><br/>z-score greater than or equal to 3 on the aggregate measure</p> <p><b>or</b></p> <p>a CUSUM alert on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (<a href="#">see Appendix 3</a>)</p> |
| <b>Time period</b>        | <ol style="list-style-type: none"> <li>Aggregate measure (z-score): 01/11/2013 to 31/10/2014</li> <li>Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)</li> <li>Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert (<a href="#">see Appendix 3</a>)</li> </ol>  |   |
| <b>Data source</b>        | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London   |   |
| <b>Notes</b>              | <p>Information on how CQC monitors mortality:<br/><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a></p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br/><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a></p> |   |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |  |
|-------------------------------|--|
| <b>Indicator ID</b>           | COM_DERMA  |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Dermatological conditions</b>  |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care  |
| <b>Indicator status</b>       | <b>Data updated</b>  |
| <b>Indicator construction</b> | <p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> <li><b>An aggregate measure</b></li> </ol> <p>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT35CU). See <a href="#">Appendix 4</a> for the indicator specification.</p> |

|                           |  |   |
|---------------------------|--|---|
|                           | <b>2. Outlier alerts for individual diagnosis groups</b><br>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to one of the following CCS categories: <ul style="list-style-type: none"> <li>• Skin and subcutaneous tissue infections (MORTSKINF)</li> <li>• Chronic ulcer of skin (MORTSKULC)</li> </ul>   |   |
| <b>Indicator type</b>     | Standardised mortality ratio (converted to z-score)  |   |
| <b>Assessment of risk</b> | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3 on the aggregate measure<br><br><b>or</b><br><br>at least one outlier alert where action plans are being followed up by CQC ( <a href="#">see Appendix 3</a> )  | <b>Elevated risk:</b><br>z-score greater than or equal to 3 on the aggregate measure<br><br><b>or</b><br><br>a CUSUM alert on the aggregate measure<br><br><b>or</b><br><br>at least one outlier alert that is being pursued with the trust through the CQC outliers programme ( <a href="#">see Appendix 3</a> ) |
| <b>Time period</b>        | 1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014<br>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)<br>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )  |   |
| <b>Data source</b>        | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London  |   |
| <b>Notes</b>              | Information on how CQC monitors mortality:<br><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a><br><br>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a> |   |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |  |
|-------------------------------|--|
| <b>Indicator ID</b>           | COM_ENDOC  |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality – Endocrinological conditions</b>    |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care    |
| <b>Indicator status</b>       | <b>Data updated</b>  |
| <b>Indicator construction</b> | This is a composite indicator consisting of:<br><br><b>1. An aggregate measure</b> |

|                           |   |  |
|---------------------------|---|--|
|                           | <p>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT29CU). See <a href="#">Appendix 4</a> for the indicator specification.</p> <p><b>2. Outlier alerts for individual diagnosis groups</b></p> <p>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to one of the following CCS categories:</p> <ul style="list-style-type: none"> <li>• Diabetes mellitus with complications (MORTDIABWC)</li> <li>• Diabetes mellitus without complications (MORTDIABWOC)</li> <li>• Fluid and electrolyte disorders (MORTFLUID)</li> </ul> |  |
| <b>Indicator type</b>     | Standardised mortality ratio (converted to z-score)   |  |
| <b>Assessment of risk</b> | <p><b>Risk:</b></p> <p>z-score greater than or equal to 2 but less than 3 on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert where action plans are being followed up by CQC (<a href="#">see Appendix 3</a>)</p>  | <p><b>Elevated risk:</b></p> <p>z-score greater than or equal to 3 on the aggregate measure</p> <p><b>or</b></p> <p>a CUSUM alert on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (<a href="#">see Appendix 3</a>)</p> |
| <b>Time period</b>        | <ol style="list-style-type: none"> <li>1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014</li> <li>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)</li> <li>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert (<a href="#">see Appendix 3</a>)</li> </ol>   |  |
| <b>Data source</b>        | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London   |  |
| <b>Notes</b>              | <p>Information on how CQC monitors mortality: <a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a></p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London: <a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a></p>   |  |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                     |   |
|---------------------|---|
| <b>Indicator ID</b> | COM_GASTR   |
| <b>Indicator</b>    | <b>Composite indicator: In-hospital mortality - Gastroenterological and hepatological conditions and procedures</b> |
| <b>Rationale</b>    | A high mortality rate may indicate problems with the quality and safety of care                                     |

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> <li><b>1. An aggregate measure</b><br/>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT27CU). See <a href="#">Appendix 4</a> for the indicator specification.</li> <li><b>2. Outlier alerts for individual diagnosis groups</b><br/>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to one of the following CCS categories: <ul style="list-style-type: none"> <li>• Biliary tract disease (MORTBILIA)</li> <li>• Liver disease, alcohol-related (MORTALCLIV)</li> <li>• Non-infectious gastroenteritis (MORTGASN)</li> <li>• Intestinal obstruction without hernia (MORTINTOBS)</li> <li>• Gastrointestinal haemorrhage (MORTGASHAE)</li> <li>• Other gastrointestinal disorders (MORTOGAS)</li> <li>• Other liver diseases (MORTOLIV)</li> <li>• Peritonitis and intestinal abscess (MORTPERI)</li> </ul> </li> <li><b>3. Outlier alerts for procedure groups</b><br/>In-hospital mortality after the following procedures: <ul style="list-style-type: none"> <li>• Operations on jejunum (MORTOPJEJ)</li> <li>• Therapeutic endoscopic procedures on biliary tract (MORTTEPBI)</li> <li>• Therapeutic endoscopic procedures on lower GI tract (MORTTEPLGI)</li> <li>• Therapeutic endoscopic procedures on upper GI tract (MORTTEPUGI)</li> <li>• Therapeutic operations on jejunum and ileum (MORTOJI)</li> </ul> </li> </ol> |   |
| <b>Indicator type</b>         | Standardised mortality ratio (converted to z-score)  |   |
| <b>Assessment of risk</b>     | <p><b>Risk:</b><br/>z-score greater than or equal to 2 but less than 3 on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert where action plans are being followed up by CQC (<a href="#">see Appendix 3</a>)</p>  | <p><b>Elevated risk:</b><br/>z-score greater than or equal to 3 on the aggregate measure</p> <p><b>or</b></p> <p>a CUSUM alert on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (<a href="#">see Appendix 3</a>)</p> |
| <b>Time period</b>            | <ol style="list-style-type: none"> <li>1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014</li> <li>2. Aggregate measure (CUSUM): alerts triggered during 2014/15</li> </ol>  |   |

|                    |  |
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|                    | Quarter 2 (July to September 2014)<br>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )  |
| <b>Data source</b> | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London  |
| <b>Notes</b>       | Information on how CQC monitors mortality:<br><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a><br><br>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a> |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | COM_GENIT   |   |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Genito-urinary conditions</b>   |   |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care   |   |
| <b>Indicator status</b>       | <b>Data updated</b>   |   |
| <b>Indicator construction</b> | <p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> <li><b>An aggregate measure</b><br/>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT31CU). See <a href="#">Appendix 4</a> for the indicator specification.</li> <li><b>Outlier alerts for individual diagnosis groups</b><br/>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category: <ul style="list-style-type: none"> <li>Urinary tract infections (MORTUTI)</li> </ul> </li> </ol> |   |
| <b>Indicator type</b>         | Standardised mortality ratio (converted to z-score)   |   |
| <b>Assessment of risk</b>     | <p><b>Risk:</b><br/>z-score greater than or equal to 2 but less than 3 on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert where action plans are being followed up by CQC (<a href="#">see Appendix 3</a>)</p>   | <p><b>Elevated risk:</b><br/>z-score greater than or equal to 3 on the aggregate measure</p> <p><b>or</b></p> <p>a CUSUM alert on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert that is being pursued with the trust</p> |

|                    |  |   |
|--------------------|--|---|
|                    |  | through the CQC outliers programme ( <a href="#">see Appendix 3</a> ) |
| <b>Time period</b> | 1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014<br>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)<br>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )  |   |
| <b>Data source</b> | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London  |   |
| <b>Notes</b>       | Information on how CQC monitors mortality:<br><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a><br><br>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a> |   |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | COM_HAEMA   |   |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Haematological conditions</b>   |   |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care   |   |
| <b>Indicator status</b>       | <b>Data updated</b>   |   |
| <b>Indicator construction</b> | This is a composite indicator consisting of: <ol style="list-style-type: none"> <li><b>An aggregate measure</b><br/>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT28CU). See <a href="#">Appendix 4</a> for the indicator specification.</li> <li><b>Outlier alerts for individual diagnosis groups</b><br/>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category: <ul style="list-style-type: none"> <li>Deficiency and other anaemia (MORTDEFI)</li> </ul> </li> </ol> |   |
| <b>Indicator type</b>         | Standardised mortality ratio (converted to z-score)   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3 on the aggregate measure<br><br><b>or</b><br><br>at least one outlier alert where action plans are being followed  | <b>Elevated risk:</b><br>z-score greater than or equal to 3 on the aggregate measure<br><br><b>or</b><br><br>a CUSUM alert on the aggregate measure |



|                    |  |   |
|--------------------|--|---|
|                    | up by CQC ( <a href="#">see Appendix 3</a> )   | or<br><br>at least one outlier alert that is being pursued with the trust through the CQC outliers programme ( <a href="#">see Appendix 3</a> ) |
| <b>Time period</b> | 1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014<br>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)<br>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )  |   |
| <b>Data source</b> | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London  |   |
| <b>Notes</b>       | Information on how CQC monitors mortality:<br><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a><br><br>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a> |   |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | COM_INFEC   |   |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Infectious diseases</b>   |   |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care   |   |
| <b>Indicator status</b>       | <b>Data updated</b>   |   |
| <b>Indicator construction</b> | This is a composite indicator consisting of: <ol style="list-style-type: none"> <li><b>An aggregate measure</b><br/>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT26CU). See <a href="#">Appendix 4</a> for the indicator specification.</li> <li><b>Outlier alerts for individual diagnosis groups</b><br/>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category: <ul style="list-style-type: none"> <li>Septicaemia (except in labour) (MORTSEPT)</li> </ul> </li> </ol> |   |
| <b>Indicator type</b>         | Standardised mortality ratio (converted to z-score)   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3 on the aggregate measure<br><br><b>or</b>  | <b>Elevated risk:</b><br>z-score greater than or equal to 3 on the aggregate measure<br><br><b>or</b><br>a CUSUM alert on the aggregate measure |



|                    |  |  |
|--------------------|--|--|
|                    | at least one outlier alert where action plans are being followed up by CQC ( <a href="#">see Appendix 3</a> )  | <b>or</b><br><br>at least one outlier alert that is being pursued with the trust through the CQC outliers programme ( <a href="#">see Appendix 3</a> ) |
| <b>Time period</b> | 1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014<br>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)<br>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )  |  |
| <b>Data source</b> | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London  |  |
| <b>Notes</b>       | Information on how CQC monitors mortality:<br><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a><br><br>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drosters/currentprojects/</a> |  |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | COM_MENTA   |   |
| <b>Indicator</b>              | <b>In-hospital mortality: Conditions associated with mental health</b>  |   |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care   |   |
| <b>Indicator status</b>       | <b>Data updated</b>   |   |
| <b>Indicator construction</b> | This is a composite indicator consisting of: <ol style="list-style-type: none"> <li><b>An aggregate measure</b><br/>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT33CU). See <a href="#">Appendix 4</a> for the indicator specification</li> <li><b>Outlier alerts for individual diagnosis groups</b><br/>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category: <ul style="list-style-type: none"> <li>Senility and organic mental disorders (MORTSENI)</li> </ul> </li> </ol> |   |
| <b>Data source</b>            | Hospital Episode Statistics - Protected data sent directly to CQC   |   |
| <b>Indicator type</b>         | Standardised mortality ratio (converted to z-score)   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3 on the aggregate measure<br><br><b>or</b>  | <b>Elevated risk:</b><br>z-score greater than or equal to 3 on the aggregate measure<br><br><b>or</b> |

|                    |  |  |
|--------------------|--|--|
|                    | at least one outlier alert where action plans are being followed up by CQC ( <a href="#">see Appendix 3</a> )  | a CUSUM alert on the aggregate measure<br><br><b>or</b><br><br>at least one outlier alert that is being pursued with the trust through the CQC outliers programme ( <a href="#">see Appendix 3</a> ) |
| <b>Time period</b> | 1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014<br>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)<br>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )  |  |
| <b>Data source</b> | Hospital Episode Statistics - Protected data sent directly to CQC  |  |
| <b>Notes</b>       | Information on how CQC monitors mortality:<br><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a><br><br>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a> |  |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | COM_MUSCU  |  |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality – Musculo-skeletal conditions</b>  |  |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care  |  |
| <b>Indicator status</b>       | <b>Data updated</b>  |  |
| <b>Indicator construction</b> | This is a composite indicator consisting of: <ol style="list-style-type: none"> <li><b>An aggregate measure</b><br/>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT36CU). See <a href="#">Appendix 4</a> for the indicator specification.</li> <li><b>Outlier alerts for individual diagnosis groups</b><br/>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category: <ul style="list-style-type: none"> <li>Pathological fracture (MORTPATH)</li> </ul> </li> </ol> |  |
| <b>Indicator type</b>         | Standardised mortality ratio (converted to z-score)  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3 on the aggregate measure  | <b>Elevated risk:</b><br>z-score greater than or equal to 3 on the aggregate measure |

|                    |   |  |
|--------------------|---|--|
|                    | <p><b>or</b></p> <p>at least one outlier alert where action plans are being followed up by CQC (<a href="#">see Appendix 3</a>)</p>   | <p><b>or</b></p> <p>a CUSUM alert on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (<a href="#">see Appendix 3</a>)</p> |
| <b>Time period</b> | <ol style="list-style-type: none"> <li>1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014</li> <li>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)</li> <li>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert (<a href="#">see Appendix 3</a>)</li> </ol>   |  |
| <b>Data source</b> | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London   |  |
| <b>Notes</b>       | <p>Information on how CQC monitors mortality:<br/> <a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a></p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br/> <a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a></p> |  |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |  |
|-------------------------------|--|
| <b>Indicator ID</b>           | COM_NEPHR  |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Nephrological conditions</b>   |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care  |
| <b>Indicator status</b>       | <b>Data updated</b>  |
| <b>Indicator construction</b> | <p>This is a composite indicator consisting of</p> <ol style="list-style-type: none"> <li><b>1. An aggregate measure:</b><br/>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT30CU). See <a href="#">Appendix 4</a> for the indicator specification.</li> <li><b>2. Outlier alerts for individual diagnosis groups</b><br/>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to one of the following CCS categories: <ul style="list-style-type: none"> <li>• Acute and unspecified renal failure (MORTRENA)</li> <li>• Chronic renal failure (MORTRENC)</li> </ul> </li> </ol> |
| <b>Indicator</b>              | Standardised mortality ratio (converted to z-score)  |

|                           |   |   |
|---------------------------|---|---|
| <b>type</b>               |   |   |
| <b>Assessment of risk</b> | <p><b>Risk:</b><br/>z-score greater than or equal to 2 but less than 3 on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert where action plans are being followed up by CQC (<a href="#">see Appendix 3</a>)</p>   | <p><b>Elevated risk:</b><br/>z-score greater than or equal to 3 on the aggregate measure</p> <p><b>or</b></p> <p>a CUSUM alert on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (<a href="#">see Appendix 3</a>)</p> |
| <b>Time period</b>        | <ol style="list-style-type: none"> <li>1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014</li> <li>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)</li> <li>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert (<a href="#">see Appendix 3</a>)</li> </ol>   |   |
| <b>Data source</b>        | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London   |   |
| <b>Notes</b>              | <p>Information on how CQC monitors mortality:<br/><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a></p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br/><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a></p> |   |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |  |
|-------------------------------|--|
| <b>Indicator ID</b>           | COM_NEURO  |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Neurological conditions</b>  |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care  |
| <b>Indicator status</b>       | <b>Data updated</b>  |
| <b>Indicator construction</b> | <p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> <li><b>1. An aggregate measure</b><br/>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories.* (HESMORT34CU). See <a href="#">Appendix 4</a> for the indicator specification.</li> <li><b>2. Outlier alerts for individual diagnosis groups</b><br/>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category:</li> </ol> |

|                           |   |   |
|---------------------------|---|---|
|                           | <ul style="list-style-type: none"> <li>Epilepsy, convulsions (MORTEPIL)</li> </ul>  |   |
| <b>Indicator type</b>     | Standardised mortality ratio (converted to z-score)   |   |
| <b>Assessment of risk</b> | <p><b>Risk:</b><br/>z-score greater than or equal to 2 but less than 3 on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert where action plans are being followed up by CQC (<a href="#">see Appendix 3</a>)</p>   | <p><b>Elevated risk:</b><br/>z-score greater than or equal to 3 on the aggregate measure</p> <p><b>or</b></p> <p>a CUSUM alert on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (<a href="#">see Appendix 3</a>)</p> |
| <b>Time period</b>        | <ol style="list-style-type: none"> <li>Aggregate measure (z-score): 01/11/2013 to 31/10/2014</li> <li>Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)</li> <li>Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert (<a href="#">see Appendix 3</a>)</li> </ol>  |   |
| <b>Data source</b>        | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London   |   |
| <b>Notes</b>              | <p>Information on how CQC monitors mortality:<br/><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a></p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br/><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a></p> |   |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |   |
|-------------------------------|---|
| <b>Indicator ID</b>           | COM_PAEDI   |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Paediatric and congenital disorders and perinatal mortality</b>   |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care   |
| <b>Indicator status</b>       | <b>Data updated</b>   |
| <b>Indicator construction</b> | <p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> <li><b>An aggregate measure</b><br/>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT32CU). See <a href="#">Appendix 4</a> for the indicator specification.</li> </ol> |

|                           |  |   |
|---------------------------|--|---|
|                           | <b>2. Outlier alerts for perinatal mortality</b><br>In-hospital standardised perinatal mortality (MATPERIMOR)<br><br>Further details on this indicator are provided in <a href="#">Appendix 5</a>  |   |
| <b>Indicator type</b>     | Standardised mortality ratio (converted to z-score)  |   |
| <b>Assessment of risk</b> | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3 on the aggregate measure<br><br><b>or</b><br><br>at least one outlier alert where action plans are being followed up by CQC ( <a href="#">see Appendix 3</a> )  | <b>Elevated risk:</b><br>z-score greater than or equal to 3 on the aggregate measure<br><br><b>or</b><br><br>a CUSUM alert on the aggregate measure<br><br><b>or</b><br><br>at least one outlier alert that is being pursued with the trust through the CQC outliers programme ( <a href="#">see Appendix 3</a> ) |
| <b>Time period</b>        | 1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014<br>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)<br>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )  |   |
| <b>Data source</b>        | Hospital Episode Statistics - Protected data sent directly to CQC  |   |
| <b>Notes</b>              | Information on how CQC monitors mortality:<br><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a><br><br>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a> |   |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |   |
|-------------------------------|---|
| <b>Indicator ID</b>           | COM_RESPI   |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Respiratory conditions</b>  |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care   |
| <b>Indicator status</b>       | <b>Data updated</b>   |
| <b>Indicator construction</b> | This is a composite indicator consisting of:<br><br><b>1. An aggregate measure</b><br><br>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT25CU). See <a href="#">Appendix 4</a> for the indicator specification. |

|                           |   |   |
|---------------------------|---|---|
|                           | <b>2. Outlier alerts for individual diagnosis groups</b><br>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to one of the following CCS categories: <ul style="list-style-type: none"> <li>• Asthma (MORTASTHM)</li> <li>• Acute bronchitis (MORTBRONC)</li> <li>• Chronic obstructive pulmonary disease and bronchiectasis (MORTCOPD)</li> <li>• Pleurisy, pneumothorax, pulmonary collapse (MORTPLEU)</li> </ul> or to the following condition defined by ICD10 codes: <ul style="list-style-type: none"> <li>• Pneumonia (J12-J18) (MORTPNEU)</li> </ul> |   |
| <b>Indicator type</b>     | Standardised mortality ratio (converted to z-score)   |   |
| <b>Assessment of risk</b> | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3 on the aggregate measure<br><br><b>or</b><br>at least one outlier alert where action plans are being followed up by CQC ( <a href="#">see Appendix 3</a> )   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 on the aggregate measure<br><br><b>or</b><br>a CUSUM alert on the aggregate measure<br><br><b>or</b><br>at least one outlier alert that is being pursued with the trust through the CQC outliers programme ( <a href="#">see Appendix 3</a> ) |
| <b>Time period</b>        | 1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014<br>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)<br>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )   |   |
| <b>Data source</b>        | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London   |   |
| <b>Notes</b>              | Information on how CQC monitors mortality:<br><a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a><br><br>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br><a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a>  |   |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                     |  |
|---------------------|--|
| <b>Indicator ID</b> | COM_TRAUM  |
| <b>Indicator</b>    | <b>Composite indicator: In-hospital mortality - Trauma and orthopaedic conditions and procedures</b> |
| <b>Rationale</b>    | A high mortality rate may indicate problems with the quality and safety                              |



|                               |   |  |
|-------------------------------|---|--|
|                               | of care   |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | <p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> <li><b>1. An aggregate measure</b> <p>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories* (HESMORT37CU). See <a href="#">Appendix 4</a> for the indicator specification.</p> </li> <li><b>2. Outlier alerts for individual diagnosis groups</b> <p>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to one of the following CCS categories:</p> <ul style="list-style-type: none"> <li>• Fracture of neck of femur (hip) (MORTFNOF)</li> <li>• Intracranial injury (MORTINTINJ)</li> <li>• Other fractures (MORTOFRA)</li> </ul> </li> <li><b>3. Outlier alerts for procedure groups</b> <p>In-hospital mortality after the following procedures:</p> <ul style="list-style-type: none"> <li>• Head of femur replacement (MORTHFREP)</li> <li>• Hip replacement (MORTHIPREP)</li> <li>• Craniotomy for trauma (MORTCRAN)</li> <li>• Reduction of fracture of bone (MORTREDFB)</li> <li>• Reduction of fracture of bone (upper/lower limb) (MORTREDFBL)</li> <li>• Reduction of fracture of neck of femur (MORTREDFNOF)</li> <li>• Shunting for hydrocephalus (MORTSHUN)</li> </ul> </li> </ol> |  |
| <b>Indicator type</b>         | Standardised mortality ratio (converted to z-score)   |  |
| <b>Assessment of risk</b>     | <p><b>Risk:</b></p> <p>z-score greater than or equal to 2 but less than 3 on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert where action plans are being followed up by CQC (<a href="#">see Appendix 3</a>)</p>  | <p><b>Elevated risk:</b></p> <p>z-score greater than or equal to 3 on the aggregate measure</p> <p><b>or</b></p> <p>a CUSUM alert on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (<a href="#">see Appendix 3</a>)</p> |
| <b>Time period</b>            | <ol style="list-style-type: none"> <li>1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014</li> <li>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)</li> <li>3. Outlier alerts generated or received by CQC between 01/04/2012</li> </ol>   |  |



|                    |   |
|--------------------|---|
|                    | and 15/05/2015. Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )   |
| <b>Data source</b> | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London   |
| <b>Notes</b>       | <p>Information on how CQC monitors mortality:<br/> <a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a></p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br/> <a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a></p> |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | COM_VASCU  |   |
| <b>Indicator</b>              | <b>Composite indicator: In-hospital mortality - Vascular conditions and procedures</b>   |   |
| <b>Rationale</b>              | A high mortality rate may indicate problems with the quality and safety of care  |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <p>This is a composite indicator consisting of</p> <ol style="list-style-type: none"> <li><b>An aggregate measure</b> <p>In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant CCS diagnosis categories.* (HESMORT23CU). See <a href="#">Appendix 4</a> for the indicator specification.</p> </li> <li><b>Outlier alerts for individual diagnosis groups</b> <p>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to one of the following CCS categories:</p> <ul style="list-style-type: none"> <li>Aortic, peripheral, and visceral artery aneurysm (MORTANEUR)</li> <li>Peripheral and visceral atherosclerosis (MORTPVA)</li> </ul> </li> <li><b>Outlier alerts for procedure groups</b> <p>In-hospital mortality after the following procedures:</p> <ul style="list-style-type: none"> <li>Amputation of leg (MORTAMPUT)</li> <li>Repair of abdominal aortic aneurysm (AAA) (MORTREPAAA)</li> <li>Clip and coil aneurysms (MORTCLIP)</li> <li>Other femoral bypass (MORTOFB)</li> <li>Transluminal operations on the femoral artery (MORTTOFA)</li> </ul> </li> </ol> |   |
| <b>Indicator type</b>         | Standardised mortality ratio (converted to z-score)  |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |

|                    |   |  |
|--------------------|---|--|
|                    | <p>2 but less than 3 on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert where action plans are being followed up by CQC (<a href="#">see Appendix 3</a>)</p>   | <p>on the aggregate measure</p> <p><b>or</b></p> <p>a CUSUM alert on the aggregate measure</p> <p><b>or</b></p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (<a href="#">see Appendix 3</a>)</p> |
| <b>Time period</b> | <p>1. Aggregate measure (z-score): 01/11/2013 to 31/10/2014</p> <p>2. Aggregate measure (CUSUM): alerts triggered during 2014/15 Quarter 2 (July to September 2014)</p> <p>3. Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015. Assessment of risk is based on the status of the alert (<a href="#">see Appendix 3</a>)</p>  |  |
| <b>Data source</b> | Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London   |  |
| <b>Notes</b>       | <p>Information on how CQC monitors mortality:<br/> <a href="http://www.cqc.org.uk/content/monitoring-mortality-trends">http://www.cqc.org.uk/content/monitoring-mortality-trends</a></p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:<br/> <a href="http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/">http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</a></p> |  |

\*The conditions included within each diagnosis group are described in [Appendix 2](#)

## Maternity and women's health

|                              |  |
|------------------------------|--|
| <b>Indicator ID</b>          | MATELECCS  |
| <b>Indicator Description</b> | <b>Maternity outlier alert: Elective Caesarean sections</b>  |
| <b>Rationale</b>             | <p>There is considerable national variation in the proportion of labours resulting in elective caesarean section. The measure is included within our set of indicators because it relates to the management and clinical care of women, and significant variation should prompt further questions. It is a surgical procedure that carries greater risk than some other delivery methods and there is variability in how trusts manage the role of patient choice. It is important to point out that we are not treating an elective caesarean as an adverse outcome; we recognise that in many cases this is the most appropriate action to take. There are many potential reasons for significant variation and the goal of the CQC outliers programme is to ensure that trusts with a significantly high rate understand why this is the case for them and can assure CQC about this and the quality of care they provide to women having elective caesarean section.</p> |
| <b>Indicator status</b>      | <b>Data updated</b>  |

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator construction</b> | <b>Standardisation:</b> Age, NHS or privately funded deliveries<br><br>See <a href="#">Appendix 5</a> for the detailed Indicator construction |  |
|                               | <b>Numerator:</b><br>Delivery episodes with a main procedure code of R17 (elective caesarean delivery)  | <b>Denominator:</b><br>Delivery episodes; acute and specialist trusts only |
| <b>Time period</b>            | Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015   |  |
| <b>Indicator type</b>         | Standardised ratio (converted to z-score)   |  |
| <b>Assessment of risk</b>     | Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )   |  |
| <b>Data source</b>            | Hospital Episode Statistics - Protected data sent directly to CQC   |  |

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| <b>Indicator ID</b>           | MATEMERCS  |  |
| <b>Indicator Description</b>  | <b>Maternity outlier alert: Emergency Caesarean sections</b>   |  |
| <b>Rationale</b>              | There is considerable national variation in the proportion of labours resulting in emergency caesarean section. One potential explanation for this is variation in practice (for example the extent to which NICE guidelines are followed)A significantly high emergency caesarean rate may indicate concerns over the quality of care |  |
| <b>Indicator status</b>       | <b>Data updated</b>  |  |
| <b>Indicator construction</b> | <b>Standardisation:</b> Age, NHS or privately funded deliveries<br><br>See <a href="#">Appendix 5</a> for the detailed Indicator construction  |  |
|                               | <b>Numerator:</b><br>Delivery episodes with a main procedure code of R18 (other caesarean delivery)  | <b>Denominator:</b><br>Delivery episodes; acute and specialist trusts only |
| <b>Time period</b>            | Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015  |  |
| <b>Indicator type</b>         | Standardised ratio (converted to z-score)  |  |
| <b>Assessment of risk</b>     | Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )  |  |
| <b>Data source</b>            | Hospital Episode Statistics - Protected data sent directly to CQC  |  |

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|------------------------------|--|--|
| <b>Indicator ID</b>          | MATSEPSIS  |  |
| <b>Indicator Description</b> | <b>Maternity outlier alert: Puerperal sepsis and other puerperal infections within 42 days of delivery</b> |  |
| <b>Rationale</b>             | Significantly high rates of puerperal infection may indicate concerns over the quality of care             |  |
| <b>Indicator status</b>      | <b>Data updated</b>  |  |

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| <b>Indicator construction</b> | <b>Standardisation: Age</b><br><br>See <a href="#">Appendix 5</a> for the detailed Indicator construction  |  |
|                               | <b>Numerator:</b><br>Relevant diagnosis codes (see variations below) recorded at any point during a delivery episode or in a readmission within 42 days of the start of the delivery episode. Readmission can be to any acute trust, but is attributed to the trust where the delivery took place.<br><br><i>Variation 1:</i> Puerperal sepsis (O85) and other puerperal infections (O86)<br><br><i>Variation 2:</i> Puerperal sepsis (O85) and other <u>specified</u> puerperal infections (O86 excluding O86.4 'Pyrexia of unknown origin following delivery')<br><br><i>Variation 3:</i> Puerperal sepsis (O85) | <b>Denominator:</b><br>Delivery episodes; acute and specialist trusts only |
| <b>Time period</b>            | Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015  |  |
| <b>Indicator type</b>         | Standardised ratio (converted to z-score)  |  |
| <b>Assessment of risk</b>     | Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )  |  |
| <b>Data source</b>            | Hospital Episode Statistics - Protected data sent directly to CQC  |  |

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| <b>Indicator ID</b>           | MATMATRE   |
| <b>Indicator</b>              | <b>Maternity outlier alert: Maternal non-elective readmissions within 42 days of delivery</b>  |
| <b>Rationale</b>              | <p>Significantly high rates of readmission may indicate concerns over the quality of care</p> <p>The following exclusions have been made to minimise the effect of common data recording issues on the indicator:</p> <ul style="list-style-type: none"> <li>• Readmissions with a length of stay of less than a day.</li> <li>• Women recorded with primary diagnoses on readmission in ICD-10 Chapter Z (<i>Factors influencing health status and contact with health services</i>)</li> </ul> |
| <b>Indicator status</b>       | <b>Data updated</b>  |
| <b>Indicator construction</b> | <b>Standardisation: Age</b><br><br>See <a href="#">Appendix 5</a> for the detailed Indicator construction  |

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|                           | <b>Numerator:</b><br>Women readmitted within 42 days of the start of a delivery episode with any method of admission recorded except 'elective'. The readmission can be to any acute trust, but is attributed to the trust where the birth took place. Readmissions of less than a day are excluded, as are readmissions with a primary diagnosis in ICD-10 chapter Z 'Factors influencing health status and contact with health services' on readmission | <b>Denominator:</b><br>Spells including a delivery episode, excluding delivery spells which ended in a death and delivery spells which are on-going 42 days after the delivery episode; acute and specialist trusts only |
| <b>Time period</b>        | Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015   |  |
| <b>Indicator type</b>     | Standardised ratio (converted to z-score)   |  |
| <b>Assessment of risk</b> | Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )   |  |
| <b>Data source</b>        | Hospital Episode Statistics - Protected data sent directly to CQC   |  |

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| <b>Indicator ID</b>           | MATNEORE   |   |
| <b>Indicator</b>              | <b>Maternity outlier alert: Neonatal non-elective readmissions within 28 days of delivery</b>  |   |
| <b>Rationale</b>              | Significantly high rates of readmission may indicate concerns over the quality of care<br><br>The following exclusion has been made to minimise the effect of common data recording issues on the indicator: <ul style="list-style-type: none"> <li>Readmissions with a length of stay of less than a day</li> </ul> |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Standardisation:</b> None<br><br>See <a href="#">Appendix 5</a> for the detailed Indicator construction   |   |
|                               | <b>Numerator:</b><br>Babies readmitted within 28 days of birth with any method of admission recorded except 'elective'. The readmission can be to any acute trust, but is attributed to the trust where the birth took place. Readmissions of less than a day are excluded   | <b>Denominator:</b><br>Spells including a birth episode, excluding those which ended in a death and birth spells which are on-going after 28 days; acute and specialist trusts only |
| <b>Time period</b>            | Outlier alerts generated or received by CQC between 01/04/2012 and 15/05/2015  |   |
| <b>Indicator type</b>         | Standardised ratio (converted to z-score)  |   |
| <b>Assessment</b>             | Assessment of risk is based on the status of the alert ( <a href="#">see Appendix 3</a> )  |   |

|                    |   |
|--------------------|---|
| <b>of risk</b>     |   |
| <b>Data source</b> | Hospital Episode Statistics - Protected data sent directly to CQC |

## Re-admissions

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|-------------------------------|---|
| <b>Indicator ID</b>           | COM_ELRE_ON   |
| <b>Indicator</b>              | <b>Emergency readmissions with an overnight stay within 30 days of discharge following an elective spell at the trust</b>   |
| <b>Rationale</b>              | A high rate of emergency readmissions may indicate problems with the quality and safety of care.  |
| <b>Indicator status</b>       | <b>Data updated</b>   |
| <b>Indicator construction</b> | <p><b>Numerator:</b> Observed number of patients readmitted as an emergency within 30 days of discharge following an elective spell at the trust. The readmission must have included at least one overnight stay. The readmission can be to any NHS trust but is attributed to the trust where the index admission took place.</p> <p><b>Denominator:</b> Acute and specialist trusts only; elective hospital spells within the following CCS diagnosis groups*:</p> <ul style="list-style-type: none"> <li>• Cerebrovascular</li> <li>• Vascular</li> <li>• Cardiology</li> <li>• Respiratory medicine</li> <li>• Infectious diseases</li> <li>• Gastroenterology and hepatology</li> <li>• Haematology</li> <li>• Endocrinology</li> <li>• Nephrology</li> <li>• Genito-urinary medicine</li> <li>• Paediatrics and congenital disorders</li> <li>• Mental illness</li> <li>• Neurology</li> <li>• Dermatology</li> <li>• Musculoskeletal</li> <li>• Trauma and orthopaedics</li> <li>• Other injuries &amp; conditions due to external causes</li> </ul> <p><b>Exclusions:</b></p> <p>Birth and delivery spells<br/>Regular attenders<br/>Spells where any cancer is recorded (ICD10 C00-C97, D37-D48)<br/>Index spells which resulted in a death</p> <p>The following trusts are not assessed against this indicator:</p> <ul style="list-style-type: none"> <li>• Cancer specialist trusts</li> <li>• Women's specialist trusts</li> <li>• Moorfields Eye Hospital NHS Foundation Trust</li> <li>• Children's specialist trusts</li> </ul> |

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|                           | <b>Standardisation:</b><br><br>Age, sex, primary diagnosis at admission (3 character ICD 10 code),<br>Charlson Index  |   |
| <b>Indicator type</b>     | Standardised ratio (converted to z-score)   |   |
| <b>Assessment of risk</b> | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3 (HESELRE_ON)   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 (HESELRE_ON)<br><br><b>or</b><br><br>a CUSUM alert (HESELRECU_ON) |
| <b>Time period</b>        | <ul style="list-style-type: none"> <li>HESELRE_ON (z-score): 01/10/2013 to 30/09/2014</li> <li>HESELRECU_ON (CUSUM): Alerts triggered during 2014/15 Quarter 2 (July to September 2014)</li> </ul>  |   |
| <b>Data source</b>        | Hospital Episode Statistics (HES) data supplied by Health and Social Care Information Centre (HSCIC)  |   |
| <b>Notes</b>              | The weights and bandings used to calculate the Charlson Comorbidity Index are the same as those used in the calculation of the Summary Hospital Level Mortality Indicator (SHMI). Further information can be found on pages 27 and 37 of the link below:<br><br><a href="http://www.hscic.gov.uk/media/11151/Indicator-Specification-Summary-Hospital-level-Mortality-Indicator-methodology/pdf/SHMI_Specification.pdf">http://www.hscic.gov.uk/media/11151/Indicator-Specification-Summary-Hospital-level-Mortality-Indicator-methodology/pdf/SHMI_Specification.pdf</a> |   |

\*The conditions included within each diagnosis grouping are described in [Appendix 2](#)

|                               |  |
|-------------------------------|--|
| <b>Indicator ID</b>           | COM_EMRE_ON  |
| <b>Indicator</b>              | <b>Emergency readmissions with an overnight stay within 30 days of discharge following an emergency spell at the trust</b>   |
| <b>Rationale</b>              | A high rate of emergency readmissions may indicate problems with the quality and safety of care  |
| <b>Indicator status</b>       | <b>Data updated</b>  |
| <b>Indicator construction</b> | <p><b>Numerator:</b> Observed number of patients readmitted as an emergency within 30 days of discharge following an emergency spell at the trust. The readmission must have included at least one overnight stay. The readmission can be to any NHS trust but is attributed to the trust where the index admission took place</p> <p><b>Denominator:</b> Acute and specialist trusts only; emergency hospital spells within the following CCS diagnosis groups*</p> <ul style="list-style-type: none"> <li>Cerebrovascular</li> <li>Vascular</li> <li>Cardiology</li> <li>Respiratory medicine</li> <li>Infectious diseases</li> <li>Gastroenterology and hepatology</li> </ul> |

|                           |  |  |
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|                           | <ul style="list-style-type: none"> <li>• Haematology</li> <li>• Endocrinology</li> <li>• Nephrology</li> <li>• Genito-urinary medicine</li> <li>• Paediatrics and congenital disorders</li> <li>• Mental illness</li> <li>• Neurology</li> <li>• Dermatology</li> <li>• Musculoskeletal</li> <li>• Trauma and orthopaedics</li> <li>• Other injuries &amp; conditions due to external causes</li> </ul> <p><b>Exclusions:</b><br/> Birth and delivery spells, Regular attenders<br/> Spells where any cancer is recorded (ICD10 C00-C97, D37-D48)<br/> Index spells which resulted in a death</p> <p>The following trusts are not assessed against this indicator:</p> <ul style="list-style-type: none"> <li>• Cancer specialist trusts</li> <li>• Women's specialist trusts</li> <li>• Moorfields Eye Hospital NHS Foundation Trust</li> <li>• Neurology specialist trusts</li> <li>• Orthopaedic specialist trusts</li> <li>• Children's specialist trusts</li> </ul> <p><b>Standardisation:</b><br/> Age, sex, primary diagnosis at admission (3 character ICD 10 code),<br/> Charlson Index</p> |  |
| <b>Indicator type</b>     | Standardised ratio (converted to z-score)  |  |
| <b>Assessment of risk</b> | <p><b>Risk:</b><br/> z-score greater than or equal to 2 but less than 3 (HESEMRE_ON)</p>   | <p><b>Elevated risk:</b><br/> z-score greater than or equal to 3 (HESEMRE_ON)</p> <p><b>or</b></p> <p>a CUSUM alert (HESEMRECU_ON)</p> |
| <b>Time period</b>        | <ul style="list-style-type: none"> <li>• HESEMRE_ON (z-score): 01/10/2013 to 30/09/2014</li> <li>• HESEMRECU_ON (CUSUM): Alerts triggered during 2014/15 Quarter 2 (July to September 2014)</li> </ul>   |  |
| <b>Data source</b>        | Hospital Episode Statistics – Protected data sent directly to CQC  |  |
| <b>Notes</b>              | <p>The weights and bandings used to calculate the Charlson Comorbidity Index are the same as those used in the calculation of the Summary Hospital Level Mortality Indicator (SHMI). Further information can be found on pages 27 and 37 of the link below:</p> <p><a href="http://www.hscic.gov.uk/media/11151/Indicator-Specification-Summary-Hospital-level-Mortality-Indicator-methodology/pdf/SHMI_Specification.pdf">http://www.hscic.gov.uk/media/11151/Indicator-Specification-Summary-Hospital-level-Mortality-Indicator-methodology/pdf/SHMI_Specification.pdf</a></p>   |  |

\*The conditions included within each diagnosis grouping are described in [Appendix 2](#)



## Patient Reported Outcome Measures

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | PROMS52   |   |
| <b>Indicator</b>              | <b>PROMs EQ-5D score: Groin hernia repair</b>   |   |
| <b>Rationale</b>              | All NHS patients who are having hip or knee replacements (Primary and revisions), varicose vein surgery or groin hernia surgery are being invited to fill in Patient Reported Outcome Measures (PROMs) questionnaires. The NHS is asking patients about their health and quality of life before they have an operation and about their health and the effectiveness of the operation after it. This will help the NHS measure and improve the quality of its care.  |   |
| <b>Indicator status</b>       | <b>Data updated</b>   |   |
| <b>Indicator construction</b> | EQ-5D is an assessment methodology used by the HSCIC to measure health gain following groin hernia repair. HSCIC provide detail regarding outlier trusts as part of the PROMS publication. Outlier trusts are defined within HSCIC publication as being outside of either the upper or lower 95% and 99.8% control limits.  |   |
| <b>Indicator type</b>         | Categorical rules based   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie between the <b>lower 95%</b> and <b>lower 99.8%</b> control limit as identified by HSCIC using EQ-5D   | <b>Elevated risk:</b><br>Trusts which lie below the <b>lower 99.8%</b> control limit as identified by HSCIC using EQ-5D |
| <b>Time-period</b>            | 01/04/2013 to 31/03/2014 (refreshed with the February 2015 publication of this time period)   |   |
| <b>Data source</b>            | Health and Social Care Information Centre (HSCIC)<br>Patient reported outcome measures (PROMS)<br><a href="http://www.hscic.gov.uk/proms">http://www.hscic.gov.uk/proms</a>   |   |
| <b>Notes</b>                  | <p>The EQ-5D descriptive system provides a measure of general pre and post-operative health. A patient's health gain is the difference between the scores before and after the operation. A higher score indicates better health. Further information on the scoring system is available in the PROMs guide:</p> <p><a href="http://www.hscic.gov.uk/media/1537/A-Guide-to-PROMs-Methodology/pdf/PROMS_Guide_v5.pdf">http://www.hscic.gov.uk/media/1537/A-Guide-to-PROMs-Methodology/pdf/PROMS_Guide_v5.pdf</a></p> <p>Please note that due to the delay between pre and post-operative questionnaires being sent and returned, data are provisional and may be incomplete or contain errors for which no adjustments have yet been made.</p> |   |

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | PROMS_HIP   |   |
| <b>Indicator</b>              | <b>Composite indicator: PROMs - Hip Replacement (PRIMARY)</b>   |   |
| <b>Rationale</b>              | All NHS patients who are having hip or knee replacements (Primary and revisions), varicose vein surgery or groin hernia surgery are being invited to fill in Patient Reported Outcome Measures (PROMs) questionnaires. The NHS is asking patients about their health and quality of life before they have an operation and about their health and the effectiveness of the operation after it. This will help the NHS measure and improve the quality of its care.  |   |
| <b>Indicator status</b>       | <b>Data updated</b>   |   |
| <b>Indicator construction</b> | <p>EQ-5D and Oxford hip score are two of the assessments used by the HSCIC to measure health gain following hip replacement. For each assessment, HSCIC provide details regarding outlier trusts as part of the final PROMS publication. Outlier trusts are defined by the HSCIC as being outside of either the upper or lower 95% and 99.8% control limits.</p> <p>The PROMS_HIP indicator is a composite indicator measuring the average health gain following primary Hip replacement and is informed by the outlier status of two lower level primary Hip replacement indicators.</p> <p>These two lower level primary Hip replacement indicators are as follows (see assessment of risk below for construction details):</p> <p>PROMS53: PROMs primary Hip replacement procedure measured by EQ-5D index.<br/> PROMS54: PROMs primary Hip replacement procedure measured by oxford hip score.</p> <p>The final outlier risk score is identified by using a rule-based system whereby the highest risk identified for either of the lower level assessment measures is used as the final risk score</p> |   |
| <b>Indicator type</b>         | Categorical rules based   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie between the lower 95% and lower 99.8% control limit as identified by HSCIC using the EQ-5D and/or the Oxford Hip methodologies   | <b>Elevated risk:</b><br>Trusts which lie below the <b>lower 99.8%</b> control limit as identified by HSCIC using the EQ-5D and/or the Oxford Hip methodologies |
| <b>Time-period</b>            | 01/04/2013 to 31/03/2014 (refreshed with the February 2015 publication of this time period)   |   |
| <b>Data source</b>            | Health and Social Care Information Centre (HSCIC)<br>Patient reported outcome measures (PROMS)<br><a href="http://www.hscic.gov.uk/proms">http://www.hscic.gov.uk/proms</a>   |   |

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| <b>Notes</b> | <p>Both the EQ-5D and Oxford hip descriptive system provides a measure of general pre- and post-operative health. A patient's health gain is the difference between the scores before and after the operation. A higher score indicates better health. Further information on the scoring system is available in the PROMs guide:</p> <p><a href="http://www.hscic.gov.uk/media/1537/A-Guide-to-PROMs-Methodology/pdf/PROMS_Guide_v5.pdf">http://www.hscic.gov.uk/media/1537/A-Guide-to-PROMs-Methodology/pdf/PROMS_Guide_v5.pdf</a></p> <p>Please note that due to the delay between pre and post-operative questionnaires being sent and returned, data are provisional and may be incomplete or contain errors for which no adjustments have yet been made.</p> |
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| <b>Indicator ID</b>           | PROMS_KNEE   |
| <b>Indicator</b>              | <b>Composite indicator: PROMs - Knee Replacement (PRIMARY)</b>   |
| <b>Rationale</b>              | All NHS patients who are having hip or knee replacements (Primary and revisions), varicose vein surgery or groin hernia surgery are being invited to fill in Patient Reported Outcome Measures (PROMs) questionnaires. The NHS is asking patients about their health and quality of life before they have an operation and about their health and the effectiveness of the operation after it. This will help the NHS measure and improve the quality of its care.   |
| <b>Indicator status</b>       | <b>Data updated</b>  |
| <b>Indicator construction</b> | <p>EQ-5D and Oxford knee score are two of the assessments used by the HSCIC to measure health gain following knee replacement. For each assessment, HSCIC provides details regarding outlier trusts as part of the final PROMS publication. Outlier trusts are defined by the HSCIC as being outside of either the upper or lower 95% and 99.8% control limits.</p> <p>The PROMS_KNEE indicator is a composite indicator measuring the average health gain following primary Knee replacement and is informed by the outlier status of two lower level primary Hip replacement indicators.</p> <p>These two lower level primary Knee replacement indicators are as follows (see assessment of risk below for construction details):</p> <p>PROMS55: PROMs primary Knee replacement procedure measured by EQ-5D index.</p> <p>PROMS56: PROMs primary Knee replacement procedure measured by oxford knee score.</p> <p>The final outlier risk score is identified by using a rule-based system whereby the highest risk identified for either of the lower level assessment measures is used as the final risk score</p> |

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| <b>Indicator type</b>     | Categorical rules based   |  |
| <b>Assessment of risk</b> | <b>Risk:</b><br>Trusts which lie between the lower 95% and lower 99.8% control limit as identified by HSCIC using the EQ-5D and/or the Oxford Knee methodologies  | <b>Elevated risk:</b><br>Trusts which lie below the <b>lower 99.8%</b> control limit as identified by HSCIC using the EQ-5D and/or the Oxford Knee methodologies |
| <b>Time-period</b>        | 01/04/2013 to 31/03/2014 (refreshed with the February 2015 publication of this time period)   |  |
| <b>Data source</b>        | Health and Social Care Information Centre (HSCIC)<br>Patient reported outcome measures (PROMS)<br><a href="http://www.hscic.gov.uk/proms">http://www.hscic.gov.uk/proms</a>   |  |
| <b>Notes</b>              | Both the EQ-5D and Oxford knee descriptive system provides a measure of general pre and post-operative health. A patient's health gain is the difference between the scores before and after the operation. A higher score indicates better health. Further information on the scoring system is available in the PROMs guide:<br><br><a href="http://www.hscic.gov.uk/media/1537/A-Guide-to-PROMs-Methodology/pdf/PROMS_Guide_v5.pdf">http://www.hscic.gov.uk/media/1537/A-Guide-to-PROMs-Methodology/pdf/PROMS_Guide_v5.pdf</a><br><br>Please note that due to the delay between pre and post-operative questionnaires being sent and returned, data are provisional and may be incomplete or contain errors for which no adjustments have yet been made. |  |

## Audits

|                               |  |
|-------------------------------|--|
| <b>Indicator ID</b>           | NHFD01   |
| <b>Indicator</b>              | <b>National Hip Fracture Database: measure of cases assessed as achieving compliance with all nine Best Practice Tariff standards of care</b>  |
| <b>Rationale</b>              | The National Hip Fracture Database is a clinically led audit of hip fracture care and secondary prevention. Care is assessed against best practice standards defined by the British Orthopaedic Association (BOA) and British Geriatrics Society (BGS). Data collection is robust and established within participating trusts  |
| <b>Indicator status</b>       | <b>No change</b>   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of cases achieving compliance with all nine best practice tariff standards of care, as follows: <ul style="list-style-type: none"> <li>Time to surgery within 36 hours from arrival in an emergency department, or time of diagnosis of an admitted patient to the start of anaesthesia</li> <li>Admission under the joint care of a consultant geriatrician and a consultant orthopaedic surgeon</li> </ul> |

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|                           | <ul style="list-style-type: none"> <li>• Admission using an assessment protocol agreed by geriatric medicine, orthopaedic surgery and anaesthesia</li> <li>• Assessment by a geriatrician in the perioperative period (within 72 hours of admission)</li> <li>• Postoperative geriatrician-directed multi-professional rehabilitation team</li> <li>• Fracture prevention assessment - falls</li> <li>• Fracture prevention assessment - bone health</li> <li>• First Abbreviated Mental Test (AMT) performed before surgery and scores recorded in NHFD</li> <li>• Second AMT performed after surgery but within the same spell and scores recorded in NHFD</li> </ul> <p><b>Denominator:</b><br/>All patients admitted with a hip fracture.</p> |   |
| <b>Indicator type</b>     | z-scored  |   |
| <b>Assessment of risk</b> | <p><b>Risk:</b><br/>z-score greater than or equal to 2 but less than 3</p>  | <p><b>Elevated risk:</b><br/>z-score greater than or equal to 3</p> |
| <b>Time period</b>        | 01/01/2013 to 31/12/2013  |   |
| <b>Data source</b>        | Royal College of Physicians, National Hip Fracture Database<br><a href="http://www.nhfd.co.uk">www.nhfd.co.uk</a>   |   |

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|-------------------------------|---|
| <b>Indicator ID</b>           | SSNAPD02  |
| <b>Indicator</b>              | <b>SSNAP Clinical Audit Domain 2: overall team-centred level for key stroke unit indicators</b>   |
| <b>Rationale</b>              | <p>The Sentinel Stroke National Audit Programme (SSNAP) collects a minimum dataset for every stroke patient in order to benchmark services and to support clinicians in identifying where improvements are needed, planning change and celebrating success. The standards are based on the National Stroke Guideline 2012:</p> <p><a href="http://www.rcplondon.ac.uk/stroke/guidelines">www.rcplondon.ac.uk/stroke/guidelines</a></p>  |
| <b>Indicator status</b>       | <b>Data updated</b>   |
| <b>Indicator construction</b> | <p>Domain 2 is a composite score, graded on a five point scale (A-E), based on an assessment of the following three individual key stroke unit indicators:</p> <ul style="list-style-type: none"> <li>• Proportion of patients directly admitted to a stroke unit within 4 hours of clock start (clock start is defined as the time of arrival at hospital. Where stroke occurred in hospital it refers to the time of onset of symptoms)</li> <li>• Median time between clock start and arrival on a stroke unit</li> <li>• Proportion of patients who spent at least 90% of their stay on a stroke unit</li> </ul> <p>Each stroke team receives their own data each quarter, which are then later published as a national report. The reports within the portal linked below are based on admissions between July and September 2014:</p> |

|                           |   |
|---------------------------|---|
|                           | <p><a href="#">SSNAP Results Portal</a></p> <p>The full detail behind the methodology used by the Royal College of Physicians (RCP) to calculate the domain level score can be found in the technical information sheet within the team level full results portfolio excel file. Some keys point to note on the methodology are as follows:</p> <ul style="list-style-type: none"> <li>• Data are collected at team level. For trusts with more than one team, the team with the lowest score will be taken as trust level.</li> <li>• If one or more team has submitted insufficient or no data, the trust will be assigned an elevated risk.</li> <li>• If all teams had too few cases to report on (i.e. they only treated a small number of stroke patients), the trust is not included in this indicator.</li> <li>• Both routinely admitting and non-routinely admitting acute teams are included (but not non-acute inpatient teams)</li> <li>• For non-routinely admitting teams, the Domain 2 score is only the percentage of patients who have 90% of their stay on a stroke unit</li> <li>• Case ascertainment is not accounted within the domain level score, but is an important factor to consider when interpreting these scores; further information can be found in the section entitled “Participation and Case Ascertainment” which is on page 19 of the national report (this can be accessed via the link above).</li> </ul> |
| <b>Indicator type</b>     | Categorical rules based   |
| <b>Assessment of risk</b> | <p>Categorical classifications for team centred results in the published report are as follows:</p> <p>SSNAP Team centred level A-C → ‘no evidence of risk’<br/> SSNAP Team centred level D → ‘risk’<br/> SSNAP Team centred level E → ‘elevated risk’<br/> Insufficient or no data → ‘elevated risk’</p>   |
| <b>Time-period</b>        | 01/07/2014 to 30/09/2014  |
| <b>Data source</b>        | <p>Royal College of Physicians<br/> Sentinel Stroke National Audit Programme</p> <p><a href="#">SSNAP Results Portal</a></p>  |

|                         |   |
|-------------------------|---|
| <b>Indicator ID</b>     | MINAP22   |
| <b>Indicator</b>        | <b>Proportion of patients who received all the secondary prevention medications for which they were eligible</b>  |
| <b>Rationale</b>        | Use of secondary prevention medication after the acute event is proven to improve outcomes for patients after either STEMI or nSTEMI. NICE clinical guideline 27 recommends that all eligible patients who have had an acute heart attack should be offered treatment with a combination of the following drugs: ACE inhibitor, aspirin, beta blocker, statin, dual anti-platelet therapy |
| <b>Indicator status</b> | <b>Reinstated, data updated</b> - This indicator was removed from IM v4 due to the age of the data, but has now been reinstated as 2013/14  |

|                               |   |   |
|-------------------------------|---|---|
|                               | data has been published.  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of patients who received all the secondary prevention medications for which they were eligible  | <b>Denominator:</b><br>Number of patients eligible to receive secondary prevention medication |
| <b>Indicator type</b>         | z-scored  |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated risk:</b><br>z-score greater than or equal to 3                                   |
| <b>Time-period</b>            | 01/04/2013 to 31/03/2014  |   |
| <b>Data source</b>            | National Institute for Cardiovascular Outcomes Research (NICOR): Myocardial Ischaemia National Audit Project - UCL<br><br><a href="http://www.ucl.ac.uk/nicor/audits/minap/documents/annual_reports/minap-public-report-2014">http://www.ucl.ac.uk/nicor/audits/minap/documents/annual_reports/minap-public-report-2014</a> |   |

## A&E Survey (AESURPAIN)

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | AESURPAIN  |   |
| <b>Indicator</b>              | <b>A&amp;E Survey 2014 Q30 "Do you think the hospital staff did everything they could to help control your pain?"</b>  |   |
| <b>Rationale</b>              | Hospital staff should try to alleviate pain or discomfort for patients when they require it to make them as comfortable as possible during their hospital stay |   |
| <b>Indicator status</b>       | <b>No change</b>   |   |
| <b>Indicator construction</b> | Scores, as described in the Technical Document:<br><a href="http://www.nhssurveys.org/surveys/819">http://www.nhssurveys.org/surveys/819</a>                   |   |
| <b>Indicator type</b>         | Modified z-score   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b>   | <b>Elevated Risk:</b>   |
|                               | Trusts with scores that are statistically worse than the national average with 95% significance  | Trusts with scores that are statistically worse than the national average with 99% significance |
| <b>Time period</b>            | Patients attending A&E between 01/01/2014 to 31/03/2014  |   |
| <b>Data Source</b>            | A&E Survey (CQC)<br><a href="http://www.nhssurveys.org/survey/1380">http://www.nhssurveys.org/survey/1380</a>  |   |



## Staff Survey (NHSSTAFF04; NHSSTAFF06)

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | NHSSTAFF04   |   |
| <b>Indicator</b>              | <b>NHS Staff Survey – KF7. The proportion of staff who were appraised in last 12 months</b>  |   |
| <b>Rationale</b>              | <p>The staff pledges, part of the NHS Constitution, define what the NHS expects from staff and what staff can expect from NHS employers. The constitution also includes staff responsibilities. <i>Staff pledge 2: To provide all staff with personal development, access to appropriate training for their jobs, and line management support to succeed</i></p> <p>Staff who are appropriately supported will be more empowered to provide care to patients</p> |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of staff surveyed who reported they had been appraised in last 12 months   | <b>Denominator:</b><br>Number of respondents                |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
| <b>Time period</b>            | 01/09/2014 to 31/12/2014   |   |
| <b>Data source</b>            | Department of Health (NHS Staff Survey)<br><a href="http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/">http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/</a>   |   |

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | NHSSTAFF06   |   |
| <b>Indicator</b>              | <b>NHS Staff Survey – KF9. The proportion of staff reported receiving support from immediate managers</b>  |   |
| <b>Rationale</b>              | <p>The staff pledges, part of the NHS Constitution, define what the NHS expects from staff and what staff can expect from NHS employers. The constitution also includes staff responsibilities. <i>Staff pledge 2: To provide all staff with personal development, access to appropriate training for their jobs, and line management support to succeed</i></p> <p>Staff who are appropriately supported will be more empowered to provide care to patients</p> |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of staff surveyed who reported that they have received support from immediate managers   | <b>Denominator:</b><br>Number of respondents                |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |



|                    |  |  |
|--------------------|--|--|
|                    | but less than 3  |  |
| <b>Time period</b> | 01/09/2014 to 31/12/2014   |  |
| <b>Data source</b> | Department of Health (NHS Staff Survey)<br><a href="http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/">http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/</a> |  |

## Staffing (ESRREG)

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | ESRREG   |   |
| <b>Indicator</b>              | <b>Composite risk rating of ESR items relating to staff registration</b>   |   |
| <b>Rationale</b>              | <p>This indicator indicates the proportion of trust staff in registrable professions whose registration status has been verified by the trust. High quality patient care depends upon appropriately qualified and regulated professional staff. In particular:</p> <ul style="list-style-type: none"> <li>i) Doctors need to be both registered with the General Medical Council and hold a licence to practise. Dentists and dental care professionals must similarly be registered with the General Dental Council.</li> <li>ii) Nurses and midwives cannot legally practise in the UK unless they are registered with the Nursing and Midwifery Council.</li> </ul> |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <p>Completeness of professional registration details held by trusts is assessed separately for each of the two groups listed <b>above</b>. A proportional data z-score is calculated for each of the two groups. The final risk level takes all four z-scores into account using a rule-based system (see 'Assessment of risk' row below). This approach prevents the large number of staff records in nursing and midwifery category masking distinctive issues in any of the other three professional groups listed above. The indicator only includes unique instances of staff not holding an active professional registration</p>                                 |   |
|                               | <b>Numerator:</b><br>Headcount of staff that hold a valid professional registration  | <b>Denominator:</b><br>Headcount of staff in with job titles that require professional registration |
| <b>Indicator type</b>         | Final risk level derived using a rules-based system from proportional z-scores for all two categories of professional staff  |   |
| <b>Assessment of risk</b>     | <p>Proportional z-scores calculated for each of the two broad categories of registrable staff listed above.</p> <ul style="list-style-type: none"> <li>i) A risk score for each of the items is assigned using the following criteria:</li> <li>ii) Weighting applied to risk score for each of the items: <ul style="list-style-type: none"> <li>• <b>No evidence of risk:</b> 0</li> </ul> </li> </ul>   |   |

|                    |   |
|--------------------|---|
|                    | <ul style="list-style-type: none"> <li>• <b>Risk: 1</b></li> <li>• <b>Elevated risk: 2</b></li> </ul> <p>iii) The aggregate risk weighting is calculated for each of the two<br/> <i>Note: a count of the constituent risks (low alert) and constituent elevated risks (high alert) can be found in the data sheet published alongside this guidance on CQC's website</i></p> <p>iv) The aggregate risk weighting is calculated for each of the professional groups listed using the following rules:</p> <p>[Sum of risk score for all professional groups per organisation]/<br/> [maximum possible risk score for all professional groups per organisation]</p> <ul style="list-style-type: none"> <li>• Risk: Greater than 1 risk and equal to or less than 0.5 risk score</li> <li>• Elevated risk: Greater than 0.5 risk score</li> </ul> |
| <b>Time period</b> | As at 31/12/2014  |
| <b>Data source</b> | Electronic Staff Record Data Warehouse  |

# Caring

## Compassionate care

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | IPSURTALKWOR  |  |
| <b>Indicator</b>              | <b>Inpatient Survey 2014 Q35 "Did you find someone on the hospital staff to talk to about your worries and fears?"</b>  |  |
| <b>Rationale</b>              | Patients should be made to feel comfortable enough to talk to staff about any worries and fears about any aspects of the care or treatment being given while in hospital                                |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | Scores, as described in Appendix A of the Technical Document: <a href="http://www.cqc.org.uk/2014-inpatient-survey-technical-details">http://www.cqc.org.uk/2014-inpatient-survey-technical-details</a> |  |
| <b>Indicator type</b>         | Modified z-score  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie below the <b>lower 95%</b> control limit   | <b>Elevated Risk:</b><br>Trusts which lie below the <b>lower 99%</b> control limit |
| <b>Time period</b>            | Inpatients spending at least one night in hospital from 01/06/2014 to 31/08/2014  |  |
| <b>Data source</b>            | Adult Inpatient Survey (CQC)<br><a href="http://nhssurveys.org/surveys/856">http://nhssurveys.org/surveys/856</a>   |  |

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | IPSURSUPEMOT  |  |
| <b>Indicator</b>              | <b>Inpatient Survey 2014 Q36 "Do you feel you got enough emotional support from hospital staff during your stay?"</b>   |  |
| <b>Rationale</b>              | Patients should feel emotionally supported by hospital staff during their stay to make them feel comfortable and at ease while receiving treatment  |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | Scores, as described in Appendix A of the Technical Document: <a href="http://www.cqc.org.uk/2014-inpatient-survey-technical-details">http://www.cqc.org.uk/2014-inpatient-survey-technical-details</a> |  |
| <b>Indicator type</b>         | Modified z-score  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie below the <b>lower 95%</b> control limit   | <b>Elevated Risk:</b><br>Trusts which lie below the <b>lower 99%</b> control limit |
| <b>Time period</b>            | Inpatients spending at least one night in hospital from 01/06/2014 to 31/08/2014  |  |
| <b>Data source</b>            | Adult Inpatient Survey (CQC)<br><a href="http://nhssurveys.org/surveys/856">http://nhssurveys.org/surveys/856</a>   |  |

## Meeting physical needs

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | IPSURHELPEAT  |  |
| <b>Indicator</b>              | <b>Inpatient Survey 2014 Q23 "Did you get enough help from staff to eat your meals?"</b>  |  |
| <b>Rationale</b>              | It is important that inpatients are not only served meals but that they are able to eat these meals. If patients are unable to eat unaided, staff should provide the help that is needed                |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | Scores, as described in Appendix A of the Technical Document: <a href="http://www.cqc.org.uk/2014-inpatient-survey-technical-details">http://www.cqc.org.uk/2014-inpatient-survey-technical-details</a> |  |
| <b>Indicator type</b>         | Modified z-score  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie below the <b>lower 95%</b> control limit   | <b>Elevated Risk:</b><br>Trusts which lie below the <b>lower 99%</b> control limit |
| <b>Time period</b>            | Inpatients spending at least one night in hospital from 01/06/2014 to 31/08/2014  |  |
| <b>Data source</b>            | Adult Inpatient Survey (CQC)<br><a href="http://nhssurveys.org/surveys/856">http://nhssurveys.org/surveys/856</a>   |  |

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | IPSURINVDECI  |  |
| <b>Indicator</b>              | <b>Inpatient Survey 2014 Q32 "Were you involved as much as you wanted to be in decisions about your care and treatment?"</b>  |  |
| <b>Rationale</b>              | Staff should make sure that patients are involved in decisions around their care and treatment as much as they want to be   |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | Scores, as described in Appendix A of the Technical Document: <a href="http://www.cqc.org.uk/2014-inpatient-survey-technical-details">http://www.cqc.org.uk/2014-inpatient-survey-technical-details</a> |  |
| <b>Indicator type</b>         | Modified z-score  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie below the <b>lower 95%</b> control limit   | <b>Elevated Risk:</b><br>Trusts which lie below the <b>lower 99%</b> control limit |
| <b>Time period</b>            | Inpatients spending at least one night in hospital from 01/06/2014 to 31/08/2014  |  |
| <b>Data source</b>            | Adult Inpatient Survey (CQC)<br><a href="http://nhssurveys.org/surveys/856">http://nhssurveys.org/surveys/856</a>   |  |

|                         |  |  |
|-------------------------|--|--|
| <b>Indicator ID</b>     | IPSURCNTPAIN   |  |
| <b>Indicator</b>        | <b>Inpatient Survey 2014 Q40 "Do you think the hospital staff did everything they could to help control your pain?"</b>  |  |
| <b>Rationale</b>        | Hospital staff should try to alleviate pain or discomfort for patients when they require it to make them as comfortable as possible during their hospital stay |  |
| <b>Indicator status</b> | <b>Data updated</b>  |  |

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator construction</b> | Scores, as described in Appendix A of the Technical Document: <a href="http://www.cqc.org.uk/2014-inpatient-survey-technical-details">http://www.cqc.org.uk/2014-inpatient-survey-technical-details</a> |  |
| <b>Indicator type</b>         | Modified z-score  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie below the <b>lower 95%</b> control limit   | <b>Elevated Risk:</b><br>Trusts which lie below the <b>lower 99%</b> control limit |
| <b>Time period</b>            | Inpatients spending at least one night in hospital from 01/06/2014 to 31/08/2014  |  |
| <b>Data source</b>            | Adult Inpatient Survey (CQC)<br><a href="http://nhssurveys.org/surveys/856">http://nhssurveys.org/surveys/856</a>   |  |

## Overall experience

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | IPSUROVERALL  |  |
| <b>Indicator</b>              | <b>Inpatient Survey 2014 Q68 "Overall..." (I had a very poor/good experience)</b>   |  |
| <b>Rationale</b>              | This shows the overall summary of patient experience (taking into account all aspects of their hospital stay).  |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | Scores, as described in Appendix A of the Technical Document: <a href="http://www.cqc.org.uk/2014-inpatient-survey-technical-details">http://www.cqc.org.uk/2014-inpatient-survey-technical-details</a> |  |
| <b>Indicator type</b>         | Modified z-score  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie below the <b>lower 95%</b> control limit   | <b>Elevated Risk:</b><br>Trusts which lie below the <b>lower 99%</b> control limit |
| <b>Time period</b>            | Inpatients spending at least one night in hospital 01/06/2014 to 31/08/2014   |  |
| <b>Data source</b>            | Adult Inpatient Survey (CQC)<br><a href="http://nhssurveys.org/surveys/856">http://nhssurveys.org/surveys/856</a>   |  |

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | FFTLIKERECIP   |  |
| <b>Indicator</b>              | <b>NHS England Inpatient % Likely to Recommend the Trust from Friends and Family Test</b>  |  |
| <b>Rationale</b>              | This is an indicator of overall patient experience of the service received. Patients are asked whether they would recommend the service they have received to friends and family who need similar treatment or care.   |  |
| <b>Indicator status</b>       | <b>Modified and data updated</b> - The Friends and Family Test indicator has been amended so that it aligns with changes introduced by NHS England in September 2014. NHS England is now calculating and presenting the FFT results as a percentage of respondents who would/would not recommend the service to their friends and family The indicator now uses the "percentage likely to recommend" results instead of the FFT score. |  |
| <b>Indicator construction</b> | Using the average percentage of inpatient respondents who would recommend the service to their friends and family. Recommend   |  |

|                           |   |   |
|---------------------------|---|---|
|                           | <p>includes 'likely' and 'Extremely likely' results. There are 2 scores recorded for this indicator:</p> <ul style="list-style-type: none"> <li>• Short Term % change - this is the relative percentage change in score between the latest quarter and the previous quarter</li> <li>• Long Term % change - this is the relative percentage change in score between the latest quarter and the previous 3 quarters</li> </ul> <p>If either of these 2 scores breaches the threshold then the indicator will be flagged.</p> |   |
| <b>Indicator type</b>     | Measure changes within each Trust   |   |
| <b>Assessment of risk</b> | <b>Risk:</b><br>3% score reduction  | <b>Elevated risk:</b><br>6% score reduction |
| <b>Time period</b>        | 01/01/2014 to 31/12/2014  |   |
| <b>Data source</b>        | Friends and Family Test (FFT)<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/friends-and-family-test/friends-and-family-test-data">www.england.nhs.uk/statistics/statistical-work-areas/friends-and-family-test/friends-and-family-test-data</a>   |   |

## Treatment with dignity and respect

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | IPSURRSPDIGN   |  |
| <b>Indicator</b>              | <b>Inpatient Survey 2014 Q66 "Overall, did you feel you were treated with respect and dignity while you were in the hospital?"</b>   |  |
| <b>Rationale</b>              | Patients should feel they are treated with dignity and respect by the care staff during their hospital stay  |  |
| <b>Indicator status</b>       | <b>Data updated</b>  |  |
| <b>Indicator construction</b> | Scores, as described in Appendix A of the Technical Document:<br><a href="http://www.cqc.org.uk/2014-inpatient-survey-technical-details">http://www.cqc.org.uk/2014-inpatient-survey-technical-details</a> |  |
| <b>Indicator type</b>         | Modified z-score   |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie below the <b>lower 95%</b> control limit  | <b>Elevated Risk:</b><br>Trusts which lie below the <b>lower 99%</b> control limit |
| <b>Time period</b>            | Inpatients spending at least one night in hospital from 01/06/2014 to 31/08/2014   |  |
| <b>Data source</b>            | Adult Inpatient Survey (CQC)<br><a href="http://nhssurveys.org/surveys/856">http://nhssurveys.org/surveys/856</a>  |  |

## Trusting relationships

|                     |   |  |
|---------------------|---|--|
| <b>Indicator ID</b> | IPSURCONFDOC  |  |
| <b>Indicator</b>    | <b>Inpatient Survey 2014 Q25 "Did you have confidence and trust in the doctors treating you?"</b>   |  |
| <b>Rationale</b>    | Studies have shown that having confidence in their doctors is of high importance to patients, as they should have trust and confidence in the staff treating them |  |
| <b>Indicator</b>    | <b>Data updated</b>   |  |

|                               |  |  |
|-------------------------------|--|--|
| <b>status</b>                 |  |  |
| <b>Indicator construction</b> | Scores, as described in Appendix A of the Technical Document:<br><a href="http://www.cqc.org.uk/2014-inpatient-survey-technical-details">http://www.cqc.org.uk/2014-inpatient-survey-technical-details</a> |  |
| <b>Indicator type</b>         | Modified z-score   |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie below the <b>lower 95%</b> control limit  | <b>Elevated Risk:</b><br>Trusts which lie below the <b>lower 99%</b> control limit |
| <b>Time period</b>            | Inpatients spending at least one night in hospital from 01/06/2014 to 31/08/2014   |  |
| <b>Data source</b>            | Adult Inpatient Survey (CQC)<br><a href="http://nhssurveys.org/surveys/856">http://nhssurveys.org/surveys/856</a>  |  |

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | IPSURCONFNUR   |  |
| <b>Indicator</b>              | <b>Inpatient Survey 2014 Q28 "Did you have confidence and trust in the nurses treating you?"</b>   |  |
| <b>Rationale</b>              | Studies have shown that having confidence in their nurses is of high importance to patients as they should have trust and confidence in the staff treating them  |  |
| <b>Indicator status</b>       | <b>Data updated</b>  |  |
| <b>Indicator construction</b> | Scores, as described in Appendix A of the Technical Document:<br><a href="http://www.cqc.org.uk/2014-inpatient-survey-technical-details">http://www.cqc.org.uk/2014-inpatient-survey-technical-details</a> |  |
| <b>Indicator type</b>         | Modified z-score   |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Trusts which lie below the <b>lower 95%</b> control limit  | <b>Elevated Risk:</b><br>Trusts which lie below the <b>lower 99%</b> control limit |
| <b>Time period</b>            | Inpatients spending at least one night in hospital from 01/06/2014 to 31/08/2014   |  |
| <b>Data source</b>            | Adult Inpatient Survey (CQC)<br><a href="http://nhssurveys.org/surveys/856">http://nhssurveys.org/surveys/856</a>  |  |

## **A&E Survey (AESURCONFID; AESURATTENT; AESURREASS; AESURCONT; AESURDIGRES)**

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | AESURCONFID   |  |
| <b>Indicator</b>              | <b>A&amp;E Survey 2014 Q14 "Did you have confidence and trust in the doctors and nurses examining and treating you?"</b>  |  |
| <b>Rationale</b>              | Studies have shown that having confidence in their doctors is of high importance to patients, as they should have trust and confidence in the staff treating them |  |
| <b>Indicator status</b>       | <b>No change</b>  |  |
| <b>Indicator construction</b> | Scores, as described in the Technical Document:<br><a href="http://www.nhssurveys.org/surveys/819">http://www.nhssurveys.org/surveys/819</a>                      |  |

|                           |   |   |
|---------------------------|---|---|
| <b>Indicator type</b>     | Modified z-score  |   |
| <b>Assessment of risk</b> | <b>Risk:</b>  | <b>Elevated Risk:</b>   |
|                           | Trusts with scores that are statistically worse than the national average with 95% significance               | Trusts with scores that are statistically worse than the national average with 99% significance |
| <b>Time period</b>        | Patients attending A&E between 01/01/2014 to 31/03/2014   |   |
| <b>Data Source</b>        | A&E Survey (CQC)<br><a href="http://www.nhssurveys.org/survey/1380">http://www.nhssurveys.org/survey/1380</a> |   |

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | AESURATTENT  |   |
| <b>Indicator</b>              | <b>A&amp;E Survey 2014 Q19 "If you needed attention, were you able to get a member of medical or nursing staff to help you?"</b>             |   |
| <b>Rationale</b>              | Patients should be made to feel comfortable enough to ask staff for help when needed and feel that their needs are being met.                |   |
| <b>Indicator status</b>       | <b>No change</b>   |   |
| <b>Indicator construction</b> | Scores, as described in the Technical Document:<br><a href="http://www.nhssurveys.org/surveys/819">http://www.nhssurveys.org/surveys/819</a> |   |
| <b>Indicator type</b>         | Modified z-score   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b>   | <b>Elevated Risk:</b>   |
|                               | Trusts with scores that are statistically worse than the national average with 95% significance  | Trusts with scores that are statistically worse than the national average with 99% significance |
| <b>Time period</b>            | Patients attending A&E between 01/01/2014 to 31/03/2014  |   |
| <b>Data Source</b>            | A&E Survey (CQC)<br><a href="http://www.nhssurveys.org/survey/1380">http://www.nhssurveys.org/survey/1380</a>                                |   |

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | AESURREASS  |  |
| <b>Indicator</b>              | <b>A&amp;E Survey 2014 Q22 "If you were feeling distressed while you were in the A&amp;E Department, did a member of staff help to reassure you?"</b>               |  |
| <b>Rationale</b>              | Patients should be made to feel comfortable enough to talk to staff about any worries and fears about any aspects of the care or treatment being given while in A&E |  |
| <b>Indicator status</b>       | <b>No change</b>  |  |
| <b>Indicator construction</b> | Scores, as described in the Technical Document:<br><a href="http://www.nhssurveys.org/surveys/819">http://www.nhssurveys.org/surveys/819</a>                        |  |



|                           |   |   |
|---------------------------|---|---|
| <b>Indicator type</b>     | Modified z-score  |   |
| <b>Assessment of risk</b> | <b>Risk:</b>  | <b>Elevated Risk:</b>   |
|                           | Trusts with scores that are statistically worse than the national average with 95% significance               | Trusts with scores that are statistically worse than the national average with 99% significance |
| <b>Time period</b>        | Patients attending A&E between 01/01/2014 to 31/03/2014   |   |
| <b>Data Source</b>        | A&E Survey (CQC)<br><a href="http://www.nhssurveys.org/survey/1380">http://www.nhssurveys.org/survey/1380</a> |   |

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | AESURCONT   |   |
| <b>Indicator</b>              | <b>A&amp;E Survey 2014 Q41 "Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left the A&amp;E Department?"</b>    |   |
| <b>Rationale</b>              | Patients should be told who to contact if they have further concerns about their condition as this is an important factor in helping to reduce avoidable A&E re-attendance. |   |
| <b>Indicator status</b>       | <b>No change</b>  |   |
| <b>Indicator construction</b> | Scores, as described in the Technical Document:<br><a href="http://www.nhssurveys.org/surveys/819">http://www.nhssurveys.org/surveys/819</a>                                |   |
| <b>Indicator type</b>         | Modified z-score  |   |
| <b>Assessment of risk</b>     | <b>Risk:</b>  | <b>Elevated Risk:</b>   |
|                               | Trusts with scores that are statistically worse than the national average with 95% significance   | Trusts with scores that are statistically worse than the national average with 99% significance |
| <b>Time period</b>            | Patients attending A&E between 01/01/2014 to 31/03/2014   |   |
| <b>Data Source</b>            | A&E Survey (CQC)<br><a href="http://www.nhssurveys.org/survey/1380">http://www.nhssurveys.org/survey/1380</a>   |   |

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | AESURDIGRES  |  |
| <b>Indicator</b>              | <b>A&amp;E Survey 2014 Q42 "Overall, did you feel you were treated with respect and dignity while you were in the A&amp;E Department?"</b>   |  |
| <b>Rationale</b>              | Patients should feel they are treated with dignity and respect by the care staff during their visit to A&E                                   |  |
| <b>Indicator status</b>       | <b>No change</b>   |  |
| <b>Indicator construction</b> | Scores, as described in the Technical Document:<br><a href="http://www.nhssurveys.org/surveys/819">http://www.nhssurveys.org/surveys/819</a> |  |
| <b>Indicator type</b>         | Modified z-score   |  |

|                           |   |   |
|---------------------------|---|---|
| <b>Assessment of risk</b> | <b>Risk:</b>  | <b>Elevated Risk:</b>   |
|                           | Trusts with scores that are statistically worse than the national average with 95% significance               | Trusts with scores that are statistically worse than the national average with 99% significance |
| <b>Time period</b>        | Patients attending A&E between 01/01/2014 to 31/03/2014   |   |
| <b>Data Source</b>        | A&E Survey (CQC)<br><a href="http://www.nhssurveys.org/survey/1380">http://www.nhssurveys.org/survey/1380</a> |   |

# Responsive

## A&E Survey (AESURPRIV)

|                        |  |   |
|------------------------|--|---|
| Indicator ID           | AESURPRIV  |   |
| Indicator              | <b>A&amp;E Survey 2014 Q18 "Were you given enough privacy when being examined or treated?"</b>   |   |
| Rationale              | Patients should feel their privacy is respected during examinations and treatment.   |   |
| Indicator status       | <b>No change</b>   |   |
| Indicator construction | Scores, as described in the Technical Document:<br><a href="http://www.nhssurveys.org/surveys/819">http://www.nhssurveys.org/surveys/819</a> |   |
| Indicator type         | Modified z-score   |   |
| Assessment of risk     | <b>Risk:</b>   | <b>Elevated Risk:</b>   |
|                        | Trusts with scores that are statistically worse than the national average with 95% significance  | Trusts with scores that are statistically worse than the national average with 99% significance |
| Time period            | Patients attending A&E between 01/01/2014 to 31/03/2014  |   |
| Data Source            | A&E Survey (CQC)   |   |
|                        | <a href="http://www.nhssurveys.org/survey/1380">http://www.nhssurveys.org/survey/1380</a>  |   |

## Access measures

|                        |   |   |
|------------------------|---|---|
| Indicator ID           | COM_AD_A&E  |   |
| Indicator description  | <b>Composite indicator: A&amp;E waiting times more than 4 hours</b>   |   |
| Assessment of Risk     | Composite indicator of AD_A&E13, AD_A&E14 and AD_A&E15 where the indicator with highest risk determines composite result  |   |
| Rationale              | Access to emergency health may affect patient morbidity/mortality. Frail elderly attendees are at risk of developing pressure sores within two hours of lying on a trolley. The Department of Health's Operating Framework for the NHS in England 2012/13 maintains the requirement for at least 95% of patients to spend no more than four hours in any type of A&E from arrival to admission, transfer or discharge |   |
| Indicator status       | <b>Data updated</b>   |   |
| AD_A&E13               | <b>Proportion of patients spending more than 4 hours in Type 1 only A&amp;E departments from arrival to discharge, transfer or admission</b>  |   |
| Indicator construction | <b>Numerator:</b><br>Number of patients spending more than 4 hours in a Type 1 A&E department from arrival to discharge, transfer or admission  | <b>Denominator:</b><br>The total number of patients attending a Type 1 A&E department |

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator type</b>         | z-scored  |  |
| <b>Assessment of risk</b>     | Goal value set at 95% (As recommended by Department of Health's Operating Framework for the NHS in England 2012/13)   |  |
|                               | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated risk:</b><br>z-score greater than or equal to 3                            |
| <b>Time period</b>            | 01/10/2014 to 31/12/2014  |  |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/">www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/</a> |  |
| <b>AD_A&amp;E14</b>           | <b>Proportion of patients spending more than 4 hours in Type 2 only A&amp;E departments from arrival to discharge, transfer or admission</b>  |  |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of patients spending more than 4 hours in a Type 2 A&E department from arrival to discharge, transfer or admission  | <b>Denominator:</b><br>The total number of patients attending a Type 2 A&E department  |
| <b>Indicator type</b>         | z-scored  |  |
| <b>Assessment of risk</b>     | Goal value set at 95% (As recommended by Department of Health's Operating Framework for the NHS in England 2012/13)   |  |
|                               | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated risk:</b><br>z-score greater than or equal to 3                            |
| <b>Time period</b>            | 01/10/2014 to 31/12/2014  |  |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/">www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/</a> |  |
| <b>AD_A&amp;E15</b>           | <b>Proportion of patients spending more than 4 hours in Type 3 only A&amp;E departments from arrival to discharge, transfer or admission</b>  |  |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of patients spending more than 4 hours in a Type 3 A&E department from arrival to discharge, transfer or admission  | <b>Denominator:</b><br>The total number of patients attending a Type 3 A&E department. |
| <b>Indicator type</b>         | z-scored  |  |
| <b>Assessment of risk</b>     | Goal value set at 95% (As recommended by Department of Health's Operating Framework for the NHS in England 2012/13)   |  |
|                               | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated risk:</b><br>z-score greater than or equal to 3                            |
| <b>Time period</b>            | 01/10/2014 to 31/12/2014  |  |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/">www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/</a> |  |

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | COM_RTT  |   |
| <b>Indicator description</b>  | <b>Composite monthly Referral to Treatment (RTT) waiting times</b>   |   |
| <b>Assessment of Risk</b>     | Composite indicator of RTT_01, RTT_02 and RTT_03 where the indicator with highest risk determines composite result   |   |
| <b>Rationale</b>              | <p>The NHS Operating Framework for 2012/13 sets the Referral to Treatment (RTT) operational standards: 90% of admitted and 95% of non-admitted patients should start consultant-led treatment within 18 weeks of referral, and 92% of patients on an incomplete pathway should have been waiting no more than 18 weeks.</p> <p>For the purpose of risk analysis CQC assign risk through the comparison of trust activity against a mean value of all trusts, with risk applied to outliers as detailed below. It is therefore possible for trusts meeting target thresholds to be identified as risk when compared to other trusts through outlier analysis.</p> |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>RTT_01</b>                 | <b>Monthly Referral to Treatment (RTT) waiting times for completed admitted pathways (on an adjusted basis): percentage within 18 weeks</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of completed admitted pathways (with a known clock start) within 18 weeks  | <b>Denominator:</b><br>Total number of completed admitted pathways (with a known clock start)     |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | Risk is determined through z-score analysis using the national average for acute trusts as the expected value.   |   |
|                               | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3                                       |
| <b>Time period</b>            | 01/12/2014 to 31/12/2014   |   |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/">www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/</a>  |   |
| <b>RTT_02</b>                 | <b>Monthly Referral to Treatment (RTT) waiting times for completed non-admitted pathways: percentage within 18 weeks</b>   |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of completed non-admitted pathways (with a known clock start) within 18 weeks  | <b>Denominator:</b><br>Total number of completed non-admitted pathways (with a known clock start) |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment</b>             | Risk is determined through z-score analysis using the national   |   |

|                               |   |   |
|-------------------------------|---|---|
| <b>of risk</b>                | average for acute trusts as the expected value.   |   |
|                               | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
| <b>Time period</b>            | 01/12/2014 to 31/12/2014  |   |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/">www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/</a> |   |
| <b>RTT_03</b>                 | <b>Monthly Referral to Treatment (RTT) waiting times for incomplete pathways: percentage within 18 weeks</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of incomplete pathways within 18 weeks  | <b>Denominator:</b><br>Total number of incomplete pathways  |
| <b>Indicator type</b>         | z-scored  |   |
| <b>Assessment of risk</b>     | Risk is determined through z-score analysis using the national average for acute trusts as the expected value.  |   |
|                               | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
| <b>Time period</b>            | 01/12/2014 to 31/12/2014  |   |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/">www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/</a> |   |

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | DIAG6WK01  |   |
| <b>Indicator description</b>  | <b>Diagnostics waiting times: patients waiting over 6 weeks for a diagnostic test</b>  |   |
| <b>Rationale</b>              | Providing fast, convenient access will reduce pain and anxiety for patients and ensure that waiting times for treatment will have been reduced to the point that they are no longer the major issue for patients and the public  |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of patients waiting more than 6 weeks for a diagnostic test  | <b>Denominator:</b><br>Total number of patients waiting     |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
|                               |  |   |
| <b>Time period</b>            | 01/12/2014 to 31/12/2014   |   |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/diagnostics-waiting-times-and-activity/monthly-diagnostics-waiting-times-and-activity/">http://www.england.nhs.uk/statistics/statistical-work-areas/diagnostics-waiting-times-and-activity/monthly-diagnostics-waiting-times-and-activity/</a> |   |

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | WT_CAN26   |   |
| <b>Indicator</b>              | <b>The proportion of patients receiving their first definitive treatment for cancer within two months (62 days) of GP or dentist urgent referral for suspected cancer</b>  |   |
| <b>Rationale</b>              | The NHS Cancer Plan set the ultimate goal that no patient should wait longer than two months (62 days) from an urgent referral for suspected cancer to the beginning of treatment, except for good clinical reasons  |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>The number of patients receiving their first definitive treatment for cancer within two months (62 days) of GP or dentist urgent referral for suspected cancer  | <b>Denominator:</b><br>The total number of patients receiving their first definitive treatment for cancer following an urgent GP or dentist referral for suspected cancer |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | Goal value set at 85% (As recommended by Department of Health)<br><a href="http://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/05/Cancer-Waiting-Times-commentary-Q4-2012-13-commissioner-based-data.pdf">www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/05/Cancer-Waiting-Times-commentary-Q4-2012-13-commissioner-based-data.pdf</a> |   |
|                               | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3   |
| <b>Time period</b>            | 01/10/2014 to 31/12/2014   |   |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/cancer-waiting-times/">www.england.nhs.uk/statistics/statistical-work-areas/cancer-waiting-times/</a>  |   |

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | WT_CAN27   |  |
| <b>Indicator</b>              | <b>The proportion of patients receiving their first definitive treatment for cancer within two months (62 days) of urgent referral from the national screening service</b>   |  |
| <b>Rationale</b>              | The NHS Cancer Plan set the ultimate goal that no patient should wait longer than two months (62 days) from an urgent referral for suspected cancer to the beginning of treatment, except for good clinical reasons  |  |
| <b>Indicator status</b>       | <b>Data updated</b>  |  |
| <b>Indicator construction</b> | <b>Numerator:</b><br>The number of patients receiving their first definitive treatment for cancer within two months (62 days) of urgent referral from the national screening service   | <b>Denominator:</b><br>The total number of patients receiving their first definitive treatment for cancer following an urgent referral from the national screening service |
| <b>Indicator type</b>         | z-scored   |  |
| <b>Assessment of risk</b>     | Goal value set at 90% (As recommended by Department of Health)<br><a href="http://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/05/Cancer-Waiting-Times-commentary-Q4-2012-13-commissioner-based-data.pdf">www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/05/Cancer-Waiting-Times-commentary-Q4-2012-13-commissioner-based-data.pdf</a> |  |

|                    |   |   |
|--------------------|---|---|
|                    | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
| <b>Time period</b> | 01/10/2014 to 31/12/2014  |   |
| <b>Data source</b> | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/cancer-waiting-times/">www.england.nhs.uk/statistics/statistical-work-areas/cancer-waiting-times/</a> |   |

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | WT_CAN22   |   |
| <b>Indicator</b>              | <b>The proportion of patients receiving their first definitive treatment within one month (31 days) of a decision to treat (as a proxy for diagnosis) for cancer</b>   |   |
| <b>Rationale</b>              | The NHS Cancer Plan set the ultimate goal that no patient should wait longer than one month (31 days) from diagnosis of cancer to the beginning of treatment, except for good clinical reasons   |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>The number of patients receiving their first definitive treatment within one month (31 days) of a decision to treat (as a proxy for diagnosis) for cancer   | <b>Denominator:</b><br>The total number of patients receiving their first definitive treatment for cancer |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | Goal value set at 96% (As recommended by Department of Health)<br><a href="http://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/05/Cancer-Waiting-Times-commentary-Q4-2012-13-commissioner-based-data.pdf">www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/05/Cancer-Waiting-Times-commentary-Q4-2012-13-commissioner-based-data.pdf</a> |   |
|                               | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3   |
| <b>Time period</b>            | 01/10/2014 to 31/12/2014   |   |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/cancer-waiting-times/">www.england.nhs.uk/statistics/statistical-work-areas/cancer-waiting-times/</a>  |   |

|                         |   |  |
|-------------------------|---|--|
| <b>Indicator ID</b>     | CND_OPS02   |  |
| <b>Indicator</b>        | <b>The proportion of patients whose operation was cancelled</b>   |  |
| <b>Rationale</b>        | The NHS Plan (published in July 2000) states that patients will have the right to redress when things go wrong. When a patient's operation is cancelled by the hospital on the day of admission, or later, for non-clinical reasons, the hospital will have to offer another binding date to treat the patient within a maximum of 28 days or fund the patient's treatment at the time and hospital of the patient's choice. This continues to be a standard that the NHS should maintain, as set out in the 2009/10 NHS Operating Framework. Cancelled operations are defined as those that have been cancelled by the trust for non-clinical reasons on the day of admission or later |  |
| <b>Indicator status</b> | <b>Data updated</b>   |  |



|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of last minute cancellations for non-clinical reasons in the time period   | <b>Denominator:</b><br>The total number of general and acute first finished consultant episodes (FFCEs) for elective activity (inpatient ordinary and day case admissions) |
| <b>Indicator type</b>         | z-scored   |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3  |
| <b>Time period</b>            | 01/10/2014 to 31/12/2014   |  |
| <b>Data source</b>            | NHS England<br><b>Numerator:</b><br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/cancelled-elective-operations/">www.england.nhs.uk/statistics/statistical-work-areas/cancelled-elective-operations/</a><br><b>Denominator:</b><br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/hospital-activity/monthly-hospital-activity/">http://www.england.nhs.uk/statistics/statistical-work-areas/hospital-activity/monthly-hospital-activity/</a> |  |

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | CND_OPS01   |  |
| <b>Indicator</b>              | <b>Proportion of patients not treated within 28 days of last minute cancellation due to non-clinical reason</b>   |  |
| <b>Rationale</b>              | The NHS Plan (published in July 2000) states that patients will have the right to redress when things go wrong. When a patient's operation is cancelled by the hospital on the day of admission, or later, for non-clinical reasons, the hospital will have to offer another binding date to treat the patient within a maximum of 28 days or fund the patient's treatment at the time and hospital of the patient's choice. This continues to be a standard that the NHS should maintain, as set out in the 2009/10 NHS Operating Framework. Cancelled operations are defined as those that have been cancelled by the trust for non-clinical reasons on the day of admission or later |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of patients not treated within 28 days of last minute cancellation  | <b>Denominator:</b><br>Number of last minute cancellations for non-clinical reasons in the time period |
| <b>Indicator type</b>         | z-scored  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated risk:</b><br>z-score greater than or equal to 3  |
| <b>Time period</b>            | 01/10/2014 to 31/12/2014  |  |
| <b>Data source</b>            | NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/cancelled-elective-operations/">www.england.nhs.uk/statistics/statistical-work-areas/cancelled-elective-operations/</a>   |  |

## Discharge and Integration

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | DTC40  |   |
| <b>Indicator</b>              | <b>The ratio of the total number of days delayed to the total number of occupied beds over the quarter (3 months), where the delay is attributable to the NHS</b>  |   |
| <b>Rationale</b>              | People should receive the right care in the right place at the right time, and trusts must ensure, with partners, that people move on from the hospital environment once they are safe to transfer. The Community Care Act 2003 facilitates joint working with social services and requires partners to identify the causes of delay, and implement the actions required to tackle delays within their local system. Although this is an all-adult indicator, the vast majority of those delayed are patients aged over 75 years |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>The total number of days delayed over the quarter where the delay is attributable to the NHS  | <b>Denominator:</b><br>The total number of occupied beds in the quarter   |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3   |
| <b>Time period</b>            | 01/10/2014 to 31/12/2014   |   |
| <b>Data source</b>            | <b>Numerator:</b><br>NHS England<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/delayed-transfers-of-care/">www.england.nhs.uk/statistics/statistical-work-areas/delayed-transfers-of-care/</a>   | <b>Denominator:</b><br>KH03<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/">http://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/</a><br>and non-consultant led bed figures (sent direct to CQC) |

## Complaints

|                               |  |                       |
|-------------------------------|--|-----------------------|
| <b>Indicator ID</b>           | CQC_COM  |                       |
| <b>Indicator</b>              | <b>CQC complaints</b>  |                       |
| <b>Rationale</b>              | It's important to take into account the complaints that CQC receives about a provider, as this gives us additional information that we can use alongside results from analysing their quantitative data        |                       |
| <b>Indicator status</b>       | <b>Data updated</b>  |                       |
| <b>Indicator construction</b> | Counts of complaints adjusted by bed days using an iterative negative binomial regression model. Bed days may be partly estimated when their availability does not cover the full time period indicated below. |                       |
| <b>Indicator type</b>         | p-value  |                       |
| <b>Assessment</b>             | <b>Risk:</b>   | <b>Elevated Risk:</b> |

|                    |   |   |
|--------------------|---|---|
| <b>of risk</b>     | P-value $\leq 0.01$ after Elevated Risk trusts omitted from analysis<br>See <a href="#">Appendix 7</a> for details. | P-value $\leq 0.01$ and iterative global P-value $\leq 0.20$<br>See <a href="#">Appendix 7</a> for details. |
| <b>Time-period</b> | 25/02/2014 to 24/02/2015  |   |
| <b>Data source</b> | Care Quality Commission (internal data)   |   |

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | PROV_COM   |  |
| <b>Indicator</b>              | <b>Provider complaints</b>   |  |
| <b>Rationale</b>              | It's important to take into account the complaints that each provider receives directly as this gives us additional information to be used alongside results from analysing their quantitative data  |  |
| <b>Indicator status</b>       | <b>No change</b>   |  |
| <b>Indicator construction</b> | Counts of complaints adjusted by total patient volume using an iterative negative binomial regression model. Patient volume may be partly estimated when its availability does not cover the full time period indicated below.   |  |
| <b>Indicator type</b>         | p-value  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>P-value $\leq 0.01$ after Elevated Risk trusts omitted from analysis<br>See <a href="#">Appendix 7</a> for details.  | <b>Elevated Risk:</b><br>P-value $\leq 0.01$ and iterative global P-value $\leq 0.20$<br>See <a href="#">Appendix 7</a> for details. |
| <b>Time-period</b>            | 01/04/2013 to 31/03/2014   |  |
| <b>Data source</b>            | HSCIC - NHS written data complaints<br><a href="http://www.hscic.gov.uk/article/2021/Website-Search?productid=15261&amp;q=complaints+data&amp;sort=Relevance&amp;size=10&amp;page=1&amp;area=both#top">http://www.hscic.gov.uk/article/2021/Website-Search?productid=15261&amp;q=complaints+data&amp;sort=Relevance&amp;size=10&amp;page=1&amp;area=both#top</a> |  |

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | PHSO_COM   |  |
| <b>Indicator</b>              | <b>PHSO Fully and partly upheld complaints</b>   |  |
| <b>Rationale</b>              | The role of PHSO is to consider complaints that government departments, a range of other public bodies in the UK, and the NHS in England, have not acted properly or fairly or have provided a poor service.                                 |  |
| <b>Indicator status</b>       | <b>New indicator</b>   |  |
| <b>Indicator construction</b> | Counts of fully and partly upheld complaints adjusted by total patient volume using an iterative Poisson regression model. Patient volume may be partly estimated when its availability does not cover the full time period indicated below. |  |
| <b>Indicator type</b>         | p-value  |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>P-value $\leq 0.01$ after Elevated Risk trusts omitted from analysis<br>See <a href="#">Appendix 7</a> for details.  | <b>Elevated Risk:</b><br>P-value $\leq 0.01$ and iterative global P-value $\leq 0.20$<br>See <a href="#">Appendix 7</a> for details. |
| <b>Time-period</b>            | 01/04/2013 to 30/09/2014   |  |
| <b>Data source</b>            | <a href="http://www.ombudsman.org.uk/reports-and-">http://www.ombudsman.org.uk/reports-and-</a>  |  |

|   |
|---|
| <a href="#"><u>consultations/reports/health/complaints-about-acute-trusts-2013-14-and-q1-and-q2-2014-15</u></a> |
|---|

## Well-led

### Friends and family test response rate

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | FFTResp02   |   |
| <b>Indicator</b>              | <b>NHS England Inpatients response rate from Friends and Family Test</b>  |   |
| <b>Rationale</b>              | This is an indicator of overall patient experience of the service received. Patients would recommend service to others if they have had a good experience. Patients and family should all have access to this survey  |   |
| <b>Indicator status</b>       | <b>Data updated</b>   |   |
| <b>Indicator construction</b> | Response rate: Total trust-level respondents January 2014 to December 2014 inclusive, divided by total trust-level eligible patients from January 2014 to December 2014 inclusive   |   |
| <b>Indicator type</b>         | z-scored  |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
| <b>Time period</b>            | 01/01/2014 to 31/12/2014  |   |
| <b>Data source</b>            | Friends and Family Test (FFT)<br><a href="http://www.england.nhs.uk/statistics/statistical-work-areas/friends-and-family-test/friends-and-family-test-data">www.england.nhs.uk/statistics/statistical-work-areas/friends-and-family-test/friends-and-family-test-data</a> |   |

### Partners

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | MONITOR01  |   |
| <b>Indicator</b>              | <b>Monitor risk rating for governance</b>  |   |
| <b>Rationale</b>              | Formal governance risk rating supplied by an external regulatory body. Monitor assesses trust governance on a four-point scale of: no risk rating currently available, no evident concerns, currently under investigation and subject to enforcement action.   |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b> n/a  | <b>Denominator:</b> n/a   |
| <b>Indicator type</b>         | Categorical or Ordinal (z-scored)  |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>Monitor risk rating: currently under investigation   | <b>Elevated risk:</b><br>Monitor risk rating: Subject to enforcement action |
| <b>Time period</b>            | as at 02/03/2015   |   |
| <b>Data source</b>            | Monitor risk rating:<br><a href="http://www.monitor.gov.uk/about-your-local-nhs-foundation-trust/nhs-foundation-trust-performance/actual-performance/risk-ratings">http://www.monitor.gov.uk/about-your-local-nhs-foundation-trust/nhs-foundation-trust-performance/actual-performance/risk-ratings</a><br><br>Monitor regulatory action:<br><a href="http://www.monitor.gov.uk/about-your-local-nhs-foundation-trust/regulatory-action/action-were-taking-nhs-foundation-trusts">http://www.monitor.gov.uk/about-your-local-nhs-foundation-trust/regulatory-action/action-were-taking-nhs-foundation-trusts</a> |   |

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | MONITOR02   |  |
| <b>Indicator</b>              | <b>Monitor - Continuity of service rating</b>   |  |
| <b>Rationale</b>              | <p>Formal continuity of service rating supplied by an external Healthcare regulatory body. Monitor assesses trust governance on the following five-point scale of:</p> <p>1: significant risk<br/> 2: material risk<br/> 2*: level of risk is material but stable<br/> 3: emerging or minor concern<br/> 4: no evident concerns</p> |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | <b>Numerator:</b> n/a   | <b>Denominator:</b> n/a                      |
| <b>Indicator type</b>         | Categorical or Ordinal (z-scored)   |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>2: material risk  | <b>Elevated risk:</b><br>1: significant risk |
| <b>Time period</b>            | as at 02/03/2015  |  |
| <b>Data source</b>            | <p>Monitor risk rating:<br/> <a href="http://www.monitor.gov.uk/about-your-local-nhs-foundation-trust/nhs-foundation-trust-performance/actual-performance/risk-ratings">http://www.monitor.gov.uk/about-your-local-nhs-foundation-trust/nhs-foundation-trust-performance/actual-performance/risk-ratings</a></p>                    |  |
| <b>Notes</b>                  | <p>The continuity of services rating is Monitor's view of the risk that the trust will fail to carry on as a going concern. A rating of 1 indicates the most serious risk and 4 the least risk. A rating of 2* means the trust has a risk rating of 2 but its financial position is unlikely to get worse.</p>                      |  |

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | TDA03   |   |
| <b>Indicator</b>              | <b>NHS Trust Development Authority risk rating for governance</b>   |   |
| <b>Rationale</b>              | <p>This is a formal governance risk rating supplied by an external regulatory body. NHS TDA assesses trust governance on the following 5 point scale:</p> <p>1 Special measures<br/> 2 Intervention (significant delivery issues)<br/> 3 Intervention (some delivery issues)<br/> 4 Standard oversight (limited/ no delivery issues)<br/> 5 Standard oversight (good or outstanding rating)</p> |   |
| <b>Indicator status</b>       | <b>Data updated</b>   |   |
| <b>Indicator construction</b> | <b>Numerator:</b> n/a   | <b>Denominator:</b> n/a                     |
| <b>Indicator type</b>         | Categorical or Ordinal (z-scored)   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>2 Intervention (significant delivery issues)  | <b>Elevated Risk:</b><br>1 Special measures |
| <b>Time period</b>            | 01/11/2014 to 30/11/2014  |   |

|                    |  |
|--------------------|--|
| <b>Data source</b> | NHS TDA – Protected data which is sent directly to CQC |
|--------------------|--|

|                           |   |  |
|---------------------------|---|--|
| <b>Indicator ID</b>       | NTS12   |  |
| <b>Indicator</b>          | <b>GMC National Training Survey – Trainee's overall satisfaction</b>  |  |
| <b>Rationale</b>          | This indicator combines general questions about the quality and usefulness of the training post and provides a global satisfaction score  |  |
| <b>Indicator status</b>   | <b>No change</b>  |  |
| <b>Indicator type</b>     | Categorical or Ordinal (z-scored)   |  |
| <b>Assessment of risk</b> | <b>Risk:</b><br>Below Q2/IQR level  | <b>Elevated risk:</b><br>n/a to this indicator |
| <b>Time period</b>        | 26/03/2014 to 08/05/2014  |  |
| <b>Data source</b>        | General Medical Council National Training Survey 2014<br><a href="http://www.gmc-uk.org/education/surveys.asp">www.gmc-uk.org/education/surveys.asp</a> -<br>(summary of survey - GMC permission required to access Trust level data via secure portal) |  |

## Staff Survey (STASURBG01; NHSSTAFF16; COM\_ABUSESTA)

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | STASURBG01   |   |
| <b>Indicator</b>              | <b>NHS Staff Survey – The proportion of staff who would recommend the trust as a place to work or receive treatment</b>  |   |
| <b>Rationale</b>              | Staff feedback with regards to their work environment and how their trust is performing is an indicator of how the trust is functioning  |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of staff surveyed who would recommend the trust as a place to work or receive treatment  | <b>Denominator:</b><br>Number of respondents                |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
| <b>Time period</b>            | 01/09/2014 to 31/12/2014   |   |
| <b>Data source</b>            | Department of Health (NHS Staff Survey)<br><a href="http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/">http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/</a> |   |

|                     |   |  |
|---------------------|---|--|
| <b>Indicator ID</b> | NHSSTAFF16  |  |
| <b>Indicator</b>    | <b>NHS Staff Survey – KF21. The proportion of staff reporting good communication between senior management and staff</b>  |  |
| <b>Rationale</b>    | The staff pledges, part of the NHS Constitution, define what the NHS expects from staff and what staff can expect from NHS employers. The constitution also includes staff responsibilities. <i>Staff pledge 2: To provide all staff with personal development, access to appropriate</i> |  |

|                               |  |   |
|-------------------------------|--|---|
|                               | <i>training for their jobs, and line management support to succeed.</i><br><br>Staff who are appropriately supported will be more empowered to provide care to patients                              |   |
| <b>Indicator status</b>       | <b>Data updated</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of staff surveyed who reported good communication between senior management and staff  | <b>Denominator:</b><br>Number of respondents                |
| <b>Indicator type</b>         | z-scored   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |
| <b>Time period</b>            | 01/09/2014 to 31/12/2014   |   |
| <b>Data source</b>            | Department of Health (NHS Staff Survey)<br><a href="http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/">http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/</a> |   |

|                               |  |   |
|-------------------------------|--|---|
| <b>Indicator ID</b>           | COM_ABUSESTA   |   |
| <b>Indicator</b>              | <b>Composite of two questions from the NHS Staff Survey relating to abuse from other staff</b>   |   |
| <b>Rationale</b>              | <p>The staff pledges, part of the NHS Constitution, define what the NHS expects from staff and what staff can expect from NHS employers. The constitution also includes staff responsibilities. Staff pledge 1: to provide a positive working environment for staff and to promote supportive, open cultures that help staff do their job to the best of their ability.</p> <p>Staff who are appropriately supported will be more empowered to provide care to patients</p> <p>This is a composite of two following indicators:</p> <ul style="list-style-type: none"> <li>• <b>NHSSTAFF13:</b> NHS Staff Survey - KF17. Percentage experiencing physical violence from staff in last 12 months</li> <li>• <b>NHSSTAFF15:</b> NHS Staff Survey - KF19. Percentage experiencing harassment, bullying or abuse from staff in last 12 months</li> </ul> |   |
| <b>Indicator status</b>       | <b>New Indicator</b>   |   |
| <b>Indicator construction</b> | Each of the two underlying indicator is z-scored as proportion data. The final outlier risk score for the composite indicator is identified through use of a rule where the highest risk identified for either of the two underlying indicators is used as the final risk score.   |   |
| <b>Indicator type</b>         | z-scored (proportion data)   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>z-score greater than or equal to 2   | <b>Elevated risk:</b><br>z-score greater than or equal to 3 |



|                    |  |  |
|--------------------|--|--|
|                    | but less than 3  |  |
| <b>Time period</b> | 01/09/2014 to 31/12/2014   |  |
| <b>Data source</b> | Department of Health (NHS Staff Survey)<br><a href="http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/">http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2014-Results/</a> |  |

## Staffing (ESRSIC; ESRT0; ESRSTAB)

|  |  |  |  |   |
|--|--|--|--|---|
| Indicator ID                             | ESRSIC   |  |  |   |
| Indicator                                | Composite risk rating of ESR items relating to staff sickness rates  |  |  |   |
| Rationale                                | A high level of staff sickness could indicate a higher risk of not having a sufficient number of staff with the right competencies, knowledge, qualifications, skills and experience to meet the needs of people who use the services at all times. It could also be an indirect indication of dysfunctional working conditions for staff  |  |  |   |
| Indicator status                         | Data updated   |  |  |   |
| Indicator construction                   | <p>Staff sickness rates are assessed separately for each of the following four staff groups:</p> <ul style="list-style-type: none"><li>i) Medical and dental staff</li><li>ii) Nursing and midwifery staff</li><li>iii) Other clinical staff</li><li>iv) Non-clinical staff</li></ul> <p>In addition, staff sickness rates are calculated for the following two specific illness categories thought to be linked to dysfunctional working conditions:</p> <ul style="list-style-type: none"><li>v) Stress</li><li>vi) Back problems</li></ul> <p>A proportional data z-score is calculated for each of the above six groups. The final risk level takes all four z-scores into account using a rule-based system (see ‘Assessment of risk’ row below). This approach prevents the large number of staff records in nursing and midwifery category masking distinctive issues in any of the other three occupational groups listed above. It also allows illness categories closely related to organisational dysfunction particular prominence</p> <table><tr><td><b>Numerator:</b><br/>Number of days sick</td><td><b>Denominator:</b><br/>Total number of days available</td></tr></table> |  | <b>Numerator:</b><br>Number of days sick | <b>Denominator:</b><br>Total number of days available |
| <b>Numerator:</b><br>Number of days sick | <b>Denominator:</b><br>Total number of days available  |  |  |   |
| Indicator type                           | Final risk level derived using a rules-based system from proportional z-scores for all six of the staff sickness types listed above  |  |  |   |
| Assessment of risk                       | <ul style="list-style-type: none"><li>i) Proportional z-scores calculated for each of the four broad categories of registrable staff listed above</li><li>ii) A risk score for each of the items is assigned using the following criteria:<ul style="list-style-type: none"><li>• <b>No evidence of risk:</b> Z-score &lt;2.0</li><li>• <b>Risk: z-score:</b> ≥2.0 but &lt;3.0</li></ul></li></ul>   |  |  |   |

|                    |  |
|--------------------|--|
|                    | <ul style="list-style-type: none"> <li>• <b>Elevated risk:</b> z-score <math>\geq 3.0</math></li> </ul> <p>iii) Weighting applied to risk score for each of the items:</p> <ul style="list-style-type: none"> <li>• <b>No evidence of risk:</b> 0</li> <li>• <b>Risk:</b> 1</li> <li>• <b>Elevated risk:</b> 2</li> </ul> <p><i>Note: a count of the constituent risks (low alert) and constituent elevated risks (high alert) can be found in the data sheet alongside this guidance on CQC's website.</i></p> <p>iv) The aggregate risk weighting is calculated for each of the domains listed using the following rules:</p> <p>[Sum of risk score for all six categories per organisation]/ [maximum possible risk score for all six categories per organisation]</p> <ul style="list-style-type: none"> <li>• Risk: Greater than 1 risk and less than 0.5 risk score</li> <li>• Elevated risk: Greater than or equal to 0.5 risk score</li> </ul> |
| <b>Time period</b> | 01/01/2014 to 31/12/2014   |
| <b>Data source</b> | Electronic Staff Record Data Warehouse   |

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | ESRTO   |  |
| <b>Indicator</b>              | <b>Staff turnover rate (NHS Electronic Staff Record data)</b>   |  |
| <b>Rationale</b>              | <p>The turnover rate measures the proportion of the trust's workforce that has changed over the last year. A high turnover rate could indicate that the employer does not adequately support workers, which could have an impact on the quality of care and on the cohesiveness of the workforce. Particularly useful when viewed in conjunction with indicator ESRSTAB (staff stability). The effect of Transfer of Undertakings (Protection of Employment) is excluded</p> <p>Turnover rates are assessed separately for each of the following four staff groups:</p> <ul style="list-style-type: none"> <li>i) Medical and dental staff</li> <li>ii) Nursing and midwifery staff</li> <li>iii) Other clinical staff</li> <li>iv) Non-clinical staff</li> </ul> |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Number of leavers in the last 12 months  | <b>Denominator:</b><br>Average headcount over the last 12 months |
| <b>Indicator type</b>         | Final risk level derived using a rules-based system from proportional z-scores for all six of the staff sickness types listed above   |  |
| <b>Assessment of risk</b>     | Proportional z-scores calculated for each of the four broad categories of registrable staff listed above <ul style="list-style-type: none"> <li>i) A risk score for each of the items is assigned using the following criteria:</li> </ul>  |  |

|                    |   |
|--------------------|---|
|                    | <ul style="list-style-type: none"> <li>• <b>No evidence of risk:</b> Z-score &lt;2.0</li> <li>• <b>Risk: z-score:</b> ≥2.0 but &lt;3.0</li> <li>• <b>Elevated risk:</b> z-score ≥3.0</li> </ul> <p>ii) Weighting applied to risk score for each of the items:</p> <ul style="list-style-type: none"> <li>• <b>No evidence of risk:</b> 0</li> <li>• <b>Risk:</b> 1</li> <li>• <b>Elevated risk:</b> 2</li> </ul> <p>iii) The aggregate risk weighting is calculated for each of the four<br/> <i>Note: a count of the constituent risks (low alert) and constituent elevated risks (high alert) can be found in the data sheet published alongside this guidance on CQC's website</i></p> <p>iv) The aggregate risk weighting is calculated for each of the professional groups listed using the following rules:</p> <p>[Sum of risk score for all professional groups per organisation]/<br/> [maximum possible risk score for all professional groups per organisation]</p> <ul style="list-style-type: none"> <li>• Risk: Greater than 1 risk and less than 0.5 risk score</li> <li>• Elevated risk: Greater than or equal to 0.5 risk score</li> </ul> |
| <b>Time period</b> | 01/01/2014 to 31/12/2014  |
| <b>Data source</b> | Electronic Staff Record Data Warehouse  |

|                               |  |
|-------------------------------|--|
| <b>Indicator ID</b>           | ESRSTAB  |
| <b>Indicator</b>              | <b>Composite risk rating of ESR items relating to staff stability</b><br>(Proportion of staff who have >1year's service)   |
| <b>Rationale</b>              | The stability index measures the trust's retention of experienced workers. A low score in the stability index could indicate a lack of experience within the trust's workforce. Particularly useful when viewed in conjunction with indicator ESRT0 (Staff Turnover)   |
| <b>Indicator status</b>       | <b>Data updated</b>  |
| <b>Indicator construction</b> | <p>A stability index is calculated separately for each of the following four staff groups:</p> <ul style="list-style-type: none"> <li>i) Medical and dental staff</li> <li>ii) Nursing and midwifery staff</li> <li>iii) Other clinical staff</li> <li>iv) Non-clinical staff</li> </ul> <p>A ratio z-score is then calculated for each of the four stability indices. The final risk level takes all four z-scores into account using a rule-based system (see 'Assessment of risk' row below). This approach prevents the relatively large number of staff in the nursing and midwifery category from masking distinctive issues in any of the other</p> |

|                           |  |  |
|---------------------------|--|--|
|                           | three occupational groups listed above. The effect of Transfer of Undertakings (Protection of Employment) is excluded.   |  |
|                           | <b>Ratio Count 1:</b><br>Number of employees (headcount) with greater than 12 months service   | <b>Ratio Count 2:</b><br>Number of employees (headcount) 12 months ago |
| <b>Indicator type</b>     | Final risk level derived using a rules-based system from ratio z-scores for all four staff categories listed above   |  |
| <b>Assessment of risk</b> | <p>i) Ratio z-scores calculated for the stability of each of the four broad categories of staff listed above</p> <p>ii) A risk score for each of the items is assigned using the following criteria:</p> <ul style="list-style-type: none"> <li>• <b>No evidence of risk:</b> Z-score &lt;2.0</li> <li>• <b>Risk:</b> z-score ≥2.0 but &lt;3.0</li> <li>• <b>Elevated risk:</b> z-score ≥3.0</li> </ul> <p>iii) Weighting applied to risk score for each of the items:</p> <ul style="list-style-type: none"> <li>• <b>No evidence of risk:</b> 0</li> <li>• <b>Risk:</b> 1</li> <li>• <b>Elevated risk:</b> 2</li> </ul> <p><i>Note: a count of the constituent risks (low alert) and constituent elevated risks (high alert) can be found in the data sheet published alongside this guidance on CQC's website.</i></p> <p>iv) The aggregate risk weighting is calculated for each of the professional groups listed using the following rules:</p> <p>[Sum of risk score for all professional groups per organisation]/<br/>[maximum possible risk score for all professional groups per organisation]</p> <ul style="list-style-type: none"> <li>• Risk: Greater than 1 risk and less than 0.5 risk score</li> <li>• Elevated risk: Greater than or equal to 0.5 risk score</li> </ul> |  |
| <b>Time period</b>        | 01/01/2014 to 31/12/2014   |  |
| <b>Data source</b>        | Electronic Staff Record Data Warehouse   |  |

## Flu vaccination uptake

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | FLUVAC01  |   |
| <b>Indicator</b>              | <b>Proportion of Health Care Workers (HCW) with direct patient care that have been vaccinated against seasonal influenza</b>  |   |
| <b>Rationale</b>              | High rates of influenza vaccine coverage amongst Health Care Workers have been shown to reduce the risk of passing the infection to patients and reduce sickness absence of staff |   |
| <b>Indicator status</b>       | <b>No change</b>  |   |
| <b>Indicator construction</b> | <b>Numerator:</b><br>Total number of HCW who received   | <b>Denominator:</b><br>Total number of HCW employed |

|                           |   |   |
|---------------------------|---|---|
|                           | vaccine   | by trust  |
| <b>Indicator type</b>     | z-scored  |   |
| <b>Assessment of risk</b> | <b>Risk:</b><br>z-score greater than or equal to 2 but less than 3  | <b>Elevated Risk:</b><br>z-score greater than or equal to 2 but less than 3 |
| <b>Time period</b>        | 01/09/2013 to 31/01/2014  |   |
| <b>Data source</b>        | Department of Health<br><a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/319682/2902502_FluVaccineUptake_HCWs_2013-14_acc.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/319682/2902502_FluVaccineUptake_HCWs_2013-14_acc.pdf</a> |   |

## Whistleblowing

|                               |   |  |
|-------------------------------|---|--|
| <b>Indicator ID</b>           | WHISTLEBLOW   |  |
| <b>Indicator</b>              | <b>Snapshot of Whistleblowing alerts received by CQC</b>  |  |
| <b>Indicator construction</b> | Count of alerts that are 'open', 'in progress', 'pending' or 'on hold' on the day specified in time period.   |  |
| <b>Rationale</b>              | It's important to take into account any whistleblowing alerts received about a provider that are raised by those working for the provider, as this reflects potentially very serious problems that may need to be addressed |  |
| <b>Indicator status</b>       | <b>Data updated</b>   |  |
| <b>Indicator type</b>         | Count of alerts   |  |
| <b>Assessment of risk</b>     | <b>Elevated risk:</b><br>One or more alerts that are open, in progress, pending or on hold<br><br>n.b. trusts can only be assigned as no evidence of risk or elevated risk for this indicator                               |  |
| <b>Time period</b>            | 04/03/2015  |  |
| <b>Data source</b>            | Care Quality Commission (internal data)   |  |

## GMC Enhanced monitoring

|                               |  |  |
|-------------------------------|--|--|
| <b>Indicator ID</b>           | GMC  |  |
| <b>Indicator</b>              | <b>GMC - Enhanced monitoring</b>   |  |
| <b>Rationale</b>              | Count of entries published by the General Medical Council for issues that require enhanced monitoring and have not been closed |  |
| <b>Indicator status</b>       | <b>Data updated</b>  |  |
| <b>Indicator construction</b> | Count of entries   |  |
| <b>Indicator type</b>         | Count of entries   |  |
| <b>Assessment of risk</b>     | <b>Risk:</b><br>1 or more entries where the GMC status is not Closed or Concerns Over Progress                                 | <b>Elevated risk:</b><br>1 or more entries where the GMC status notes Concerns Over Progress |
| <b>Time-period</b>            | Status as of 23/03/2015  |  |

|                    |   |
|--------------------|---|
| <b>Data source</b> | Data supplied by the General Medical Council (GMC) based on information published by the GMC at <a href="http://www.gmc-uk.org/education/enhanced_monitoring.asp">http://www.gmc-uk.org/education/enhanced_monitoring.asp</a> |
|--------------------|---|

# Crosscutting

## Patient-Led Assessment of the Care Environment

|                               |   |   |
|-------------------------------|---|---|
| <b>Indicator ID</b>           | COM_PLACE   |   |
| <b>Indicator</b>              | <b>Composite indicator: Patient-Led Assessment of the Care Environment (PLACE)</b>  |   |
| <b>Rationale</b>              | The PLACE programme is an assessment how the organisation supports patient care in respect of four domains: privacy and dignity, food, cleanliness and general building maintenance. Every patient should be cared for with compassion and dignity in a clean, safe environment. Where standards fall short, they should be able to draw it to the attention of managers and hold the service to account. PLACE assessments will provide motivation for improvement by providing a clear message, directly from patients, about how the environment or services might be enhanced.        |   |
| <b>Indicator status</b>       | <b>No change</b>  |   |
| <b>Indicator construction</b> | <p>A proportion is calculated for each of the four domains. The numerator and denominators for each domain are the sum of all scores achieved (numerator) and the sum of the maximum scores possible (denominator) for all aspects of the care environment assessed pertaining to that domain.</p> <p>Each of the four proportions are z-scored and a rules based assessment is applied to calculate a final PLACE trust level score that incorporates all four domains. The final risk score is the highest risk identified through z-score analysis across any of the four domains.</p> |   |
| <b>Indicator type</b>         | Categorical rules based   |   |
| <b>Assessment of risk</b>     | <b>Risk:</b> <ul style="list-style-type: none"> <li>• z-score greater than or equal to 2, but less than 3, for one or more of the four domains.</li> <li>• No domain with a z-score greater than or equal to 3.</li> </ul>  | <b>Elevated risk:</b> <ul style="list-style-type: none"> <li>• z-score greater than or equal to 3 for one of more of the four domains.</li> </ul> |
| <b>Time-period</b>            | 29/01/2014 to 17/06/2014  |   |
| <b>Data source</b>            | Health and Social Care Information Centre (HSCIC)<br>Patient-led assessments of the care environment (PLACE)<br><br><a href="http://www.hscic.gov.uk/catalogue/PUB14780">http://www.hscic.gov.uk/catalogue/PUB14780</a>   |   |

## Share your experience

|                        |   |  |
|------------------------|---|--|
| Indicator ID           | SYE   |  |
| Indicator              | <b>Share your experience negative comments</b>  |  |
| Rationale              | It's important to take into account comments about providers from people using services, as this gives us additional information about a provider to be used alongside results from analysing their quantitative data |  |
| Indicator status       | <b>Data updated</b>   |  |
| Indicator construction | Counts of negative comments adjusted by counts of positive comments using an iterative negative binomial regression model.  |  |
| Indicator type         | p-value   |  |
| Assessment of risk     | <b>Risk:</b><br>P-value $\leq 0.01$ after Elevated Risk trusts omitted from analysis<br><br>See <a href="#">Appendix 7</a> for details.   | <b>Elevated Risk:</b><br>P-value $\leq 0.01$ and iterative global P-value $\leq 0.20$<br><br>See <a href="#">Appendix 7</a> for details. |
| Time-period            | 01/02/2014 to 31/01/2015  |  |
| Data source            | Care Quality Commission – Comments submitted directly to CQC  |  |

## Patient opinion

|                        |   |  |
|------------------------|---|--|
| Indicator ID           | P_OPINION   |  |
| Indicator              | <b>Patient opinion – negative comments</b>  |  |
| Rationale              | It's important to take into account comments about providers from people using services, as this gives us additional information about a provider to be used alongside results from analysing their quantitative data |  |
| Indicator status       | <b>Data updated</b>   |  |
| Indicator construction | Counts of negative comments adjusted by counts of positive comments using an iterative zero-inflated negative binomial regression model.  |  |
| Indicator type         | p-value   |  |
| Assessment of risk     | <b>Risk:</b><br>P-value $\leq 0.01$ after Elevated Risk trusts omitted from analysis<br><br>See <a href="#">Appendix 7</a> for details.   | <b>Elevated Risk:</b><br>P-value $\leq 0.01$ and iterative global P-value $\leq 0.20$<br><br>See <a href="#">Appendix 7</a> for details. |
| Time-period            | 04/02/2014 to 03/02/2015  |  |
| Data source            | The data used for the patient opinion indicator is available to trusts through the Patient Opinion website.<br>( <a href="https://www.patientopinion.org.uk/">https://www.patientopinion.org.uk/</a> )                |  |



## List of data sources

**Central Alerting System (CAS):** a web-based cascading system for issuing alerts, important public health messages and other safety critical information and guidance to the NHS and other organisations, including independent providers of health and social care

**Department of Health (DH):** Develops policies and guidelines to improve the quality of care and to meet patient expectations.

**Dr Foster Intelligence:** a provider of healthcare information in the UK, monitoring the performance of the NHS and providing information to the public. It is a joint-venture with the Department of Health and was launched in February 2006. It aims to improve the quality and efficiency of health and social care.

**Dr Foster Unit at Imperial College London:**

<http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/>

**Electronic Staff Record (ESR):** a human resources and payroll database system currently used by the NHS.

**Friends and Family Test:** a single question survey which asks patients whether they would recommend the NHS service they have received to friends and family who need similar treatment or care.

**Health and Social Care Information Centre (HSCIC):** England's central, authoritative source of health and social care information.

**Hospital Episode Statistics (HES):** data warehouse containing details of all admissions, outpatient appointments and A&E attendances at NHS hospitals in England. This data is collected during a patient's time at hospital and is submitted to allow hospitals to be paid for the care they deliver.

**MONITOR:** the sector regulator for health services in England with the role of protecting and promoting the interests of patients by ensuring that the whole sector works for their benefit.

**National Reporting and Learning System (NRLS):** a central database of patient safety incident reports.

**NHS Cancer Plan:**

[http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyandGuidance/DH\\_4009609](http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyandGuidance/DH_4009609)

**NHS constitution:** created to protect the NHS and make sure it will always do the things it was set up to do in 1948 – to provide high-quality healthcare that's free and for everyone. [www.nhs.uk/choiceintheNHS/Rightsandpledges/NHSConstitution/Documents/2013/the-nhs-constitution-for-england-2013.pdf](http://www.nhs.uk/choiceintheNHS/Rightsandpledges/NHSConstitution/Documents/2013/the-nhs-constitution-for-england-2013.pdf)

**NHS England:** oversees the budget, planning, delivery and day-to-day operation of the NHS in England as set out in the Health and Social Care Act 2012.

**NHS Inpatient Survey:** this survey looked at the experiences of people over the age of 16 who were admitted to an NHS hospital over the year and stayed at least one night.

**NHS A&E Survey:** this survey looked at people over the age of 16 who attended a major Accident and Emergency Department(s) within the trust

**NHS Staff Survey:** this is an annual survey and is recognised as an important way of ensuring that the views of staff working in the NHS inform local improvements and input in to local and national assessments of quality, safety, and delivery of the NHS Constitution.

**NHS Trust Development Authority (NHS TDA):** manages the process of NHS Hospitals becoming foundation trusts and to performance manage those hospital trusts that remain directly accountable to the NHS.

**Patient-led assessments of the care environment (PLACE):** the new system for assessing the quality of the patient environment, replacing the old Patient Environment Action Team (PEAT) inspections.

**Patient Reported Outcome Measures (PROMs):** measures health gain in patients undergoing hip replacement, knee replacement, varicose vein and groin hernia surgery in England, based on responses to questionnaires before and after surgery

**Secondary Uses Service (SUS):** single, comprehensive repository for healthcare data in England. When a patient or service user is treated or cared for, information is collected and stored.

**Share your experience:** if you have experienced poor care, or know that poor care is being provided somewhere you can report it to the CQC, anonymously if you wish. You can also tell us when you feel you have received good care.

**The Sentinel Stroke National Audit Programme (SSNAP):** aims to improve the quality of stroke care by auditing stroke services against evidence based standards. It will build on the work of the National Sentinel Stroke Audit (NSSA) and the Stroke Improvement National Audit Programme (SINAP)

**Summary Hospital-level Mortality Indicator (SHMI):** an indicator which reports on mortality at trust level across the NHS in England

## **Appendix 1: Detailed specifications for the HSMR and deaths in low-risk diagnosis groups**

The following pages are reproduced from information received from Dr Foster Intelligence on the detailed specifications for Hospital Standardised Mortality Ratio (HSMR) and deaths in low-risk diagnosis groups.

| <b>Hospital Standardised Mortality Ratio (HSMR)</b>  |
|--|
| <p><b>Metric</b></p> <p>The ratio of the observed number of in-hospital deaths with a Hospital Standardised Mortality Ratio (HSMR) diagnosis to the expected number of deaths, multiplied by 100, at trust level.</p>  |
| <p><b>Denominator</b></p> <p>Spells with a primary dominant diagnosis of any of the 56 CCS groups that comprise the HSMR basket (see Appendix A for the list of CCS diagnosis groups within the HSMR basket), linked into superspells<sup>1</sup>.</p>   |
| <p><b>Observed</b></p> <p>Denominator superspells with method of discharge as death (DISMETH=4,5).</p> <p>Deaths are assigned to every provider within the superspell.</p>   |
| <p><b>Expected</b></p> <p>Expected number of in-hospital deaths derived from logistic regression, adjusting for factors to indirectly standardise for differences in case-mix.</p>   |
| <p><b>Data Sources</b></p> <p>Hospital Episode Statistics for the period July 2013 – June 2014.</p>  |
| <p><b>Statistical methods</b></p> <p>Logistic Regression is used to calculate the expected number of in-hospital deaths. To indirectly standardise for differences in patient case-mix, the model is adjusted for the following factors:</p> <ul style="list-style-type: none"> <li>○ Sex</li> <li>○ Age on admission (in five year bands up to 90+)</li> <li>○ Interactions between age on admission (in five year bands up to 90+) and Charlson co-morbidity score</li> <li>○ Admission method (non-elective or elective)</li> <li>○ Socio-economic deprivation quintile of the area of residence of the patient (based on the Carstairs Index)</li> <li>○ Diagnosis/procedure subgroup</li> <li>○ Co-morbidities (based on Charlson score)</li> <li>○ Number of previous emergency admissions</li> <li>○ Year of discharge (rolling 12 month)</li> <li>○ Palliative care (if any episode in the spell has the treatment function code 315 or contains ICD10 code Z515 in any of the diagnoses fields)</li> <li>○ Month of admission</li> <li>○ Source of admission</li> </ul> |

- **Relative Risk:** The ratio is calculated by dividing the actual number of deaths by the expected number and multiplying the figure by 100. It is expressed as a relative risk, where a risk rating of 100 represents the national average. If the trust has an HSMR of 100, that means that the number of patients who died was exactly as it would be expected taking into account the standardisation factors. An HSMR above 100 means more patients died than would be expected; one below 100 means that fewer than expected died.
- **Control Limits:** Control limits tell us the range of values which are consistent with random or chance variation. Data points falling within the control limits are consistent with random or chance variation and are said to display 'common-cause variation'; for data points falling outside the control limits, chance is an unlikely explanation and hence they are said to display 'special-cause variation' – that is, where the trust's rate diverges significantly from the national rate.
- Data points falling above the upper 99.8% Poisson control limit are said to be significantly 'higher than expected', data points falling below the lower 99.8% Poisson control limit are said to be significantly 'lower than expected', data points falling between the lower 99.8% Poisson control limit and the upper 99.8% Poisson control limit are said to be 'within expected range'.

## Notes

The HSMR basket of CCS groups accounts for approximately 80% of all in-hospital deaths in England. See 'HSMR Toolkit' for full methodological detail.

<sup>1</sup> Superspell: a group of spells linked by transfer

## Deaths in Low-Risk Diagnosis Groups (PSI)

### Metric

Deaths per 1000 spells for conditions normally associated with a very low rate of mortality.

### Denominator

Spells with a primary diagnosis associated with a low mortality diagnosis group where the mortality rate has been shown to be consistently below 0.5% (for the list of Low Mortality CCS groups see Appendix E).

### Exclusions:

- Spells with a diagnosis code for trauma, immunocompromised state, or cancer in any diagnosis field
- Admission age under 19 (ages 18 and under)
- Spells with an ICD10 code R296 ('Tendency to fall, not elsewhere classified') in any position
- See Appendix B: Immunocompromised state

- See Appendix C: Cancer codes
- See Appendix D: Trauma codes

### **Numerator**

Denominator spells with method of discharge as death.

*DISMETH:*

4 Died

### **Data Source**

Hospital Episode Statistics for the period July 2013 – June 2014.

### **Statistical methods**

- To interpret the performance of a trust on a crude rate indicator, the data point is compared against the national crude rate.
- Control Limits: Control limits tell us the range of values which are consistent with random or chance variation. Data points falling within the control limits are consistent with random or chance variation and are said to display 'common-cause variation'; for data points falling outside the control limits, chance is an unlikely explanation and hence they are said to display 'special- cause variation' – that is, where the trust's rate diverges significantly from the national rate.
- Data points falling above the upper 99.8% binomial control limit are said to be significantly 'higher than expected', data points falling below the lower 99.8% binomial control limit are said to be significantly 'lower than expected', data points falling between the lower 99.8% binomial control limit and the upper 99.8% binomial control limit are said to be 'within expected range'.

| <b>HSMR for Emergency Admissions (Weekday)</b>  |
|---|
| <p><b>Metric</b></p> <p>The ratio of the observed number of in-hospital deaths following weekday emergency admissions with a Hospital Standardised Mortality Ratio (HSMR) diagnosis to the expected number of deaths, multiplied by 100, at trust level.</p>  |
| <p><b>Denominator</b></p> <p>Emergency spells with a primary dominant diagnosis of any of the 56 CCS groups that comprise the HSMR basket (see Appendix A for the list of CCS diagnosis groups within the HSMR basket) and an emergency admission on Monday, Tuesday, Wednesday, Thursday, or Friday, linked into superspells<sup>1</sup>.</p> <p>Emergency admissions are defined using the following ADMIMETH codes:</p> <ul style="list-style-type: none"> <li>21      Emergency: via Accident and Emergency (A&amp;E) services, including the casualty department of the provider</li> <li>22      Emergency: via general practitioner (GP)</li> <li>23      Emergency: via Bed Bureau, including the Central Bureau</li> <li>24      Emergency: via consultant outpatient clinic</li> <li>28      Emergency: other means, including patients who arrive via the A&amp;E department of another healthcare provider</li> </ul> |
| <p><b>Observed</b></p> <p>Denominator superspells with method of discharge as death (DISMETH=4,5).<br/>Deaths are assigned to every provider within the superspell.</p>   |
| <p><b>Expected</b></p> <p>The expected number of in-hospital deaths derived from logistic regression, adjusting for factors to indirectly standardise for differences in case-mix.</p>  |
| <p><b>Data Source</b></p> <p>Hospital Episode Statistics for the period July 2013 – June 2014.</p>  |

## Statistical methods

Logistic Regression is used to calculate the expected number of in-hospital deaths. To indirectly standardise for differences in patient case-mix, the model is adjusted for the following factors based on ten years of data from July 2003:

- Sex
  - Age on admission (in five year bands up to 90+)
  - Interactions between age on admission (in five year bands up to 90+) and Charlson co-morbidity score
  - Admission method (non-elective or elective)
  - Socio-economic deprivation quintile of the area of residence of the patient (based on the Carstairs Index)
  - Diagnosis/procedure subgroup
  - Co-morbidities (based on Charlson score)
  - Number of previous emergency admissions
  - Year of discharge (rolling 12 month)
  - Palliative care (if any episode in the spell has the treatment function code 315 or contains ICD10 code Z515 in any of the diagnoses fields)
  - Month of admission
  - Source of admission
- **Relative Risk:** The ratio is calculated by dividing the actual number of deaths by the expected number and multiplying the figure by 100. It is expressed as a relative risk, where a risk rating of 100 represents the national average. If the trust has an HSMR of 100, that means that the number of patients who died was exactly as it would be expected taking into account the standardisation factors. An HSMR above 100 means more patients died than would be expected; one below 100 means that fewer than expected died.
  - **Control Limits:** Control limits tell us the range of values which are consistent with random or chance variation. Data points falling within the control limits are consistent with random or chance variation and are said to display 'common-cause variation'; for data points falling outside the control limits, chance is an unlikely explanation and hence they are said to display 'special- cause variation' – that is, where the trust's rate diverges significantly from the national rate.

<sup>1</sup> Superspell: a group of spells linked by transfer

## Notes

The HSMR basket of CCS groups accounts for approximately 80% of all in-hospital deaths in England. See 'HSMR Toolkit' for full methodological detail.



| <b>HSMR for Emergency Admissions (Weekend)</b>  |
|---|
| <p><b>Metric</b></p> <p>The ratio of the observed number of in-hospital deaths following weekend emergency admissions with a Hospital Standardised Mortality Ratio (HSMR) diagnosis to the expected number of deaths, multiplied by 100, at trust level.</p>  |
| <p><b>Denominator</b></p> <p>Emergency spells with a primary dominant diagnosis of any of the 56 CCS groups that comprise the HSMR basket (see Appendix A for the list of CCS diagnosis groups within the HSMR basket) and an emergency admission on Saturday or Sunday, linked into superspells<sup>1</sup>.</p> <p>Emergency admissions are defined using the following ADMIMETH codes:</p> <ul style="list-style-type: none"> <li>21 Emergency: via Accident and Emergency (A&amp;E) services, including the casualty department of the provider</li> <li>22 Emergency: via general practitioner (GP)</li> <li>23 Emergency: via Bed Bureau, including the Central Bureau</li> <li>24 Emergency: via consultant outpatient clinic</li> <li>28 Emergency: other means, including patients who arrive via the A&amp;E department of another healthcare provider</li> </ul> |
| <p><b>Observed</b></p> <p>Denominator superspells with method of discharge as death (DISMETH=4,5).</p> <p>Deaths are assigned to every provider within the superspell.</p>  |
| <p><b>Expected</b></p> <p>The expected number of in-hospital deaths derived from logistic regression, adjusting for factors to indirectly standardise for differences in case-mix.</p>  |
| <p><b>Data Source</b></p> <p>Hospital Episode Statistics for the period July 2013 – June 2014.</p>  |
| <p><b>Statistical methods</b></p> <p>Logistic Regression is used to calculate the expected number of in-hospital deaths. To indirectly standardise for differences in patient case-mix, the model is adjusted for the following factors based on ten years from July 2003:</p>  |

<sup>1</sup> Superspell: a group of spells linked by transfer

- Sex
  - Age on admission (in five year bands up to 90+)
  - Interactions between age on admission (in five year bands up to 90+) and Charlson co-morbidity score
  - Admission method (non-elective or elective)
  - Socio-economic deprivation quintile of the area of residence of the patient (based on the Carstairs Index)
  - Diagnosis/procedure subgroup
  - Co-morbidities (based on Charlson score)
  - Number of previous emergency admissions
  - Year of discharge (rolling 12 month)
  - Palliative care (if any episode in the spell has the treatment function code 315 or contains ICD10 code Z515 in any of the diagnoses fields)
  - Month of admission
  - Source of admission
- **Relative Risk:** The ratio is calculated by dividing the actual number of deaths by the expected number and multiplying the figure by 100. It is expressed as a relative risk, where a risk rating of 100 represents the national average. If the trust has an HSMR of 100, that means that the number of patients who died was exactly as it would be expected taking into account the standardisation factors. An HSMR above 100 means more patients died than would be expected; one below 100 means that fewer than expected died.
  - **Control Limits:** Control limits tell us the range of values which are consistent with random or chance variation. Data points falling within the control limits are consistent with random or chance variation and are said to display 'common-cause variation'; for data points falling outside the control limits, chance is an unlikely explanation and hence they are said to display 'special-cause variation' – that is, where the trust's rate diverges significantly from the national rate.
  - Data points falling above the upper 99.8% Poisson control limit are said to be significantly 'higher than expected', data points falling below the lower 99.8% Poisson control limit are said to be significantly 'lower than expected', data points falling between the lower 99.8% Poisson control limit and the upper 99.8% Poisson control limit are said to be 'within expected range'.

## Notes

The HSMR basket of CCS groups accounts for approximately 80% of all in-hospital deaths in England. See 'HSMR Toolkit' for full methodological detail.

## Appendix 1A: HSMR diagnosis groups

| CCS Number | CCS Group Name                                    |
|------------|---|
| 2          | Septicemia (except in labour)                     |
| 12         | Cancer of oesophagus                              |
| 13         | Cancer of stomach                                 |
| 14         | Cancer of colon                                   |
| 15         | Cancer of rectum and anus                         |
| 17         | Cancer of pancreas                                |
| 19         | Cancer of bronchus, lung                          |
| 24         | Cancer of breast                                  |
| 27         | Cancer of ovary                                   |
| 29         | Cancer of prostate                                |
| 32         | Cancer of bladder                                 |
| 38         | Non-Hodgkin's lymphoma                            |
| 39         | Leukaemias  |
| 42         | Secondary malignancies                            |
| 43         | Malignant neoplasm without specification of site  |
| 55         | Fluid and electrolyte disorders                   |
| 59         | Deficiency and other anaemia                      |
| 68         | Senility and organic mental disorders             |
| 100        | Acute myocardial infarction                       |
| 101        | Coronary atherosclerosis and other heart disease  |
| 103        | Pulmonary heart disease                           |
| 106        | Cardiac dysrhythmias                              |
| 107        | Cardiac arrest and ventricular fibrillation       |
| 108        | Congestive heart failure, nonhypertensive         |
| 109        | Acute cerebrovascular disease                     |
| 114        | Peripheral and visceral atherosclerosis           |
| 115        | Aortic, peripheral, and visceral artery aneurysms |
| 117        | Other circulatory disease                         |
| 122        | Pneumonia   |
| 125        | Acute bronchitis                                  |

|     |  |
|-----|--|
| 127 | Chronic obstructive pulmonary disease and bronchiectasis |
| 129 | Aspiration pneumonitis, food/vomitus                     |
| 130 | Pleurisy, pneumothorax, pulmonary collapse               |
| 131 | Respiratory failure, insufficiency, arrest (adult)       |
| 133 | Other lower respiratory disease                          |
| 134 | Other upper respiratory disease                          |
| 145 | Intestinal obstruction without hernia                    |
| 148 | Peritonitis and intestinal abscess                       |
| 149 | Biliary tract disease                                    |
| 150 | Liver disease, alcohol-related                           |
| 151 | Other liver diseases                                     |
| 153 | Gastrointestinal haemorrhage                             |
| 154 | Noninfectious gastroenteritis                            |
| 155 | Other gastrointestinal disorders                         |
| 157 | Acute and unspecified renal failure                      |
| 158 | Chronic renal failure                                    |
| 159 | Urinary tract infections                                 |
| 197 | Skin and subcutaneous tissue infections                  |
| 199 | Chronic ulcer of skin                                    |
| 224 | Other perinatal conditions                               |
| 226 | Fracture of neck of femur (hip)                          |
| 231 | Other fractures  |
| 233 | Intracranial injury                                      |
| 237 | Complication of device, implant or graft                 |
| 245 | Syncope  |
| 251 | Abdominal pain   |

## Appendix 1B: Immunocompromised States

| ICD code | Description   |
|----------|---|
| B24      | Unspecified human immunodeficiency virus [HIV] disease                                  |
| B59      | Pneumocystosis  |
| D70      | Agranulocytosis   |
| D71      | Functional disorders of polymorphonuclear neutrophils                                   |
| D720     | Genetic anomalies of leukocytes   |
| D800     | Hereditary hypogammaglobulinaemia   |
| D801     | Nonfamilial hypogammaglobulinaemia  |
| D802     | Selective deficiency of immunoglobulin A [IgA]  |
| D803     | Selective deficiency of immunoglobulin G [IgG] subclasses                               |
| D804     | Selective deficiency of immunoglobulin M [IgM]  |
| D805     | Immunodeficiency with increased immunoglobulin M [IgM]                                  |
| D808     | Other immunodeficiencies with predominantly antibody defects                            |
| D814     | Nezelof's syndrome  |
| D819     | Combined immunodeficiency, unspecified  |
| D820     | Wiskott-Aldrich syndrome  |
| D821     | Di George's syndrome  |
| D830     | Common variable immunodeficiencies with predominant abnormal B-cell number and function |
| D831     | Common variable immunodeficiencies predominant immunoregulatory T-cell disorder         |
| D838     | Other common variable immunodeficiencies  |
| D849     | immunodeficiency, unspecified   |
| D898     | Other specified disorders involving the immune mechanism NEC                            |
| D899     | Disorder involving the immune mechanism, unspecified                                    |
| E40      | Kwashiorkor   |
| E41      | Nutritional marasmus  |

|      |   |
|------|---|
| E43  | Unspecified severe protein-energy malnutrition                  |
| I120 | Hypertensive renal disease with renal failure                   |
| I131 | Hypertensive heart and renal disease with renal failure         |
| I132 | Hyper heart and renal disease both (cong) heart and renal fail  |
| K912 | Postsurgical malabsorption, not elsewhere classified            |
| M359 | Systemic involvement of connective tissue, unspecified          |
| N18  | Chronic renal failure (no exact ICD10 match possible)           |
| T860 | Bone-marrow transplant rejection                                |
| T861 | Kidney transplant failure and rejection                         |
| T862 | Heart transplant failure and rejection                          |
| T864 | Liver transplant failure and rejection                          |
| T868 | Failure and reject of other transplanted organs and tissues     |
| T869 | Failure and reject of unspecified transplanted organ and tissue |
| Z452 | Adjustment and management of vascular access device             |
| Z491 | Extracorporeal dialysis   |
| Z940 | Kidney transplant status  |
| Z941 | Heart transplant status   |
| Z942 | Lung transplant status  |
| Z944 | Liver transplant status   |
| Z948 | Other transplanted organ and tissue status                      |
| Z992 | Dependence on renal dialysis                                    |

## Appendix 1C: Cancer code

| ICD Code | Description  |
|----------|--|
| B21      | Human immunodeficiency virus disease resulting in malignant neoplasms                            |
| C00-C97  | Malignant Neoplasms  |
| D00-D09  | Carcinomata-in-situ  |
| D46      | Myelodysplastic syndromes  |
| D47      | Other neoplasms of uncertain or unknown behaviour of lymphoid, haematopoietic and related tissue |
| D48      | Neoplasm of uncertain or unknown behaviour of other and unspecified sites                        |
| M724     | Pseudosarcomatous fibromatosis   |
| Z08      | Follow-up examination after treatment for malignant neoplasm                                     |
| Z12      | Special screening examination for neoplasms  |
| Z511     | Chemotherapy session for neoplasm  |
| Z85      | Personal history of malignant neoplasm   |

## Appendix 1D: Trauma diagnosis codes

| ICD10 code | Description  |
|------------|--|
| S011       | Open wound of eyelid and periocular area                               |
| S020       | Fracture of vault of skull   |
| S021       | Fracture of base of skull  |
| S022       | Fracture of nasal bones  |
| S023       | Fracture of orbital floor  |
| S024       | Fracture of malar and maxillary bones                                  |
| S026       | Fracture of mandible   |
| S027       | Multiple fractures involving skull and facial bones                    |
| S028       | Fractures of other skull and facial bones                              |
| S029       | Fracture of skull and facial bones, part unspecified                   |
| S030       | Dislocation of jaw   |
| S052       | Ocular laceration and rupture with prolapse or loss intraocular tissue |
| S053       | Ocular laceration without prolapse or loss of intraocular tissue       |
| S054       | Penetrating wound of orbit with or without foreign body                |
| S055       | Penetrating wound of eyeball with foreign body                         |
| S057       | Avulsion of eye  |
| S058       | Other injuries of eye and orbit  |
| S059       | Injury of eye and orbit, part unspecified                              |
| S060       | Concussion   |
| S062       | Diffuse brain injury   |
| S062       | Diffuse brain injury   |
| S064       | Epidural haemorrhage   |
| S064       | Epidural haemorrhage   |
| S065       | Traumatic subdural haemorrhage   |
| S066       | Traumatic subarachnoid haemorrhage                                     |
| S068       | Other intracranial injuries  |
| S068       | Other intracranial injuries  |
| S070       | Crushing injury of face  |
| S099       | Unspecified injury of head   |
| S120       | Fracture of first cervical vertebra                                    |
| S121       | Fracture of second cervical vertebra                                   |
| S127       | Multiple fractures of cervical spine                                   |



|      |  |
|------|--|
| S128 | Fracture of other parts of neck                        |
| S129 | Fracture of neck, part unspecified                     |
| S131 | Dislocation of cervical vertebra                       |
| S133 | Multiple dislocations of neck                          |
| S141 | Other and unspecified injuries of cervical spinal cord |
| S142 | Injury of nerve root of cervical spine                 |
| S143 | Injury of brachial plexus                              |
| S150 | Injury of carotid artery                               |
| S152 | Injury of external jugular vein                        |
| S153 | Injury of internal jugular vein                        |
| S157 | Injury of multiple blood vessels at neck level         |

| ICD10 code | Description  |
|------------|--|
| S158       | Injury of other blood vessels at neck level            |
| S159       | Injury of unspecified blood vessel at neck level       |
| S179       | Crushing injury of neck, part unspecified              |
| S220       | Fracture of thoracic vertebra                          |
| S222       | Fracture of sternum                                    |
| S223       | Fracture of rib  |
| S224       | Multiple fractures of ribs                             |
| S225       | Flail chest  |
| S231       | Dislocation of thoracic vertebra                       |
| S241       | Other and unspecified injuries of thoracic spinal cord |
| S242       | Injury of nerve root of thoracic spine                 |
| S250       | Injury of thoracic aorta                               |
| S251       | Injury of innominate or subclavian artery              |
| S252       | Injury of superior vena cava                           |
| S253       | Injury of innominate or subclavian vein                |
| S254       | Injury of pulmonary blood vessels                      |
| S255       | Injury of intercostal blood vessels                    |
| S257       | Injury of multiple blood vessels of thorax             |
| S258       | Injury of other blood vessels of thorax                |
| S259       | Injury of unspecified blood vessel of thorax           |
| S268       | Other injuries of heart                                |
| S269       | Injury of heart, unspecified                           |
| S270       | Traumatic pneumothorax                                 |
| S271       | Traumatic haemothorax                                  |
| S272       | Traumatic haemopneumothorax                            |
| S273       | Other injuries of lung                                 |
| S274       | Injury of bronchus                                     |
| S278       | Injury of other specified intrathoracic organs         |
| S278       | Injury of other specified intrathoracic organs         |
| S279       | Injury of unspecified intrathoracic organ              |
| S320       | Fracture of lumbar vertebra                            |
| S321       | Fracture of sacrum                                     |
| S323       | Fracture of ilium                                      |

|      |  |
|------|--|
| S324 | Fracture of acetabulum   |
| S325 | Fracture of pubis  |
| S328 | Fracture of other and unspecified parts of lumbar spine and pelvis |
| S331 | Dislocation of lumbar vertebra                                     |
| S332 | Dislocation of sacroiliac and sacrococcygeal joint                 |
| S341 | Other injury of lumbar spinal cord                                 |
| S342 | Injury of nerve root of lumbar and sacral spine                    |
| S343 | Injury of cauda equina   |
| S344 | Injury of lumbosacral plexus                                       |
| S350 | Injury of abdominal aorta  |
| S351 | Injury of inferior vena cava                                       |
| S352 | Injury of coeliac or mesenteric artery                             |

| ICD10 code | Description   |
|------------|---|
| S353       | Injury of portal or splenic vein  |
| S354       | Injury of renal blood vessels   |
| S355       | Injury of iliac blood vessels   |
| S357       | Injury multi blood vessels abdomen lower back and pelvis level              |
| S358       | Injury other blood vessels abdomen lower back and pelvis level              |
| S359       | Injury of unspecified blood vessel abdomen lower back and pelvis level      |
| S360       | Injury of spleen  |
| S361       | Injury of liver or gallbladder  |
| S362       | Injury of pancreas  |
| S363       | Injury of stomach   |
| S364       | Injury of small intestine   |
| S365       | Injury of colon   |
| S366       | Injury of rectum  |
| S368       | Injury of other intra-abdominal organs                                      |
| S369       | Injury of unspecified intra-abdominal organ                                 |
| S370       | Injury of kidney  |
| S371       | Injury of ureter  |
| S372       | Injury of bladder   |
| S376       | Injury of uterus  |
| S378       | Injury of other pelvic organs   |
| S379       | Injury of unspecified pelvic organ  |
| S380       | Crushing injury of external genital organs                                  |
| S381       | Crush injury of other and unspecified part of abdomen lower back and pelvis |
| S420       | Fracture of clavicle  |
| S421       | Fracture of scapula   |
| S422       | Fracture of upper end of humerus  |
| S423       | Fracture of shaft of humerus  |
| S424       | Fracture of lower end of humerus  |
| S430       | Dislocation of shoulder joint   |
| S431       | Dislocation of acromioclavicular joint                                      |
| S432       | Dislocation of sternoclavicular joint                                       |
| S433       | Dislocation of other and unspecified parts of shoulder girdle               |

|      |   |
|------|---|
| S451 | Injury of brachial artery                     |
| S452 | Injury of axillary or brachial vein           |
| S47  | Crushing injury of shoulder and upper arm     |
| S520 | Fracture of upper end of ulna                 |
| S521 | Fracture of upper end of radius               |
| S522 | Fracture of shaft of ulna                     |
| S523 | Fracture of shaft of radius                   |
| S524 | Fracture of shafts of both ulna and radius    |
| S525 | Fracture of lower end of radius               |
| S526 | Fracture of lower end of both ulna and radius |
| S528 | Fracture of other parts of forearm            |
| S529 | Fracture of forearm, part unspecified         |
| S531 | Dislocation of elbow, unspecified             |

| ICD10 code | Description  |
|------------|--|
| S552       | Injury of vein at forearm level                            |
| S570       | Crushing injury of elbow                                   |
| S579       | Crushing injury of forearm, part unspecified               |
| S580       | Traumatic amputation at elbow level                        |
| S581       | Traumatic amputation at level between elbow and wrist      |
| S620       | Fracture of navicular [scaphoid] bone of hand              |
| S621       | Fracture of other carpal bone(s)                           |
| S622       | Fracture of first metacarpal bone                          |
| S623       | Fracture of other metacarpal bone                          |
| S624       | Multiple fractures of metacarpal bones                     |
| S628       | Fracture of other and unspecified parts of wrist and hand  |
| S630       | Dislocation of wrist                                       |
| S631       | Dislocation of finger                                      |
| S652       | Injury of superficial palmar arch                          |
| S655       | Injury of blood vessel(s) of other finger                  |
| S670       | Crushing injury of thumb and other finger(s)               |
| S678       | Crush injury other and unspecified parts of wrist and hand |
| S710       | Open wound of hip  |
| S720       | Fracture of neck of femur                                  |
| S721       | Pertrochanteric fracture                                   |
| S722       | Subtrochanteric fracture                                   |
| S723       | Fracture of shaft of femur                                 |
| S724       | Fracture of lower end of femur                             |
| S729       | Fracture of femur, part unspecified                        |
| S730       | Dislocation of hip   |
| S750       | Injury of femoral artery                                   |
| S751       | Injury of femoral vein at hip and thigh level              |
| S752       | Injury of greater saphenous vein at hip and thigh level    |
| S772       | Crushing injury of hip with thigh                          |
| S789       | Traumatic amputation of hip and thigh, level unspecified   |
| S810       | Open wound of knee   |
| S820       | Fracture of patella  |
| S821       | Fracture of upper end of tibia                             |

|      |   |
|------|---|
| S822 | Fracture of shaft of tibia                    |
| S824 | Fracture of fibula alone                      |
| S825 | Fracture of medial malleolus                  |
| S826 | Fracture of lateral malleolus                 |
| S828 | Fractures of other parts of lower leg         |
| S830 | Dislocation of patella                        |
| S831 | Dislocation of knee                           |
| S832 | Tear of meniscus, current                     |
| S833 | Tear of articular cartilage of knee, current  |
| S850 | Injury of popliteal artery                    |
| S851 | Injury of (anterior)(posterior) tibial artery |
| S855 | Injury of popliteal vein                      |

| ICD10 code | Description   |
|------------|---|
| S858       | Injury of other blood vessels at lower leg level                    |
| S859       | Injury of unspecified blood vessel at lower leg level               |
| S870       | Crushing injury of knee   |
| S878       | Crushing injury of other and unspecified parts of lower leg         |
| S880       | Traumatic amputation at knee level                                  |
| S881       | Traumatic amputation at level between knee and ankle                |
| S889       | Traumatic amputation of lower leg, level unspecified                |
| S913       | Open wound of other parts of foot                                   |
| S920       | Fracture of calcaneus   |
| S921       | Fracture of talus   |
| S922       | Fracture of other tarsal bone(s)                                    |
| S923       | Fracture of metatarsal bone   |
| S929       | Fracture of foot, unspecified                                       |
| S930       | Dislocation of ankle joint  |
| S931       | Dislocation of toe(s)   |
| S933       | Dislocation of other and unspecified parts of foot                  |
| S951       | Injury of plantar artery of foot                                    |
| S958       | Injury of other blood vessels at ankle and foot level               |
| S959       | Injury of unspecified blood vessel at ankle and foot level          |
| S970       | Crushing injury of ankle  |
| S971       | Crushing injury of toe(s)   |
| S978       | Crushing injury of other parts of ankle and foot                    |
| S980       | Traumatic amputation of foot at ankle level                         |
| T012       | Open wounds involving multiple regions of upper limb(s)             |
| T021       | Fractures involving thorax with lower back and pelvis               |
| T024       | Fractures involving multiple regions of both upper limbs            |
| T025       | Fractures involving multiple regions of both lower limbs            |
| T039       | Multiple dislocations, sprains and strains, unspecified             |
| T041       | Crushing injuries involving thorax with abdomen lower back & pelvis |
| T042       | Crushing injuries involving multiple region of upper limb(s)        |
| T043       | Crushing injuries involving multiple region of lower limb(s)        |
| T049       | Multiple crushing injuries, unspecified                             |
| T052       | Traumatic amputation of both arms [any level]                       |



|      |  |
|------|--|
| T053 | Traumatic amputation of both feet                                  |
| T055 | Traumatic amputation of both legs [any level]                      |
| T061 | Injured nerves and spinal cord involving other multi body regions  |
| T080 | Fracture of spine, level unspecified                               |
| T081 | Fracture of spine, level unspecified                               |
| T092 | Dislocation sprain & strain unspecified joint & ligament trunk     |
| T093 | Injury of spinal cord, level unspecified                           |
| T094 | Injury of unspecified nerve spinal nerve root & plexus trunk       |
| T100 | Fracture of upper limb, level unspecified                          |
| T101 | Fracture of upper limb, level unspecified                          |
| T114 | Injury of unspecified blood vessel of upper limb level unspecified |
| T116 | Traumatic amputation of upper limb, level unspecified              |

| ICD10 code | Description   |
|------------|---|
| T120       | Fracture of lower limb, level unspecified                           |
| T121       | Fracture of lower limb, level unspecified                           |
| T131       | Open wound of lower limb, level unspecified                         |
| T142       | Fracture of unspecified body region                                 |
| T143       | Dislocation, sprain and strain of unspecified body region           |
| T145       | Injury of blood vessel(s) of unspecified body region                |
| T147       | Crush injury and traumatic amputation of unspecified body region    |
| T148       | Other injuries of unspecified body region                           |
| T200       | Burn of unspecified degree of head and neck                         |
| T201       | Burn of first degree of head and neck                               |
| T202       | Burn of second degree of head and neck                              |
| T203       | Burn of third degree of head and neck                               |
| T210       | Burn of unspecified degree of trunk                                 |
| T211       | Burn of first degree of trunk                                       |
| T212       | Burn of second degree of trunk                                      |
| T213       | Burn of third degree of trunk                                       |
| T220       | Burn unspecified degree should and upper limb except wrist and hand |
| T221       | Burn first degree of shoulder and upper limb except wrist and hand  |
| T222       | Burn sec degree of shoulder and upper limb except wrist/hand        |
| T223       | Burn third degree shoulder and upper limb except wrist and hand     |
| T230       | Burn of unspecified degree of wrist and hand                        |
| T260       | Burn of eyelid and periocular area                                  |
| T261       | Burn of cornea and conjunctival sac                                 |
| T262       | Burn with resulting rupture and destruction of eyeball              |
| T264       | Burn of eye and adnexa, part unspecified                            |
| T790       | Air embolism (traumatic)  |
| T791       | Fat embolism (traumatic)  |
| T792       | Traumatic secondary and recurrent haemorrhage                       |
| T793       | Post-traumatic wound infection, not elsewhere classified            |
| T794       | Traumatic shock   |
| T795       | Traumatic anuria  |
| T796       | Traumatic ischaemia of muscle                                       |
| T797       | Traumatic subcutaneous emphysema                                    |
| T798       | Other early complications of trauma                                 |

## Appendix 1E: Low mortality CCS groups

| CCS diagnosis group code | CCS diagnosis group  | Description   |
|--------------------------|--|---|
| 7                        | Viral infection  | A70,A82,A881,A90,A91,A920,A921,A923,A924,A928,A929,A93,A94,A950,A951,A959,A96,A98,A99,B000,B001,B002,B008,B009,B018,B019,B022,B027,B028,B029,B03,B04,B059,B068,B069,B07,B08,B09,B258,B259,B260,B268,B269,B27,B330,B331,B333,B338,B34,B97,P352,U04 |
| 10                       | Immunizations and screening for infectious disease   | R761,R762,Z030,Z11,Z20,Z22-Z27  |
| 46                       | Benign neoplasm of uterus  | D25,D26   |
| 47                       | Other and unspecified benign neoplasm  | D10-D24,D27-D36   |
| 53                       | Disorders of lipid metabolism  | E75,E78   |
| 57                       | Immunity disorders   | D80-D84,D89   |
| 61                       | Sickle cell anaemia  | D57   |
| 64                       | Other haematologic conditions  | D730-D732,D734,D735,D738,D739,D74,D75,D77,R71   |
| 66                       | Alcohol-related mental disorders   | F10,G312,R780   |
| 67                       | Substance-related mental disorders   | F11-F19,F55,R781-R784   |
| 69                       | Affective disorders  | F30-F34,F38,F39,F412  |
| 72                       | Anxiety, somatoform, dissociative, and personality disorders   | F40,F410,F411,F413,F418,F419,F42-F45,F48,F51,F60-F63,F68,F69,R451   |
| 74                       | Other mental conditions  | F50,F52,F54,F59,F64-F66,F80-F83,F88,F89,F95,F99,R44,R457  |
| 75                       | Personal history of mental disorder, mental and behavioural problems, observation and screening for mental condition | Z032,Z133,Z865  |
| 80                       | Multiple sclerosis   | G35   |
| 84                       | Headache, including migraine   | G43,G44,R51   |
| 86                       | Cataract   | H25,H26,H280-H282   |
| 87                       | Retinal detachments, defects, vascular occlusion, and retinopathy  | G453,H33-H36  |

|    |   |  |
|----|---|--|
| 88 | Glaucoma  | H40,H420,H428  |
| 89 | Blindness and vision defects                    | H52-H54,H581   |
| 90 | Inflammation, infection of eye                  | A211,A71,A74,B005,B023,B058,B30,B580,B601,B691,B872,B940,H000,H01,H03,H040,H043,H044,H050,H051,H061,H10,H13,H150,H151,H161-H163,H168,H169,H190-H193,H20,H220,H221,H30,H320,H440,H441,H451,H46,H481 |
| 91 | Other eye disorders                             | H001,H02,H041,H042,H045-H049,H052-H060,H062,H063,H11,H158-H160,H164,H17,H18,H198,H21,H228,H27,H288,H31,H328,H43,H442-H450,H458,H47,H480,H488,H49-H51,H55,H57,H580,H588                             |
| 92 | Otitis media and related conditions             | B053,H65-H70,H72,H73,H740-H743,H75,H80   |
| 93 | Conditions associated with dizziness or vertigo | H81-H83,R42  |
| 94 | Other ear and sense organ disorders             | B874,H60-H62,H71,H744,H748,H749,H90-H93,H940,H948  |
| 95 | Other nervous system disorders                  | G08,G360,G368-G372,G375-G379,G47,G50-G62,G630-G638,G64,G70-G73,G92,G930,G932,G934,G935,G938,G939,G94-G96,G98,G99,R20,R25,R260,R261,R268,R27,R290,R292,R43,R47,R48,R83,R90,R930,R940,R941           |

|     |   |   |
|-----|---|---|
| 98  | Essential hypertension                            | I10   |
| 102 | Nonspecific chest pain                            | R071-R074   |
| 112 | Transient cerebral ischaemia                      | G450-G452,G454,G458,G459  |
| 119 | Varicose veins of lower extremity                 | I83   |
| 120 | Haemorrhoids                                      | I84   |
| 124 | Acute and chronic tonsillitis                     | J03,J35,J36   |
| 126 | Other upper respiratory infections                | A360-A362,A37,B873,J00-J02,J04-J06,J32  |
| 136 | Disorders of teeth and jaw                        | K00-K08,K090-K092,K10   |
| 137 | Diseases of mouth, excluding dental               | A690,A691,K098,K099,K11-K14,R682  |
| 138 | Oesophageal disorders                             | I859,I982,K20-K23   |
| 140 | Gastritis and duodenitis                          | K29   |
| 141 | Other disorders of stomach and duodenum           | K30,K31   |
| 142 | Appendicitis and other appendiceal conditions     | K35-K38   |
| 143 | Abdominal hernia                                  | K40-K46   |
| 144 | Regional enteritis and ulcerative colitis         | K50,K51   |
| 147 | Anal and rectal conditions                        | K594,K60,K61,K620-K624,K626-K629  |
| 160 | Calculus of urinary tract                         | N20,N21,N220,N228,N23   |
| 162 | Other diseases of bladder and urethra             | N31,N32,N338,N350,N358,N359,N36   |
| 163 | Genitourinary symptoms and ill-defined conditions | N02,N391,N393,N394,N398,N399,R30-R36,R39,R80,R820,R821-R823,R825-R829,R934,R944 |
| 164 | Hyperplasia of prostate                           | N40   |
| 165 | Inflammatory conditions of male genital organs    | N41,N431,N45,N482,N486,N49,N51  |

|     |  |   |
|-----|--|---|
| 166 | Other male genital disorders   | N42,N430,N432-<br>N434,N44,N46,N47,N480,N481,N483-<br>N485,N488,              |
| 167 | Nonmalignant breast conditions                                       | N60-N64   |
| 168 | Inflammatory diseases of female pelvic organs                        | A483,N70-N73,N748,N750,N751,N76,N77   |
| 169 | Endometriosis  | N80   |
| 170 | Prolapse of female genital organs                                    | N81   |
| 171 | Menstrual disorders  | N91,N92,N938,N939,N944-N946   |
| 172 | Ovarian cyst   | N830-N832   |
| 173 | Menopausal disorders   | N95   |
| 174 | Female infertility   | N97   |
| 175 | Other female genital disorders                                       | N758,N759,N82,N833-N839,N84-<br>N90,N930,N940-N943,N948,N949,N96,R87          |
| 176 | Contraceptive and procreative management                             | Z30,Z31,Z320,Z35  |
| 177 | Spontaneous abortion   | O03   |
| 178 | Induced abortion   | O04-O07   |
| 179 | Postabortion complications   | O08   |
| 180 | Ectopic pregnancy  | O00   |
| 181 | Other complications of pregnancy                                     | O01,O02,O12,O21,O23,O25,O260-<br>O264,O266-O269,O28,O31,O860-O863,<br>O98,O99 |
| 182 | Haemorrhage during pregnancy, abruption of placenta, placenta previa | O20,O44-O67   |
| 183 | Hypertension complicating pregnancy, childbirth and the puerperium   | O10,O11,O13-O16   |

|     |  |   |
|-----|--|---|
| 184 | Early or threatened labour   | O47   |
| 185 | Prolonged pregnancy  | O48   |
| 186 | Diabetes or abnormal glucose tolerance complicating pregnancy, childbirth, or the puerperium | O24   |
| 187 | Malposition, malpresentation   | O32,O64,O801,O830,O831  |
| 188 | Fetopelvic disproportion, obstruction  | O33,O65,O66   |
| 189 | Previous C-section   | O757  |
| 190 | Foetal distress and abnormal forces of labour  | O363,O62,O63,O68  |
| 191 | Polyhydramnios and other problems of amniotic cavity   | O40-O42,O755,O756   |
| 192 | Umbilical cord complication  | O69   |
| 193 | Trauma to perineum and vulva   | O70   |
| 194 | Forceps delivery   | O81,O841  |
| 195 | Other complications of birth, puerperium affecting management of mother                      | A34,O22,O265,O34,O35,O360-O362,O364-O369,O43,O60,O61,O71-O74,O750-O754,O758,O759,O82,O832-O834,O838,O839,O842,O848,O85,O864,O868,O87,O88,O90-O92,O95-O97                              |
| 196 | Normal pregnancy and/or delivery   | O30,O800,O808,O809,O840,O849,Z321,Z33,Z34,Z37,Z39   |
| 198 | Other inflammatory condition of skin   | L10,L12-L14,L21,L26,L28,L29,L304,L305,L308,L309,L40-L42,L430,L431,L433,L438-L443,L448,L449,L45,L510,L511,L518,L519,L52,L531-L533,L538-L540,L548,L661,L71,L920,L93,L945,L951,L981,L982 |

|     |   |  |
|-----|---|--|
| 200 | Other skin disorders  | L11, L301, L57, L60, L62, L63, L648, L649, L65, L660, L662, L663, L664, L668, L669, L67, L68, L70, L72-L75, L80-L87, L90, L91, L921-L923, L928, L929, L940-L944, L948- L950, L958, L959, L985-L989, L99, R21, R22, R234, R238, R61 |
| 202 | Rheumatoid arthritis and related disease                        | M05, M06, M08, M09, M120   |
| 203 | Osteoarthritis  | M15-M19  |
| 205 | Spondylosis, intervertebral disc disorders, other back problems | M432-M436, M45, M460, M461, M464-M469, M47, M480-M484, M488, M489, M491-M494, M498, M50-M54  |
| 206 | Osteoporosis  | M810-M812, M814-M819, M82  |
| 208 | Acquired foot deformities                                       | M201-M206, M214, M216  |
| 209 | Other acquired deformities                                      | M200, M210-M213, M215, M217-M219, M245, M40, M430, M431, M438, M439, M95   |
| 210 | Systemic lupus erythematosus and connective tissue disorders    | M32-M34, M350, M351, M358-M360   |
| 211 | Other connective tissue disease                                 | M242, M257, M353-M357, M60-M62, M630-M633, M638, M65-M79, R293, R298, R936, R937   |
| 212 | Other bone disease and musculoskeletal deformities              | M41, M42, M840-M842, M848, M849, M85, M870, M88, M89, M906, M908, M91-M94, M99   |
| 225 | Joint disorders and dislocations, trauma-related                | M125, M22, M23, M241, M244, S030-S033, S130-S133, S230-S232, S330-S334, S430-S433, S530-S533, S630-S634, S730, S830-S833, S837, S930-S933, T03, T092, T112, T132, T143, T923, T933   |



|     |   |   |
|-----|---|---|
| 232 | Sprains and strains   | S034,S035,S134-S136,S233-S235,S335-S337,S434-S437,S534,S635-S637,S731,S834-S836,S934-S936   |
| 234 | Crushing injury or internal injury                                    | S04,S07,S090-S092,S097,S142-S146,S15-S17,S19,S242-S246,S25-S29,S342-S348,S35-S37,S380,S381,S39,S44-S47,S49,S54-S57,S59,S64-S67,S69,S74-S77,S79,S84,S85-S87,S89,S94-S97,S99,T04,T062-T065,T094,T147,T903,T914-T919,T924-T929,T934-T938 |
| 236 | Open wounds of extremities  | S411,S51,S58,S61,S68,S711,S781,S789,S81,S88,S91,S98,T012,T013,T016,T050-T056,T111,T116,T131,T136,T920,T930  |
| 241 | Poisoning by psychotropic agents                                      | T40,T420-T427,T43   |
| 242 | Poisoning by other medications and drugs                              | L640,N14,T36-T39,T41,T428,T44-T50,T96   |
| 247 | Lymphadenitis   | I88,L04,R59   |
| 251 | Abdominal pain  | R10   |
| 253 | Allergic reactions  | L20,L22-L25,L27,L300,L302,L432,L50,L512,L530,L55,L56,L58,L59,T780-T784  |
| 254 | Rehabilitation care, fitting of prostheses, and adjustment of devices | Z43-Z46,Z50   |
| 256 | Medical examination/evaluation  | Z00,Z01,Z04,Z10   |
| 257 | Other aftercare   | Z08,Z09,Z42,Z47,Z48,Z54   |
| 258 | Other screening for suspected conditions                              | Z031,Z033-Z039,Z12,Z130-Z132,Z134-Z139,Z36  |

## Appendix 2: AHRQ CCS diagnosis groupings used in mortality and readmissions indicators

This appendix lists the sets of clinically-related diagnosis groupings we have used for some of our mortality and readmissions indicators and the individual clinical classification software (CCS) diagnosis groups that map to each. These groupings were developed by the Agency for Healthcare Research and Quality (AHRQ). A lookup table matching ICD-10 codes to CCS diagnosis groups is available here:

[http://www.hscic.gov.uk/media/9748/Amended-AHRQ-CCS-ICD-10-lookup-table-May13/xls/CCS\\_ICD10\\_lookup\\_table\\_May13.xlsx](http://www.hscic.gov.uk/media/9748/Amended-AHRQ-CCS-ICD-10-lookup-table-May13/xls/CCS_ICD10_lookup_table_May13.xlsx)

### Cardiac-related conditions

| CCS diagnosis group |  |
|---------------------|--|
| 96                  | Heart valve disorders  |
| 97                  | Peri-, endo- and myo-carditis; cardiomyopathy (except that caused by tuberculosis or sexually transmitted disease) |
| 98                  | Essential hypertension   |
| 99                  | Hypertension with complications and secondary hypertension   |
| 100                 | Acute myocardial infarction  |
| 101                 | Coronary atherosclerosis and other heart disease   |
| 102                 | Nonspecific chest pain   |
| 103                 | Pulmonary heart disease  |
| 104                 | Other and ill-defined heart disease  |
| 105                 | Conduction disorders   |
| 106                 | Cardiac dysrhythmias   |
| 107                 | Cardiac arrest and ventricular fibrillation  |
| 108                 | Congestive heart failure; nonhypertensive  |

### Cerebrovascular conditions

| CCS diagnosis group |   |
|---------------------|---|
| 109                 | Acute cerebrovascular disease                 |
| 110                 | Occlusion or stenosis of precerebral arteries |
| 111                 | Other and ill-defined cerebrovascular disease |
| 112                 | Transient cerebral ischemia                   |
| 113                 | Late effects of cerebrovascular disease       |

## Dermatology conditions

| CCS diagnosis group |   |
|---------------------|---|
| <b>197</b>          | Skin and subcutaneous tissue infections |
| <b>198</b>          | Other inflammatory condition of skin    |
| <b>199</b>          | Chronic ulcer of skin                   |
| <b>200</b>          | Other skin disorders                    |
| <b>240</b>          | Burns                                   |

## Endocrinology conditions

| CCS diagnosis group |   |
|---------------------|---|
| <b>48</b>           | Thyroid disorders                                     |
| <b>49</b>           | Diabetes mellitus without complication                |
| <b>50</b>           | Diabetes mellitus with complications                  |
| <b>51</b>           | Other endocrine disorders                             |
| <b>52</b>           | Nutritional deficiencies                              |
| <b>53</b>           | Disorders of lipid metabolism                         |
| <b>54</b>           | Gout and other crystal arthropathies                  |
| <b>55</b>           | Fluid and electrolyte disorders                       |
| <b>58</b>           | Other nutritional; endocrine; and metabolic disorders |

## Gastroenterology and Hepatology conditions

| CCS diagnosis group |   |
|---------------------|---|
| 135                 | Intestinal infection                          |
| 138                 | Oesophageal disorders                         |
| 139                 | Gastro-duodenal ulcer (except haemorrhage)    |
| 140                 | Gastritis and duodenitis                      |
| 141                 | Other disorders of stomach and duodenum       |
| 142                 | Appendicitis and other appendiceal conditions |
| 143                 | Abdominal hernia                              |
| 144                 | Regional enteritis and ulcerative colitis     |
| 145                 | Intestinal obstruction without hernia         |
| 146                 | Diverticulosis and diverticulitis             |
| 147                 | Anal and rectal conditions                    |
| 148                 | Peritonitis and intestinal abscess            |
| 149                 | Biliary tract disease                         |
| 150                 | Liver disease; alcohol-related                |
| 151                 | Other liver diseases                          |
| 152                 | Pancreatic disorders (not diabetes)           |
| 153                 | Gastrointestinal haemorrhage                  |
| 154                 | Noninfectious gastroenteritis                 |
| 155                 | Other gastrointestinal disorders              |

## Genito-urinary conditions

| CCS diagnosis group |   |
|---------------------|---|
| 159                 | Urinary tract infections                          |
| 160                 | Calculus of urinary tract                         |
| 162                 | Other diseases of bladder and urethra             |
| 163                 | Genitourinary symptoms and ill-defined conditions |
| 164                 | Hyperplasia of prostate                           |
| 165                 | Inflammatory conditions of male genital organs    |
| 166                 | Other male genital disorders                      |

## Haematology conditions

| CCS diagnosis group |                                       |
|---------------------|---------------------------------------|
| <b>59</b>           | Deficiency and other anaemia          |
| <b>60</b>           | Acute posthaemorrhagic anaemia        |
| <b>61</b>           | Sickle cell anaemia                   |
| <b>62</b>           | Coagulation and hemorrhagic disorders |
| <b>63</b>           | Diseases of white blood cells'        |
| <b>64</b>           | Other hematologic conditions          |

## Infectious diseases

| CCS diagnosis group |   |
|---------------------|---|
| <b>2</b>            | Septicaemia (except in labour)  |
| <b>3</b>            | Bacterial infection; unspecified site   |
| <b>4</b>            | Mycoses   |
| <b>5</b>            | HIV infection   |
| <b>6</b>            | Hepatitis   |
| <b>7</b>            | Viral infection   |
| <b>8</b>            | Other infections; including parasitic   |
| <b>9</b>            | Sexually transmitted infections (not HIV or hepatitis)                            |
| <b>10</b>           | Immunizations and screening for infectious disease                                |
| <b>76</b>           | Meningitis (except that caused by tuberculosis or sexually transmitted disease)   |
| <b>77</b>           | Encephalitis (except that caused by tuberculosis or sexually transmitted disease) |
| <b>78</b>           | Other CNS infection and poliomyelitis   |

## Conditions associated with mental health

| CCS diagnosis group |  |
|---------------------|--|
| <b>65</b>           | Learning disability  |
| <b>66</b>           | Alcohol-related mental disorders   |
| <b>67</b>           | Substance-related mental disorders   |
| <b>68</b>           | Senility and organic mental disorders  |
| <b>69</b>           | Affective disorders  |
| <b>70</b>           | Schizophrenia and related disorders  |
| <b>71</b>           | Other psychoses  |
| <b>72</b>           | Anxiety; somatoform; dissociative; and personality disorders   |
| <b>73</b>           | Preadult disorders   |
| <b>74</b>           | Other mental conditions  |
| <b>75</b>           | Personal history of mental disorder; mental and behavioural problems; observation and screening for mental condition |

## Musculoskeletal conditions

| CCS diagnosis group |  |
|---------------------|--|
| <b>201</b>          | Infective arthritis and osteomyelitis (except that caused by tuberculosis or sexually transmitted disease) |
| <b>202</b>          | Rheumatoid arthritis and related disease   |
| <b>203</b>          | Osteoarthritis   |
| <b>204</b>          | Other non-traumatic joint disorders  |
| <b>205</b>          | Spondylosis; intervertebral disc disorders; other back problems  |
| <b>206</b>          | Osteoporosis   |
| <b>207</b>          | Pathological fracture  |
| <b>212</b>          | Other bone disease and musculoskeletal deformities   |

## Nephrology conditions

| CCS diagnosis group |                                       |
|---------------------|---------------------------------------|
| <b>156</b>          | Nephritis; nephrosis; renal sclerosis |
| <b>157</b>          | Acute and unspecified renal failure   |
| <b>158</b>          | Chronic renal failure                 |
| <b>161</b>          | Other diseases of kidney and ureters  |

## Neurology conditions

| CCS diagnosis group |   |
|---------------------|---|
| <b>79</b>           | Parkinson`s disease   |
| <b>80</b>           | Multiple sclerosis  |
| <b>81</b>           | Other hereditary and degenerative nervous system conditions |
| <b>82</b>           | Paralysis   |
| <b>83</b>           | Epilepsy; convulsions                                       |
| <b>95</b>           | Other nervous system disorders                              |

## Paediatric and Congenital disorders

| CCS diagnosis group |   |
|---------------------|---|
| <b>213</b>          | Cardiac and circulatory congenital anomalies                    |
| <b>214</b>          | Digestive congenital anomalies                                  |
| <b>215</b>          | Genitourinary congenital anomalies                              |
| <b>216</b>          | Nervous system congenital anomalies                             |
| <b>217</b>          | Other congenital anomalies                                      |
| <b>218</b>          | Liveborn  |
| <b>219</b>          | Short gestation; low birth weight; and fetal growth retardation |
| <b>220</b>          | Intrauterine hypoxia and birth asphyxia                         |
| <b>221</b>          | Respiratory distress syndrome                                   |
| <b>222</b>          | Haemolytic jaundice and perinatal jaundice                      |
| <b>223</b>          | Birth trauma  |
| <b>224</b>          | Other perinatal conditions                                      |

## Respiratory conditions

| CCS diagnosis group |  |
|---------------------|--|
| <b>1</b>            | Tuberculosis   |
| <b>56</b>           | Cystic fibrosis  |
| <b>122</b>          | Pneumonia (except that caused by tuberculosis or sexually transmitted disease) |
| <b>123</b>          | Influenza  |
| <b>125</b>          | Acute bronchitis   |
| <b>126</b>          | Other upper respiratory infections   |
| <b>127</b>          | Chronic obstructive pulmonary disease and bronchiectasis                       |
| <b>128</b>          | Asthma   |
| <b>129</b>          | Aspiration pneumonitis; food/vomitus   |
| <b>130</b>          | Pleurisy; pneumothorax; pulmonary collapse                                     |
| <b>131</b>          | Respiratory failure; insufficiency; arrest (adult)                             |
| <b>132</b>          | Lung disease due to external agents  |
| <b>133</b>          | Other lower respiratory disease  |
| <b>134</b>          | Other upper respiratory disease  |

## Conditions relating to Trauma and Orthopaedics

| CCS diagnosis group |  |
|---------------------|--|
| <b>225</b>          | Joint disorders and dislocations; trauma-related |
| <b>226</b>          | Fracture of neck of femur (hip)                  |
| <b>227</b>          | Spinal cord injury                               |
| <b>228</b>          | Skull and face fractures                         |
| <b>229</b>          | Fracture of upper limb                           |
| <b>230</b>          | Fracture of lower limb                           |
| <b>231</b>          | Other fractures                                  |
| <b>232</b>          | Sprains and strains                              |
| <b>233</b>          | Intracranial injury                              |
| <b>234</b>          | Crushing injury or internal injury               |
| <b>235</b>          | Open wounds of head; neck; and trunk             |
| <b>236</b>          | Open wounds of extremities                       |



## Vascular conditions

| CCS diagnosis group |   |
|---------------------|---|
| 114                 | Peripheral and visceral atherosclerosis               |
| 115                 | Aortic; peripheral; and visceral artery aneurysms     |
| 116                 | Aortic and peripheral arterial embolism or thrombosis |
| 117                 | Other circulatory disease                             |
| 118                 | Phlebitis; thrombophlebitis and thromboembolism       |
| 119                 | Varicose veins of lower extremity                     |
| 120                 | Haemorrhoids  |
| 121                 | Other diseases of veins and lymphatics                |

## Other injuries and conditions due to external causes

| CCS diagnosis group |  |
|---------------------|--|
| 239                 | Superficial injury; contusion                        |
| 241                 | Poisoning by psychotropic agents                     |
| 242                 | Poisoning by other medications and drugs             |
| 243                 | Poisoning by nonmedicinal substances                 |
| 244                 | Other injuries and conditions due to external causes |

## Appendix 3: CQC outliers programme

Assessment of risk for outlier alerts considered as part of CQC's outliers programme is based on the status of alerts; this is currently reflecting the status as at 15 May 2015. Categorisation of risk is as follows:

Elevated risk:

- Case being pursued with the trust by CQC

Risk:

- Action plans being followed up by CQC\*

No evidence of risk:

- New case, pending assessment by CQC
- Case closed following assessment by CQC
- Case closed following CQC engagement with the trust
- Case closed after follow up of action plans by CQC

\*Please note that only cases placed in this category since 1 March 2014 are highlighted as a 'risk'.

In cases where action plans are followed up by CQC, the outlier alert will be closed once the local CQC inspector is satisfied that the trust has taken sufficient action to reduce the risks to patients in relation to issues identified by their review of the alert.

Information on how CQC monitors mortality can be found at the following link:

<http://www.cqc.org.uk/content/monitoring-mortality-trends>

## Appendix 4: Aggregate measures of in-hospital standardised mortality

This component of the composite mortality indicators is an aggregate measure of in-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of relevant diagnosis categories. The analysis is carried out internally by CQC and is based on Hospital Episode Statistics (HES). Information on the diagnosis categories within each grouping can be found in [Appendix 2](#). This includes a link to a lookup table showing the individual diagnosis codes within each diagnosis grouping.

### **Indicator specification**

#### **Numerator:**

- In-hospital deaths following an emergency admission with a primary diagnosis on admission mapped to the relevant CCS diagnosis group\*.

#### **Denominator:**

- Acute and Specialist trusts where there is activity (*see below for further information on which mortality indicators specialist trusts have been assessed against*).
- Emergency hospital spells with a primary diagnosis on admission mapped to the relevant CCS diagnosis group\*.
- Valid gender and age fields must be recorded.
- Episode type must be “general episode” (epitype = 1; regular attenders and birth and delivery events are not included).
- A valid discharge method (code 1-4) must be recorded.

#### **Standardisation:**

- Age
- Sex
- Primary diagnosis at admission (3 character ICD-10 code)

#### **Primary diagnosis:**

For each hospital spell, the diagnosis is based on the primary diagnosis of the first episode of care. However, if the primary diagnosis of the first episode is an R code (i.e. a symptom or sign) then the diagnosis will be based on the primary diagnosis in the second episode. If the primary diagnosis from the second episode (if there is more than one episode within the spell) is also an R code, then the primary diagnosis from the first episode will be used.

\*The conditions included within each CCS diagnosis group are described in [Appendix 2](#)

## **Overlaps with mortality outlier alerts**

As part of our process, overlaps between recently closed outlier alerts and the aggregate measures they map to are routinely considered. When there is evidence of a strong overlap between an outlier case and a risk flag for an aggregate measure, the aggregate measure risk will be reduced to match the level of risk assigned to the outlier alert.

## **Mortality indicator rules for specialist trusts**

### **Children's trusts**

Assessed against the paediatric and congenital disorders CCS diagnosis group and against all outlier groupings, except those relating to cardiac surgery and alcoholic liver disease.

### **Cancer specialists**

Not assessed against any mortality indicators.

### **Women's trusts**

Assessed against perinatal mortality and paediatric and congenital disorders indicators only.

### **Cardiothoracic specialists**

Assessed against all cardiology and respiratory indicators only.

### **Non-specialist trusts that provide cardiac surgery**

Assessed against all indicators.

### **Orthopaedic specialists**

Assessed against musculoskeletal and orthopaedic indicators only.

### **Other specialists**

Assessed against relevant specialties only.

# Appendix 5: Detailed specification of maternity indicators

## General data notes

- All the following indicators include births that took place in-hospital and **exclude** home births. Although there is some information relating to home births recorded within HES, it is a very restricted set of fields and is not of sufficient detail to use in this analysis.
- Deliveries that are privately funded but take place in an NHS setting are included in this analysis.
- Quarterly data is grouped by discharge date. For readmissions indicators, this refers to discharge from the initial delivery or birth spell.
- This analysis uses continuous spells, whereby a planned transfer to another trust is identified as part of the same spell and is not counted as a readmission. Continuous spells are identified as follows: The admission date on the second spell is within plus or minus one day of the discharge date of the first spell. Either the first spell has a discharge destination (disdest) code of 51 (NHS other hospital provider - ward for general patients or the younger physically disabled) or 52 (NHS other hospital provider - ward for maternity patients or neonates) or the second spell has an admission source (admisorc) of 51 or 52 or the second spell has an admission method (admimeth) of 81 (Transfer of any admitted patient from another hospital provider other than in an emergency).
- In a small proportion of deliveries, it was found that there was more than one episode within a spell that was specified as a delivery episode. When this is the case, the following rules are followed to select which episode to use:
  - 1) Highest priority goes to the episode which contains a primary procedure code that allows us to derive a valid delivery method (*delmeth\_d*).
  - 2) If there is more than one episode (or no episodes) with valid derived delivery method coding (*delmeth\_d*) then the decision is based on which episode has the most of the following fields set to valid values:
    - Birth Status (*birstat*)
    - Delivery method (*delmeth*)
    - Number of babies (*numbaby*)
    - Status of person conducting delivery (*delstat*)
    - Number of previous pregnancies (*numpreg*)

## Maternal non-elective readmissions within 42 days of delivery (MATMATRE)

This indicator looks at rates of maternal non-elective readmissions within 42 days of the start of a delivery episode. Readmissions of less than a day are excluded. Readmissions with a primary diagnosis in ICD-10 chapter Z 'Factors influencing health status and contact with health services' on readmission are also excluded.

**Denominator:**

- Episodes specified as a delivery episode (*epitype* = 2 'delivery episode') at any point during a spell.
- Deaths within the delivery spell are excluded from the denominator (*dismeth* = 4 'Died').
- Women whose delivery spell is on-going 42 days after delivery are excluded from the denominator.
- Recorded age must be between 10 and 60 years old (data validation).
- All acute and specialist trusts providing maternity services.

**Numerator:**

- Women readmitted with the following admission method codes (*Admimeth* = *Emergency* (21, 22, 23, 24, 28) or *Maternity* (31, 32)) within 42 days of the start of a delivery episode.
- Where there are multiple readmissions, only the first readmission within the 42 day period is counted in the numerator.
- The discharge date from the readmission (*Read\_Disdate*) must be at least one day after the admission date (*Read\_Admidate*), or the readmission ended in a death (*Dismeth* = 4).
- Readmissions with a primary diagnosis in ICD-10 chapter Z 'Factors influencing health status and contact with health services' are excluded.
- The readmission can be to any acute trust, but is attributed to the trust where the delivery took place.
- Planned transfers to other trusts should not be counted as readmissions and are identified as follows: The admission date on the second spell is within plus or minus one day of the discharge date of the first spell. Either the first spell has a discharge destination (*disdest*) code of 51 (NHS other hospital provider - ward for general patients or the younger physically disabled) or 52 (NHS other hospital provider - ward for maternity patients or neonates) or the second spell has an admission source (*admisorc*) of 51 or 52 or the second spell has an admission method (*admimeth*) of 81 (Transfer of any admitted patient from another hospital provider other than in an emergency).

**Standardisation:**

- Age (5 year bands)

**Neonatal non-elective readmissions within 28 days of delivery (MATNEORE)**

This indicator looks at rates of non-elective readmissions within 28 days of birth. Readmissions of less than a day are excluded.

**Denominator:**

- Episodes specified as a birth episode (*epitype* = 3 'birth episode').

- Date of Birth (*dob*) must be equal to the start of the birth episode (*admidate*).
- Deaths within the delivery spell are excluded from the denominator (*dismeth* = 4 'Died' or 5 'Baby was still born').
- Babies aged over 28 days when discharged from the birth episode are excluded from the denominator.
- All acute and specialist trusts providing maternity services.

#### **Numerator:**

- Babies readmitted with the following admission method codes (*Admimeth* = *Emergency* (21, 22, 23, 24, 28), *Maternity* (31, 32), *Other* (82, 83)) within 28 days of birth.
- Where there are multiple readmissions, only the first readmission within the 28 day period is counted in the numerator.
- The discharge date from the readmission (*Read\_Disdate*) must be at least one day after the admission date (*Read\_Admidate*), or the readmission ended in a death (*Dismeth* = 4).
- The readmission can be to any acute trust, but is attributed to the trust where the birth took place.
- Planned transfers to other trusts should not be counted as readmissions and are identified as follows: The admission date on the second spell is within plus or minus one day of the discharge date of the first spell. Either the first spell has a discharge destination (*disdest*) code of 51 (NHS other hospital provider - ward for general patients or the younger physically disabled) or 52 (NHS other hospital provider - ward for maternity patients or neonates) or the second spell has an admission source (*admisorc*) of 51 or 52 or the second spell has an admission method (*admimeth*) of 81 (Transfer of any admitted patient from another hospital provider other than in an emergency).

#### **Standardisation:**

- None

### **Puerperal Sepsis and other puerperal infections within 42 days of delivery (MATSEPSIS)**

#### **Denominator:**

- Episodes specified as a delivery episode (*epitype* = 2 'delivery episode') at any point during a spell.
- Recorded age must be between 10 and 60 years old (data validation).
- All acute and specialist trusts providing maternity services.

#### **Variation 1: Puerperal Sepsis and other puerperal infection**

#### **Numerator**

- ICD-10 diagnosis code of O85 '*Puerperal sepsis*' or O86 '*Other puerperal infections*' at any point during delivery spell or in a readmission within 42 days of the start of the delivery spell. Readmission can be to any acute trust, but is attributed to the trust where the delivery took place.

#### **Standardisation:**

- Age (5 year bands)

### **Variation 2: Puerperal Sepsis and other specified puerperal infection**

#### **Numerator**

- ICD-10 diagnosis code of O85 '*Puerperal sepsis*' or O86 '*Other puerperal infections*', **excluding** O86.4 '*Pyrexia of unknown origin following delivery*' at any point during delivery spell or in a readmission within 42 days of the start of the delivery spell. Readmission can be to any acute trust, but is attributed to the trust where the delivery took place.

#### **Standardisation:**

- Age (5 year bands)

### **Variation 3: Puerperal Sepsis**

#### **Numerator**

- ICD-10 diagnosis code of O85 '*Puerperal sepsis*' at any point during delivery spell or in a readmission within 42 days of the start of the delivery spell. Readmission can be to any acute trust, but is attributed to the trust where the delivery took place.

#### **Standardisation:**

- Age (5 year bands)

### **Elective caesarean sections (MATELECCS)**

#### **Denominator:**

- Episodes specified as a delivery episode (*epitype* = 2 '*delivery episode*') at any point during a spell.
- Recorded age must be between 10 and 60 years old (data validation).
- All acute and specialist trusts providing maternity services.

#### **Numerator**

- Episodes specified as a delivery episode (*epitype* = 2 '*delivery episode*') at any point during a spell, with a primary procedure code of R17 (elective caesarean delivery).



**Standardisation:**

- Age (5 year bands)
- NHS or privately funded deliveries (*admincat*)

**Emergency caesarean sections (MATEMERCS)****Denominator:**

- Episodes specified as a delivery episode (*epitype* = 2 'delivery episode') at any point during a spell.
- Recorded age must be between 10 and 60 years old (data validation).
- All acute and specialist trusts providing maternity services.

**Numerator**

- Episodes specified as a delivery episode (*epitype* = 2 'delivery episode') at any point during a spell, with a primary procedure code of R18 (other caesarean delivery)

**Standardisation:**

- Age (5 year bands)
- NHS or privately funded deliveries (*admincat*)

**Perinatal mortality (contributing to composite indicator: In-hospital mortality - Paediatric and congenital disorders and perinatal mortality 'COM\_PAEDI')**

This indicator includes stillbirths and neonatal deaths within 7 days of birth. Neonatal deaths are counted within any spell i.e. not restricted to the birth spell. This will therefore include deaths among babies readmitted to hospital, either planned or as an emergency, and babies transferred from their birth episode to a different trust for neonatal care. It does not include deaths which occur out of hospital.

**Denominator:**

- Episodes specified as a birth episode (*epitype* = 3 'birth episode').
- Date of Birth (*dob*) must be equal to the start of the birth episode (*admidate*).

**Numerator:**

- Babies with a discharge method from any spell, at any NHS trust, of 4 'died' or 5 'baby was still born'.
- The death can have occurred within any NHS trust, but will be attributed to the trust at which the birth occurred.

- Deaths must have occurred within 7 days of birth.

**Standardisation:**

- Sex
- Highest level of neonatal unit available at the trust

## Appendix 6: Detail specifications for Central Alerting System (CAS)

|                               |   |
|-------------------------------|---|
| <b>Indicator ID</b>           | CASIM01A01  |
| <b>Indicator</b>              | <b>The number of alerts which CAS stipulated should have been closed by trusts during the preceding 12 months, but which were still open on the date CQC extracted data from the CAS system</b> |
| <b>Rationale</b>              | This indicator highlights how many CAS alerts with closing dates in the 12 months preceding download remained open.   |
| <b>Indicator status</b>       | <b>NO</b>   |
| <b>Indicator construction</b> | CAS alerts that have breached stipulated closing date in the 12 months preceding data download which are still open   |
| <b>Indicator type</b>         | Categorical rules based   |
| <b>Assessment of risk</b>     | A risk score rating for each data category is assigned using the following criteria:<br>Elevated risk: 5 or more open alerts<br>Risk: Between 1 and 4 open alerts                               |
| <b>Time period</b>            | 01/02/2014 to 31/01/2015. The data download took place 23/02/2015.  |
| <b>Data source</b>            | Central Alerting System<br><a href="https://www.cas.dh.gov.uk/Home.aspx">https://www.cas.dh.gov.uk/Home.aspx</a>  |

|                               |  |
|-------------------------------|--|
| <b>Indicator ID</b>           | CASIM01B01   |
| <b>Indicator</b>              | <b>The number of alerts which CAS stipulated should have been closed by trusts more than 12 months ago, but which were still open on the date CQC extracted data from the CAS system</b> |
| <b>Rationale</b>              | This indicator identifies the minority of trusts which still have CAS alerts open for extraordinarily long periods after their stipulated closing date                                   |
| <b>Indicator status</b>       | <b>NO</b>  |
| <b>Indicator construction</b> | CAS alerts which are still open 12 months or more after the stipulated closing date on the date of download  |
| <b>Indicator type</b>         | Categorical rules based  |
| <b>Assessment of risk</b>     | A risk score rating for each data category is assigned using the following criteria:<br>Elevated risk: 2 or more open alerts<br>Risk: 1 open alert                                       |
| <b>Time period</b>            | 01/04/2004 to 31/01/2014. The data download took place 23/02/2015.   |
| <b>Data source</b>            | Central Alerting System<br><a href="https://www.cas.dh.gov.uk/Home.aspx">https://www.cas.dh.gov.uk/Home.aspx</a>   |

|                               |  |
|-------------------------------|--|
| <b>Indicator ID</b>           | CASIM01C01   |
| <b>Indicator</b>              | <b>Percentage of CAS alerts with closing dates during the preceding 12 months which the trust has closed late</b>  |
| <b>Rationale</b>              | This indicator gives an overall picture of trusts' timeliness in closing alerts.   |
| <b>Indicator status</b>       | <b>NO</b>  |
| <b>Indicator construction</b> | CAS alerts that were due to be closed in the 12 months preceding the data download that were closed late as a percentage of all such alerts that had been closed by the time of the data download  |
| <b>Indicator type</b>         | Categorical rules based  |
| <b>Assessment of risk</b>     | A risk score rating for each data category is assigned using the following criteria:<br>Elevated risk: 50% or more alerts closed after the stipulated closing date<br>Risk: 25% or more, but less than 50%, of alerts closed after the stipulated closing date |
| <b>Time period</b>            | 01/02/2014 to 31/01/2015. The data download took place 23/02/2015.   |
| <b>Data source</b>            | Central Alerting System<br><a href="https://www.cas.dh.gov.uk/Home.aspx">https://www.cas.dh.gov.uk/Home.aspx</a>   |

## Appendix 7: Process for assigning risk for SAFEGUARDING, SYE, P\_OPINION, CQC\_COM, PROV\_COM, PHSO\_COM

To determine Risk and Elevated Risk for SAFEGUARDING, SYE, P\_OPINION, CQC\_COM, PROV\_COM, and PHSO\_COM, an iterative process employing a numerator and denominator value is used.

For SAFEGUARDING, CQC\_COM, PROV\_COM and PHSO\_COM, the numerator is the number of events and the denominator is a measure of trust patient volume. Depending on which indicator is being modelled, this will be either bed-days or total patient contacts.

For SYE, and P\_OPINION, the numerator is the number of negative comments and the denominator is the number of positive comments.

1. Due to the variation in the range and frequency of values for different indicators, a process is used to determine the best fit of statistical model to describe variation in the numerator. We test eight candidate models.
  - The first four models include only the numerator – each one looks at the fit to a different statistical distribution. The distributions tested are Poisson, negative binomial, zero-inflated Poisson, and zero-inflated negative binomial.
  - The second four models repeat the first four, but they also include the denominator as an explanatory variable. These models test the hypothesis that trusts with higher denominator values (i.e. more activity or more positive comments) also have higher numerator values (i.e. more events or more negative comments).
  - The best model is the one with the lowest AIC value. This is a measure of the balance between simplicity and ability to explain variation. A lower value of AIC indicates a better model.
2. A p-value for each trust, based on the best model from step 1 is calculated.
  - The p-value shows how unusual each trust's numerator value is, compared to what would be expected.
  - The lower the p-value, the *farther* a trust's value is from what our model calculates should be expected.
3. The trust that has the smallest p-value (that is, the one with the value that is highest compared to what the model says it should be) is flagged as a possible "Elevated Risk".
4. The "group p-value" (PG) is then calculated across all trusts. PG represents the p-value based on lots of individual comparisons (1 for each trust). This makes the model more conservative (i.e. cautious) about what should be assigned as an outlier.

If PG is less than or equal to 0.2:

  - The candidate trust identified in step 3 is an outlier and is assigned to the "Elevated Risk" group.

- The outlier trust is removed from the dataset, and another iteration of the model (starting at step 2) is run.

If PG is greater than 0.2:

- The candidate trust identified in step 3 is not a large enough outlier to be classed as “Elevated Risk”. All of the trusts still in the dataset at this point are therefore assessed as to whether there is evidence of “Risk” or “No evidence of risk” based on the trust p-values calculated in step 2:
  - If the trust’s own p-value is less than or equal to 0.01 then the trust is assigned a “Risk”.
  - If the trust’s own p-value is greater than 0.01 then the trust is assigned “No evidence of risk”.

There “risk” model is now complete are no further iterations of the model.

## Appendix 8: How have recent trust reconfigurations been treated within Intelligent Monitoring?

Trust mergers and reconfigurations need to be accounted for within the analysis carried out for Intelligent Monitoring. This includes the following scenarios:

- 1) Two or more trusts merge into one new trust
- 2) One existing trust takes over all services of another trust
- 3) One trust splits (usually at site level) amongst two or more trusts

The principle used within Intelligent Monitoring is that the new or receiving trust takes on the historic risk of the legacy service(s). Wherever possible, data which relates to the pre-merger time period has been aggregated to reflect the composition of the current service. Where this has not been possible, a rules based system has been applied whereby the highest risk score from the legacy services have been applied to the new organisation.

Where one legacy trust has been split between two or more receiving trusts, the same principles have been applied. However, the extent to which this is possible depends on the granularity of the dataset and the way in which services have been split.

The table below shows which of the following methodology options has been applied for each indicator.

- Data preceding reconfiguration aggregated
- Rules based; highest risk assigned
- Reconfiguration accounted for by data supplier
- Data only available since reconfiguration (*this category indicates that we have not been able to fully map historic data to the new trust(s) due to the format of the source data. For example, where a service has been split, the historic data may have only been available at trust level. Please note that historic data for the receiving trust only may have been used for the period prior to reconfiguration*).

All affected trusts have also received detailed information about how the methodology has been applied for them.

**TABLE 1: Methodology applied to trust reconfigurations within Intelligent Monitoring Version five**

| Indicators  | 1. Merger                                 | 2. Takeover                               | 3. Split services*                        |
|---|---|---|---|
| <b>Never Event Incidence</b><br>(STEISNE)   | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data only available since reconfiguration |
| <b>Avoidable infections</b><br>(CDIFF, MRSA)  | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated |
| <b>Consistency of reporting to the National Reporting and Learning Service</b> (NRLS08) | Rules based; highest risk assigned        | Rules based; highest risk assigned        | Data only available since reconfiguration |

| <b>Indicators</b>  | <b>1. Merger</b>                            | <b>2. Takeover</b>                          | <b>3. Split services*</b>                   |
|--|---|---|---|
| <b>National Reporting and Learning System</b> (NRLS03, NRLS04, NRLS05)   | Data preceding reconfiguration aggregated   | Data preceding reconfiguration aggregated   | Data only available since reconfiguration   |
| <b>Central Alerting System</b> (COM_CASIM)   | Rules based; highest risk assigned          | Rules based; highest risk assigned          | Data only available since reconfiguration   |
| <b>Risk assessment for VTE</b> (VTERA03)   | Data preceding reconfiguration aggregated   | Data preceding reconfiguration aggregated   | Data only available since reconfiguration   |
| <b>Dr Foster mortality Indicators</b> (MORTLOWR, COM_HSMR)   | Rules based; highest risk assigned          | Rules based; highest risk assigned          | Data only available since reconfiguration   |
| <b>Summary Hospital Mortality Indicator</b> (SHMI01)   | Data preceding reconfiguration aggregated   | Data preceding reconfiguration aggregated   | Data only available since reconfiguration   |
| <b>Composite Mortality Indicators</b> (COM_CARDI, COM_CEREB, COM_DERMA, COM_ENDOC, COM_GASTR, COM_GENIT, COM_HAEMA, COM_INFEC, COM_MENTA, COM_MUSCU, COM_NEPHR, COM_NEURO, COM_PAEDI, COM_RESPI, COM_TRAUM, COM_VASCU) | See individual components below for details | See individual components below for details | See individual components below for details |
| - CCS diagnosis group  | Data preceding reconfiguration aggregated   | Data preceding reconfiguration aggregated   | Data preceding reconfiguration aggregated   |
| - Mortality outlier case statuses  | Rules based; highest risk assigned          | Rules based; highest risk assigned          | Data only available since reconfiguration   |
| <b>Maternity outlier case statuses</b> (MATELECCS, MATEMERCS, MATSEPSIS, MATMATRE, MATNEORE)   | Rules based; highest risk assigned          | Rules based; highest risk assigned          | Rules based; highest risk assigned          |



| <b>Indicators</b>   | <b>1. Merger</b>                                | <b>2. Takeover</b>                              | <b>3. Split services*</b>  |
|---|---|---|--|
| <b>Emergency readmissions</b><br>(COM_ELRE_ON,<br>COM_EMRE_ON)  | Data preceding<br>reconfiguration<br>aggregated | Data preceding<br>reconfiguration<br>aggregated | COM_EMRE_ON:<br>Data preceding<br>reconfiguration<br>aggregated<br><br>COM_ELRE_ON:<br>Data only available<br>since<br>reconfiguration |
| <b>Patient Reported Outcome Measures</b><br>(PROMS52, PROMS_HIP,<br>PROMS_KNEE)   | Rules based;<br>highest risk<br>assigned        | Rules based;<br>highest risk<br>assigned        | Data only available<br>since<br>reconfiguration  |
| <b>National Hip Fracture Database</b><br>(NHFD01)   | Rules based;<br>highest risk<br>assigned        | Rules based;<br>highest risk<br>assigned        | Data only available<br>since<br>reconfiguration  |
| <b>Sentinel Stroke National Audit Programme</b><br>(SSNAPD02)   | Rules based;<br>highest risk<br>assigned        | Rules based;<br>highest risk<br>assigned        | Rules based;<br>highest risk<br>assigned   |
| <b>Myocardial Ischaemia National Audit Project</b><br>(MINAP22)   | Data preceding<br>reconfiguration<br>aggregated | Data preceding<br>reconfiguration<br>aggregated | Data preceding<br>reconfiguration<br>aggregated  |
| <b>Friends and Family Test</b><br>(FFTLIKERECIP,<br>FFTRESP02)  | Data preceding<br>reconfiguration<br>aggregated | Data preceding<br>reconfiguration<br>aggregated | Data only available<br>since<br>reconfiguration  |
| <b>NHS Inpatient Survey</b><br>(IPSURTALKWOR,<br>IPSURSUPEMOT,<br>IPSURHELPEAT,<br>IPSURINVDECI,<br>IPSURCNTPAIN,<br>IPSUROVERALL,<br>IPSURRSPDIGN,<br>IPSURCONFDOC,<br>IPSURCONFNUR) | Rules based;<br>highest risk<br>assigned        | Rules based;<br>highest risk<br>assigned        | Rules based;<br>highest risk<br>assigned   |
| <b>NHS Accident and Emergency Survey</b><br>(AESURWAIT,<br>AESURCONFID,<br>AESURPRIV,<br>AESURATTENT,<br>AESURREASS,<br>AESURPAIN, AESURCONT,<br>AESURDIGRES)                         | Rules based;<br>highest risk<br>assigned        | Rules based;<br>highest risk<br>assigned        | Rules based;<br>highest risk<br>assigned   |
| <b>Accident and Emergency waiting times</b><br>(COM_AD_A&E)   | Accounted for by<br>data supplier               | Accounted for<br>by data supplier               | Data preceding<br>reconfiguration<br>aggregated  |

| <b>Indicators</b>   | <b>1. Merger</b>                          | <b>2. Takeover</b>                        | <b>3. Split services*</b>                 |
|---|---|---|---|
| <b>Referral to treatment times</b><br>(COM_RTT)   | Accounted for by data supplier            | Accounted for by data supplier            | Accounted for by data supplier            |
| <b>Diagnostics waiting times</b><br>(DIAG6WK01)   | Accounted for by data supplier            | Accounted for by data supplier            | Accounted for by data supplier            |
| <b>Cancer waiting times</b><br>(WT_CAN22, WT_CAN26, WT_CAN27)   | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data only available since reconfiguration |
| <b>Cancelled operations</b><br>(CND_OPS01, CND_OPS02)   | Accounted for by data supplier            | Accounted for by data supplier            | Data only available since reconfiguration |
| <b>Ambulance delays</b><br>(AMBTURN06)  | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated |
| <b>Delayed discharge</b><br>(DTC40)   | Accounted for by data supplier            | Accounted for by data supplier            | Data only available since reconfiguration |
| <b>Patient-Led Assessment of the Care Environment</b><br>(COM_PLACE)  | Rules based; highest risk assigned        | Rules based; highest risk assigned        | Data only available since reconfiguration |
| <b>Monitor</b><br>(MONITOR01, MONITOR02)  | Accounted for by data supplier            | Accounted for by data supplier            | Data only available since reconfiguration |
| <b>Trust Development Agency</b><br>(TDA03)  | Rules based; highest risk assigned        | Rules based; highest risk assigned        | Rules based; highest risk assigned        |
| <b>GMC National Training Survey</b><br>(NTS12)  | Rules based; highest risk assigned        | Rules based; highest risk assigned        | Data only available since reconfiguration |
| <b>NHS Staff Survey</b><br>(STASURBG01, NHSSTAFF04, NHSSTAFF06, NHSSTAFF07, NHSSTAFF11, NHSSTAFF16, COM_ABUSESTA) | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data only available since reconfiguration |
| <b>Electronic Staff Record Indicators</b><br>(ESRSIC, ESRREG, ESRT0, ESRSTAB, ESRSUP, ESRSTAFF)                   | Data only available since reconfiguration | Data only available since reconfiguration | Data only available since reconfiguration |
| <b>Healthcare worker flu vaccination uptake</b><br>(FLUVAC01)   | Rules based; highest risk assigned        | Rules based; highest risk assigned        | Data only available since reconfiguration |
| <b>Whistleblowing alerts</b><br>(WHISTLEBLOW)   | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated |
| <b>GMC - Enhanced monitoring</b><br>(GMC)   | Accounted for by data supplier            | Accounted for by data supplier            | Accounted for by data supplier            |
| <b>Indicators</b>   | <b>1. Merger</b>                          | <b>2. Takeover</b>                        | <b>3. Split services*</b>                 |

|   |   |   |   |
|---|---|---|---|
| <b>Safeguarding concerns</b><br>( <i>SAFEGUARDING</i> )                             | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated |
| <b>CQC Share Your Experience</b><br>( <i>SYE</i> )                                  | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated |
| <b>Patient Opinion</b><br>( <i>P_OPINION</i> )                                      | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated |
| <b>CQC complaints</b><br>( <i>CQC_COM</i> )   | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated |
| <b>Provider complaints</b><br>( <i>PROV_COM</i> )                                   | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated |
| <b>Parliamentary and Health Service Ombudsman complaints</b><br>( <i>PHSO_COM</i> ) | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated | Data preceding reconfiguration aggregated |

\*Note: For IMv5, the only trust reconfiguration in this category was the dissolution of Mid Staffordshire NHS Foundation Trust (RJD), with services transferred to University Hospital of North Staffordshire (RJE) (which also changed its name to University Hospitals of North Midlands NHS Trust) and The Royal Wolverhampton NHS Trust (RL4). Please note that each reconfiguration which involves splitting services will need to be assessed on a case by case basis.